

École Doctorale Internationale *Culture, éducation, communication*
Avignon et Pays de Vaucluse, Foggia, Lisboa, Paris Ouest Nanterre La Défense, Potsdam, Roma Tre



Assessment and Research

Edited by Liliana Dozza & Emma Nardi

Cahiers de l'EDI - 2



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Edizioni Nuova Cultura

Descrizione della collana

Les Cahiers de l'EDI sont un exemple concret de la vocation internationale et interdisciplinaire de l'École Doctorale Internationale *Culture, éducation, communication*. Issus des présentations des doctorants aux séminaires organisés chaque année par l'École, les volumes rendent compte, à travers des recherches très différentes, du traitement de thématiques en lien avec les domaines développés au sein des Universités qui font partie de l'École. Cette collection donne aux doctorants la possibilité d'exercer une des tâches fondamentales du travail des chercheurs: communiquer les résultats de leurs travaux.

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Metodi e criteri di valutazione

La collana adotta un sistema di valutazione dei testi basato sulla revisione paritaria e anonima (*peer-review*). I criteri di valutazione adottati riguardano: l'interesse e l'originalità dell'argomento proposto, la qualità dell'esposizione, l'assetto metodologico e il rigore scientifico degli strumenti utilizzati, l'innovatività dei risultati, la pertinenza della bibliografia selezionata.

Comitato di redazione

Emma Nardi, Cinzia Angelini

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Introduzione

Il secondo quaderno della Scuola Dottorale Internazionale *Culture, éducation, communication* contiene gli atti degli interventi presentati durante il seminario *Assessment and Research*, che si è svolto a Bressanone il 24 e 25 settembre 2009.

Come è ormai consuetudine, il tema scelto per il seminario ha una valenza trasversale rispetto alle discipline rappresentate nella Scuola, che spaziano dalla linguistica alle scienze dell'educazione, dalla mediazione culturale nei musei alle nuove tecnologie, con un taglio delle tesi a carattere prevalentemente interdisciplinare. Tuttavia, nonostante la diversità dei contenuti, in ogni ricerca è necessario mettere a punto strumenti di verifica del percorso intrapreso e dei risultati raggiunti. I dottorandi della Scuola, dell'Università di Bolzano e delle altre sedi rappresentate hanno non solo potuto presentare la metodologia seguita e le relative soluzioni di tipo valutativo, ma anche riflettere sulle scelte effettuate dai colleghi e discutere tutti insieme sulle difficoltà e gli elementi critici che hanno dovuto affrontare.

Diciassette dottorandi provenienti da sette università diverse hanno presentato una proposta di intervento. Per fornire un'occasione di lavorare sul metodo della revisione tra pari, è stato costituito un comitato di valutazione formato da dottorandi: ogni riassunto è stato letto da tre dottorandi diversi, che hanno espresso un giudizio motivato secondo le voci di una scheda di valutazione elaborata dal consiglio della Scuola. In caso di incongruenza tra i giudizi, i dottorandi sono stati invitati a discutere tra loro per raggiungere una decisione condivisa. Terminato il lavoro le proposte di intervento sono risultate divise in tre gruppi: tre sono state considerate da accettare così come erano state presentate, due sono state rifiutate, mentre per le restanti dodici i dottorandi hanno suggerito modifiche che i colleghi hanno dovuto prendere in considerazione per formulare una nuova proposta di sommario. Il comitato scientifico, formato da professori della Scuola e dell'Università di Bolzano, ospite dell'iniziativa, ha poi controllato e validato le proposte dei dottorandi, suggerendo talvolta ulteriori modifiche.

Lo stesso lavoro di revisione, questa volta svolto solo dai membri del consiglio della Scuola, è stato dedicato ai contributi che i dottorandi hanno presentato per la pubblicazione. Per tutte le proposte sono state richieste agli autori modifiche che riguardavano sia il contenuto sia la forma. Non ci si deve stupire della necessità di correzioni formali, perché è prassi della Scuola chiedere che i dottorandi si esprimano in una lingua diversa dalla propria lingua madre non solo all'orale, ma anche nella presentazione del contributo scritto.

Nel corso del seminario di Bressanone è stato distribuito a tutti i partecipanti un questionario che consentisse di valutare la ricaduta dell'attività organizzata. Complessivamente i 39 partecipanti hanno espresso valutazioni molto positive sui contenuti del

seminario e su tutti gli aspetti organizzativi. Hanno dichiarato di considerare come punti di forza la dimensione interdisciplinare dei lavori e gli scambi tra colleghi. Tra gli aspetti critici, i dottorandi hanno segnalato la ristrettezza del tempo da dedicare alla discussione, confermando così il loro interesse alla conoscenza dei loro colleghi e al confronto dialettico.

Liliana Dozza ed Emma Nardi



Rapport d'activité pour l'année 2010

Emma Nardi*

L'an 2009 a été décisif pour l'École Doctorale Internationale *Culture, éducation, communication*: les premières thèses en cotutelle ont été soutenues et nous nous sommes soumis à une procédure d'auto-évaluation et d'évaluation externe.

Pour organiser la suite des activités, le Conseil, à partir des recommandations formulées par les experts, a pris les engagements suivants:

1. définir clairement qui sont les doctorants de l'École et leur demander de signer un engagement personnel;
2. encourager l'élection d'un représentant des doctorants;
3. produire un calendrier, même seulement partiel, des formations dispensées par l'École;
4. commencer à réfléchir sur l'attribution de crédits pour les activités des doctorants à l'intérieur de l'École;
5. définir des indicateurs quantitatifs pour construire des séries diachroniques de données;
6. lancer une série de publications de l'École;
7. constituer un comité scientifique auquel on puisse adresser un rapport final, écrit par la Directrice et approuvé par le Conseil et par le représentant des doctorants.

Ce rapport est organisé en deux parties: dans la première sont décrites les mesures adoptées pour satisfaire les engagements pris auprès des évaluateurs; la deuxième partie se réfère aux activités supplémentaires de l'École.

PREMIÈRE PARTIE. LES EFFETS DE L'ÉVALUATION 2009

1. DÉFINITION DES DOCTORANTS DE L'ÉCOLE

Dès la réunion qui a eu lieu à Bressanone le 24 septembre 2009, le Conseil a discuté le type d'engagement demandé aux doctorants de l'École. Les accords entre institution et doctorants ont été définis dans la Charte de l'École.

La Charte a été diffusée dans les sièges nationaux de l'École et les doctorants intéressés l'ont signée. On a donc constitué un groupe de 35 doctorants, ainsi distribués entre les sièges:

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Foggia	8
Paris Ouest Nanterre La Défense	9
Potsdam	6
Roma Tre	7

2. ÉLECTIONS DU REPRÉSENTANT

En mars 2010 Teresa Savoia, doctorante de Roma Tre, a écrit à tous ses condisciples pour susciter des propositions concernant la représentation des doctorants au Conseil de l'École. Une candidature s'est manifestée, celle de Alessandra Battaglini (Roma Tre), qui représente désormais les doctorants au Conseil.

3. CALENDRIER COMMUN

Pour conférer à l'École une identité propre, qui permette et soutienne une orientation des activités, le Conseil a établi un thème de recherche commun: *Oralité(s) et écriture(s)*, susceptible de constituer, par un axe transversal aux différents partenaires, un programme de recherche pluridisciplinaire.

ROMA TRE

Roma Tre a dédié à ce thème la leçon magistrale qui a ouvert l'an doctoral. La conférence, intitulée *Omero o della memoria orale*, a été donnée par Biagio Lorè, membre du collège du doctorat en *Valutazione e innovazione dei sistemi di istruzione*.

Roma Tre a aussi publié le calendrier des activités prévues sur l'ensemble de l'année.

POTSDAM

Entre le 19 avril et le 24 juillet, Gerda Hassler a organisé un colloque sur le thème *Oralité(s) et écriture(s)* qui est accessible sur Moodle (<https://moodle.uni-potsdam.de/>) par tous les doctorants de l'École à l'adresse <https://moodle.uni-potsdam.de/course/view.php?id=3180>.

PARIS OUEST NANTERRE LA DÉFENSE

La conférence d'ouverture de l'École doctorale 139, le 10 février 2010, a été donnée par le Prof. Roger Baker, professeur de psychologie clinique à l'Université de Bournemouth (Grande-Bretagne), sur le thème «Emotional Processing. The Research Program». Il s'agissait en particulier de voir comment traiter l'expression verbale des émotions, et de faire le point sur les tests (fondés sur l'écrit) mesurant l'impact de l'émotion sur diverses activités intellectuelles des sujets. Cette conférence prenait place dans le programme défini pour l'École Doctorale Internationale «*Oralité(s) et Écriture(s)*».

La première journée d'étude du Collège doctoral franco-allemand de sciences du langage (Potsdam et Paris Ouest) a été organisée à Nanterre le 14 mai, sur la thématique "Travaux sur corpus" (il s'agit bien entendu de corpus tant oraux qu'écrits, en relation avec le programme de l'Ecole "*Oralité(s) et Ecriture(s)*"). Elle réunit des doctorants, jeunes docteurs et enseignants-chercheurs chevronnés de diverses nationalités (allemande, belge, française, roumaine, italienne).

Le séminaire doctoral pluridisciplinaire de l'ED 139 porte cette année sur "Les imaginaires de la bibliothèque", dans le cadre d'un "Cycle Métiers de la Culture" destiné à informer les doctorants sur les issues professionnelles possibles de leur doctorat. Ce module, à raison de deux heures mensuelles, est assuré en partenariat avec la Bibliothèque Nationale de France ("BNF", Paris) et l'Ecole nationale des sciences supérieures de l'information et des bibliothèques (ENSSIB, Lyon). Les enseignements portent en particulier sur la relation oral/écrit et s'inscrivent dans la thématique générale de l'Ecole pour le présent contrat quadriennal "*Oralité(s) et Ecriture(s)*".

Il faut préciser que pour des raisons économiques il est difficile pour les doctorants d'un pays de participer aux activités organisées dans les autres établissements. Mais il est à remarquer que pour ce qui concerne les cotutelles, l'École prend en charge de longues périodes d'étude dans l'université partenaire.

4. ATTRIBUTION DE CRÉDITS (ECTS)

L'attribution de crédits conjoints pour les activités de l'École a été prise en considération, de façon expérimentale, à partir des activités des colloques. En ce qui concerne la rencontre de Otranto, aux doctorants qui participent aux travaux seront reconnus des crédits sur la base des règles suivantes:

Activités	Crédits
Pour la réponse à l'appel à communication, le résumé proposé et accepté et la présentation au colloque	1,5 (environ 37 heures de travail)
Pour la participation à toutes les sessions du colloque et la rédaction d'un compte rendu final selon les critères établis par le Conseil	1 (15 heures de colloque + 10 pour le rapport)
Pour ceux qui réalisent les deux activités précédentes	2,5

5. DÉFINITION D'INDICATEURS QUANTITATIFS

Les premiers indicateurs que le Conseil a décidé de prendre en considération sont les suivants:

- a. nombre de thèses en cotutelle;

- b. organisation de colloques (au moins un par an);
- c. réunions du Conseil (deux par an);
- d. réunion du comité scientifique (une fois par an);
- e. participation des doctorants aux initiatives de l'École.

Pour l'année 2010 les informations concernant les indicateurs sont les suivantes:

Thèses en cotutelle	On a signé trois conventions de thèses en cotutelle (Francesco Agrusti: Roma Tre et Avignon; Laura Corcione: Roma Tre et Avignon; Sabrina Greco: Roma Tre et Paris Ouest)
Colloques	Deux colloques (Otranto, 10-12 juin 2010; Potsdam: 23-25 septembre 2010) ont été organisés
Réunions du Conseil	Deux Conseils: 11 juin 2010 à Otranto et 24 septembre 2010 à Potsdam
Réunion du Comité scientifique	Un Comité scientifique: 10 juin 2010 à Otranto
Participation des doctorants	Participeront au colloque de Otranto 26 doctorants sur 35 (74%), dont 19 (73%) présenteront une communication. Les données du colloque de Potsdam ne sont pas encore disponibles.

Le Conseil a préparé une liste plus articulée d'indicateurs en se réservant de décider comment et quand les relever:

A	Indicateurs descriptifs
A1	Nombre d'universités présentes dans l'EDI
A2	Nombre de cours doctoraux présents dans l'EDI (pour chaque université)
A3	Nombre d'étudiants inscrits aux cours doctoraux présents dans l'EDI (pour chaque université)
A4	Nombre d'étudiants inscrits à l'EDI selon les règles définies dans la charte de l'EDI (pour chaque université)
A5	Nombre d'étudiants qui ont participé aux initiatives internationales de l'EDI (pour chaque université)
A6	Nombre d'étudiants qui ont participé à la mobilité internationale calculée par nombre de semaines
A7	Nombre d'étudiants de l'EDI en cotutelle (pour chaque université)

A8	Nombre d'étudiants de l'EDI qui ont conclu le doctorat (pour chaque université et pour chaque année académique)
A9	Nombre de docteurs de l'EDI embauchés par les universités ou les instituts de recherche (pour chaque université)

B	Indicateurs d'activité
B1	Nombre de communications présentées par les étudiants de l'EDI dans des colloques au niveau national (pour chaque université et pour chaque année académique)
B2	Nombre de communications présentées par les étudiants de l'EDI dans des colloques au niveau international, y compris ceux qui sont organisés par l'EDI (pour chaque université et pour chaque année académique)
B3	Nombre de contributions acceptées dans des publications au niveau national sans procédures de révision (livres, essais, revues) (pour chaque université et pour chaque année académique)
B4	Nombre de contributions acceptées dans des publications au niveau international sans procédures de révision (livres, essais, revues) (pour chaque université et pour chaque année académique)
B5	Nombre de contributions acceptées dans des publications au niveau national ou international avec procédures de révision entre pairs (livres, essais, revues) (pour chaque université et pour chaque année académique)
B6	Nombre de contributions acceptées dans des publications au niveau national ou international avec procédures de révision entre pairs et respectant les règles ISI (livres, essais, revues) (pour chaque université et pour chaque année académique)
B7	Nombre de contributions acceptées dans les publications de l'EDI (pour chaque université et pour chaque année académique)
B8	Nombre de thèses doctorales publiées
B9	Nombre d'étudiants participant à projets de recherche à caractère national (pour chaque université et pour chaque année académique)
B10	Nombre d'étudiants participant à projets de recherche à caractère international (pour chaque université et pour chaque année académique)

C	Indicateurs économiques
C1	Ressources disponibles pour les cours doctoraux qui font partie de l'EDI (pour chaque université et pour chaque année académique)
C2	Nombre de bourses ou d'autres formes de financement dont ont joui les étudiants de l'EDI (pour chaque université et pour chaque année académique)
C3	Ressources extérieures à l'université attribuées aux cours doctoraux de l'EDI, y compris les bourses ou les autres formes de financement pour les étudiants (pour chaque université et pour chaque année académique)
C4	Dépenses pour la participation des étudiants aux activités de l'EDI (pour chaque université et pour chaque année académique)
C5	Dépenses pour la participation des professeurs aux activités de l'EDI (pour chaque université et pour chaque année académique)

6. PUBLICATIONS DE L'ÉCOLE

L'École a lancé une série de publications qui recueillent les actes des colloques. Les essais présentés par les doctorants sont soumis à une procédure de double révision aveugle (procédure ISlike). L'intention du Conseil est de présenter à chaque colloque les actes du colloque précédent.

En 2009 on a présenté à Bressanone les actes du colloque qui a eu lieu à Vieste en 2008. Le volume, intitulé *Museum, New Technologies, Language* (Roma, Nuova Cultura, 2009, pp. 112, ISBN 978-88-6134-350-3), contient sept essais signés par huit doctorants. Le volume a été coordonné par Pierpaolo Limone et Emma Nardi.

Les actes du colloque organisé à Bressanone en 2009 constituent la deuxième publication de l'EDI.

7. COMITÉ SCIENTIFIQUE

Le Conseil a proposé aux membres du Comité d'évaluation de poursuivre leur collaboration avec l'École comme membres du Comité scientifique. Nous remercions les professeurs Sandra Laugier (Université de Picardie "Jules Verne"), Jörn Albrecht (Université de Heidelberg), Michele Pellerey (Pontificio Ateneo Salesiano - Roma), Marc Lits (Université Catholique de Louvain), Chris Whetton (National Foundation for Educational Research - Royaume Uni) pour avoir accepté de continuer à travailler pour l'École, lui fournissant ainsi le bénéfice inappréciable de leur expertise internationalement reconnue.

DEUXIÈME PARTIE. INITIATIVES SUPPLÉMENTAIRES

1. PRÉSENTATION DE PROJETS

Au mois de février, Antonella Poce a donné une série de leçons sur la présentation de projets européens. Quelques leçons ont été vidéoenregistrées sur IWT. Cette activité, que les doctorants de Roma Tre ont trouvé très intéressante, a abouti à la définition d'un projet Erasmus Mundus, intitulé *Heritage, Education, Languages, Technologies* (HELT), qui a été présenté le 30 avril 2010. Les partenaires du projet sont les universités Roma Tre (chef de file), Foggia, Paris Ouest Nanterre La Défense, Potsdam, Avignon et Pays de Vaucluse, Salerno, SEEU (Macédoine).

2. ACCORDS ERASMUS

Pour favoriser l'échange d'étudiants et de professeurs, ont été signés des accords Erasmus entre Roma Tre et Potsdam, Roma Tre et Avignon et Pays de Vaucluse, Potsdam et Paris Ouest Nanterre La Défense.

L'existence de l'Ecole doctorale internationale a constitué un argument non négligeable dans l'expertise favorable des demandes de constitution de CDFA (« collègues doctoraux franco-allemands ») par Potsdam et Paris Ouest (en Sciences du langage en particulier).

3. ATTRACTIVITÉ DE L'ÉCOLE

Plusieurs universités européennes ont exprimé leur intention d'adhérer à l'École. La table suivante fournit des indications en propos.

<i>Université demandeur</i>	<i>Université proposante</i>
Università Statale di Barcellona	Foggia
Università di Lubiana	Roma Tre
Università Politecnica delle Marche	Roma Tre
CNRS/Ecole normale supérieure de Paris et Université Paris 1	Roma Tre
Université de Louvain	Avignon et Pays de Vaucluse

L'admission sera décidée en fonction de la capacité des partenaires potentiels de contribuer aux thèmes de recherche de l'École définis dans le projet Erasmus Mundus: "Patrimoine culturel, langages, éducation, nouvelles technologies".

4. MODIFICATION DE LA CONVENTION CONSTITUTIVE

Selon la convention constitutive, pour que soit entérinée l'adhésion d'un nouveau partenaire un document signé par les recteurs des institutions présentes dans l'École était nécessaire. L'expérience a démontré qu'il est impossible de faire circuler un document à travers cinq différentes universités européennes. On a donc décidé de simplifier la procédure. Dorénavant l'admission de nouveaux partenaires, une fois délibérée par le conseil, sera signée seulement par le Recteur de l'université chef de file (Roma Tre) et par le Recteur de l'université intéressée.

Une autre modification à la convention concerne la procédure à suivre pour expulser les partenaires défaillants.



Words, Sounds and Music: teaching Literacy through Music

A Research into Italian Nursery Schools

*Silvia Azzolin**

Abstract

The need to develop new effective teaching strategies to further children's literacy learning has increased with urgency in recent years. In many countries, including Italy, pre-school curricula have requested that more research should be conducted into implementing new strategies to increase literacy learning opportunities for all students.

According to researchers, over the past 20 years phonological awareness has been labelled as one of the best predictors of how well children will read. Since words are sounds themselves, it is thought that music stimulation enhances phonological awareness itself.

The aim of this project was to determine whether a more specific music programme carried out by classroom teachers, rather than music specialists, might be related to significant gains in the development of young children's phonological awareness.

The research was carried out in two phases:

- in the first phase, an entire nursery group of 5-year-old children was involved;
- in the second phase, a group of 17 voluntary nursery teachers attended a programme in order to present some examples of music activities to their 172 children.

The quantitative and qualitative data collected support the hypothesis that music activities in pre-school curriculum can help children have a better and more effective approach to early-literacy.

Keywords

Early music education, early literacy, interdisciplinary didactics, action-research, motivation.

INTRODUCTION

Reading and writing are fundamental to the global construction of the individual because reading skills, intended both as decoding and comprehension, are related to achievement in other subjects (Stanovich, 1986). IEA international research also linked

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the literacy level of a country to its development because it is the main symbolic system for the sharing of information and education.

Recent research has investigated the relationship between phonological awareness and reading and writing skills and has shown that it has a direct relationship with reading achievement (Bryant et al., 1986; Goswami, 1990), with written language achievement (Bradley & Bryant, 1983) even though there is not an unequivocal evidence of a casual link from the competence in phonological awareness to success in reading and spelling acquisition (Sutherland & Gillon, 2007; Castles & Coltheart, 2004).

Phonological awareness is one aspect of the phonological processing (e.g. recoding in lexical access, recoding in working memory), an awareness of the sound system of language that allows an individual to make judgments about, or manipulate sounds and syllables within the words and can be placed into the larger context of meta-linguistic awareness, and is not to be confused with *phonemic* awareness (a subset of phonological awareness that refers to a sensitivity to and control over the phonemes) and with *phonetics* (the study of speech sound and the way in which these sounds are articulated). For example it is the ability to generate, recognise and manipulate rhymes, to segment a word into syllables, and to identify the initial sound of a word.

In quantitative meta-analysis research (Bus & van Ljzendoorn, 1999), 52 experimental training studies in the U.S. showed that phonological awareness is an important condition for learning to read ($d = 0.53$), even though it is not the only important predictor. Furthermore, they stressed that phonological training is more effective when started early in childhood and combined with writing, reading and meta-linguistic games or exercises. Lastly, children with reading problems may profit more from a phonological programme than children who develop reading abilities in a normal way. For instance, children who can hear the individual sound categories within a word are able to associate these phonemes with the correspondent letter representation whereas children who are poor readers have difficulties in being sensitive to rhyme and alliteration.

Though almost all of this research was conducted on English-speaking subjects, a language that does not have an exact correspondence of sounds to letters, research in other much more regular alphabetic language has found that there is a correlation between phonological awareness and reading and writing skills. Wimmer and colleagues (Wimmer et al., 1991) found that, at the beginning of the first class of primary school, the Austrian children examined showed very different levels of phonological awareness, independent of their general cognitive capabilities, but results are related to their reading ability after one year of instruction. In Italy, Tressoldi and colleagues (Tressoldi et al., 1993) found that the phonological awareness level at the beginning of primary school predicts subsequent difficulties in writing skills, especially in the decoding, noticed even after more than one year of school, with a prediction index of subjects at risk of over 85%.

MUSIC AND LANGUAGE

Many studies have investigated the relationships between language and music, in particular correlating some auditory analysis skills used in language processes with music perception skills (Barwick et al., 1998) showing that they are closely related in the same

way as the early reading skills are linked with the auditory analysis skills necessary for music perception. Lamb and Gregory (1993) found that children's scores on auditory discrimination of pitch were related to their scores on a test of phonemic awareness ($r = .70$, $P < .01$). Furthermore, Anvari, Trainor, Woodside, and Levy (2002) investigated the relationships between musical skills, phonological processing, and early reading ability with a correlated study in a population of 100 4- and 5-year-old children. Music skills were found to be significantly related to both phonological awareness and reading development: the regression analyses indicated that music perception skills contributed a unique variance in predicting reading ability, even when variance due to phonological awareness and other cognitive abilities (maths, digit span, and vocabulary) had been accounted for. "Thus, music perception appears to tap auditory mechanisms related to reading that only partially overlap with those related to phonological awareness, suggesting that both linguistic and non-linguistic general auditory mechanisms are involved in reading" (p.127).

The possibility that a similar learning mechanism may be involved in both language and music is supported by observing, in an evolutionary perspective, the development of language and music faculties (Brown, 2001; Besson & Schön, 2001; Patel et al., 1998) and by recent findings showing that music and language share some cortical areas and neural networks subserving language and music perception and production are partly overlapping (Maess et al. 2001; McMullen & Saffran, 2004; Schön et al., 2004). It seems possible that while adult musical and linguistic processes are modularised to some extent as separate entities, there may be similar developmental underpinnings in both domains, suggesting that modularity is emergent rather than present at the beginning of life. In particular a recent study suggests that musical experience tunes basic auditory sensory processing circuitry, with consequences for language processing (Wong et al., 2007).

Studies examining the influence of musical training on language abilities are relevant to theoretical debates over the modularity of language processing and also for practical issues, such as the importance of music in education and rehabilitation.

Most data show an association between musical and linguistic skills, however very few children without formal reading and writing instruction (pre-school children) were involved in these tests. A possible finding in such studies is that individuals who do seek out extensive musical training (as opposed to those who do not) might have pre-existing neural differences relevant for speech processing, and formal instruction could itself enhance phonological awareness (Marotta, 2004).

Therefore, to accurately assess the role of musical experience in shaping linguistic abilities and phonological awareness in particular, longitudinal studies are needed in which groups are matched at the outset on various neural and behavioural measures of auditory processing and are tested for linguistic skills before and after musical (versus alternative) training.

In research on pre-school language literacy skills, Gromko (2005) found that 4-5 year old children have benefited in the language symbol system from music training involving active music-making and the association of sound with developmentally appropriate symbols. The development of young children's phonemic awareness, more in their phoneme-segmentation fluency than in symbolization, gained significantly after 4 months of specialist music training by an external expert.

From an educational point of view it is also important to find out which music activities help children most to develop phonological awareness

The present study is only the first step in ongoing research that intends to investigate how children gain better results in phonological awareness and improvement in self-perception and motivation in the literacy abilities. This research was carried out within the Italian context and with specific but not specialist music activities taught to be presented by classroom teachers within the pre-school curriculum.

RESEARCH

HYPOTHESIS

One can hypothesise that a musical training programme based on musical listening, playing and singing activities chosen from the traditional and the active music making approach, easily carried out by ordinary classroom teachers, improve phonological awareness, perceived competence and motivation for literacy in children attending the last year of nursery school and that they will find benefit in their reading and writing achievement during the first year at primary school.

The aim of the present study is to see if training for auditory skills and vocal articulate skills through music activities can improve phonological awareness.

METHOD

The research methods are quantitative, through the statistic description of pre-test and post-test results in the experimental and control groups and qualitative with the analysis and the transcription of the activities, with interviews to children, parents and nursery school teachers.

PHASES

The research was developed in two phases:

- 1st phase: experimental work with one class of 28 pre-school children to test the musical programme and the materials from January 2006 to February 2007
- 2nd phase: action-research with 17 nursery school teachers and 172 children from 4 to 6 years from September 2008 to June 2009.

PARTICIPANTS

In the first phase there were 28 pre-school children (10 males and 18 females) attending the same final year class at a nursery school in North-East Italy. A whole class was chosen to avoid variables related to differences within a classroom activities programme and teaching methods, and to work with only one entire group in order to test the programme. 28 is the largest student number permitted in one classroom in Italy. Permission was received from the parents, the teachers and the headmasters.

Participants ranged in age from 5.2 to 6.2 (mean age: 5 years and 3 months).

They were divided into two groups, experimental group (14) and control group (14), based on age, sex and the state of familiarity with the language and spontaneous writing.

The second phase involved 17 teachers and 172 children aged 4-6. Teachers attended a specific training course on musical activities and literacy.

MATERIALS

All the children were given a battery of tests in two sessions: a pre-test (January 2007 - January 2009) and a post-test (June 2007 - June 2009), each lasting approximately 30 minutes. The tests were presented individually, by the same researcher in the 1st phase, by the teachers in the 2nd, in a quiet room, inside the school. The three tests (CMF - Rustioni - TCR) are standardized on Italian subjects.

The experimental group was submitted to a music program by the researcher (1st phase) or the teachers (2nd phase) for 45 minutes once a week for 20 weeks. The control group in the 1st phase was equally involved in general play activities with the researcher with the same frequency to avoid the Hawthorn effect (the better performance of the children in the treatment group might be attributed to the extra attention they had been given during the treatment). In the 2nd phase the control group did only literacy activities or nothing.

QUESTIONNAIRE

The nursery school teacher in the 1st phase, who did not know the composition of the two groups, was asked to report on the evolution and the interest shown in the literacy skills by each child during the treatment and the motivation for the music activity itself.

Parents who, in the same way, did not know the composition of the groups, were asked to report on what children told them of the activities, if they showed a different approach to sounds, phonemes, rhymes, letters, words at home (if they had become more curious and had asked more about letters, words or sounds than before) and if their interest in music in general had changed.

In the second phase teachers met the researcher and the other participants once a month, to present their work and discuss the programme. All the teachers had the opportunity to share their experience, work, thought, also through a web-forum.

RESULTS AND DISCUSSION

QUANTITATIVE ANALYSIS

For each test carried out, a descriptive analysis was carried out in order to summarize and allocate the scores achieved by the two groups at both the pre-test stage and the post-test stage.

Results showed a non parametric performance distribution that, added to the limited number of subjects tested, imposed a description analysis using the Median value as a central tendency index of frequencies distribution. In fact with the percentile values it has been possible to assess some of the trends within both the control group and the experimental group.

Tables 1 and 2 show the results of the pre-tests and post-tests for the experimental group in the 1st phase (28 children): all children achieved better results after the music

activities with a central tendency of the phonological frequency scores raised towards the upper level (Median = 15 except for the last test).

Table 1. Pre-test experimental group

EXPERIMENTAL GROUP (A) pre-test		Percentiles					
	med.	min.	25°	50°	75°	max	
LC	56,95	22,1	41,3	56,95	70,7	80,1	
TCR	12,5	7	10,75	12,5	13	14	
SB	15	12	14	15	15	15	
SS	13,5	6	9,75	13,5	15	15	
DW	12,5	11	11	12,5	14,25	15	
DNW	12	8	9,5	12	14,25	15	
RR	10	3	6,75	10	12,25	14	
SR	11,5	3	6,75	11,5	14	15	

Table 2. Post-test experimental group

EXPERIMENTAL GROUP (A) post-test		Percentiles					
	Med.	min.	25°	50°	75°	max	
LC	83,05	57	76	83,05	93,9	100	
TCR	14	13	13	14	15	15	
SB	15	14	15	15	15	15	
SS	15	12	14,75	15	15	15	
DW	15	14	14,75	15	15	15	
DNW	15	13	13,75	15	15	15	
RR	14,5	10	13	14,5	15	15	
SR	14	10	11,75	14	15	15	

It can be argued that the group not only improved but also became more homogenised including even those who had initially shown low ratings.

Tables 3 and 4 with the control group's pre-tests and post-tests show a greater score variation: the central tendency of the frequency scores again rose towards the upper level but bad performances persisted (note the value of percentiles 25° and the minimum value in each test) so that they are still positioned under the pass (acceptable) level fixed by the test standards.

Table 3. Pre-test control group

EXPERIMENTAL GROUP (B) pre-test			Percentiles			
	med.	min.	25°	50°	75°	max
LC	55	35,9	38,45	55	70,1	91,9
TCR	12	9	10,75	12	13,25	15
SB	13	9	11	13	15	15
SS	14,5	2	5,5	14,5	15	15
DW	11,5	6	7,75	11,5	13,25	15
DNW	11,5	4	6	11,5	14	15
RR	7,5	4	5,5	7,5	12,25	15
SR	10	4	6,75	10	10,25	12

Table 4. Post-test control group

EXPERIMENTAL GROUP (B) pre-test			Percentiles			
	med.	min.	25°	50°	75°	max
LC	83,05	57	76	83,05	93,93	100
TCR	14	13	13	14	15	15
SB	15	14	15	15	15	15
SS	15	12	14,75	15	15	15
DW	15	14	14,75	15	15	15
DNW	15	13	13,75	15	15	15
RR	14,5	10	13	14,5	15	15
SR	14	10	11,75	14	15	15

The group improvement can therefore be attributed to the performance of the highest achievers rather than to a general improvement. In the control group the differences between best and worst performances are accentuated and there are no evident signs of improvement by the children who had initially shown difficulties.

It is interesting to notice that the Rhyme recognition test differs from the others in that it shows a greater homogeneity among the 28 children in the pre-test, but in the post-test the experimental group achieved better results overall (Group A: Mean = 13,71; Median = 14,5; DS 1,77; group B: Mean=1,21; median=11,5;DS=3,86) (see figures 1 - 2).

The other tests were less significant because they did not present much difference between the items that showed the actual skills of the subjects tested, i.e. the results showed that on average they were so easy (see Syllabic segmentation test) that they produced a ceiling effect (many of the subjects tested had already achieved the maximum points at pre-test stage).

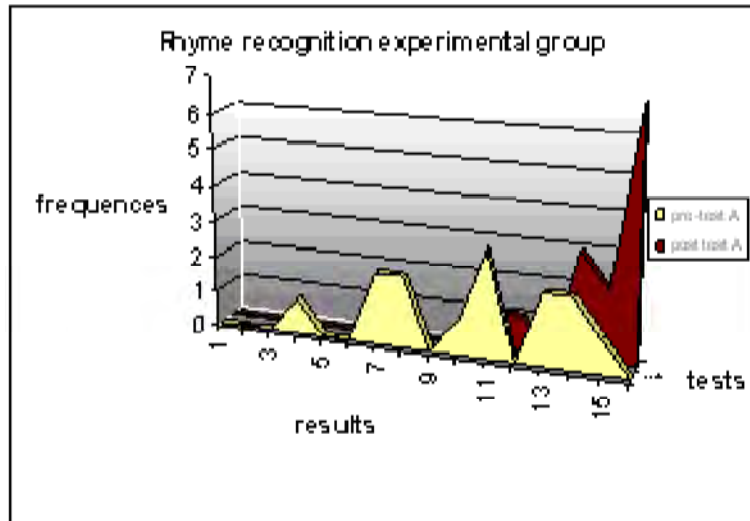


Figure 1. Rhyme Recogn. in pre and post tests Gr.A

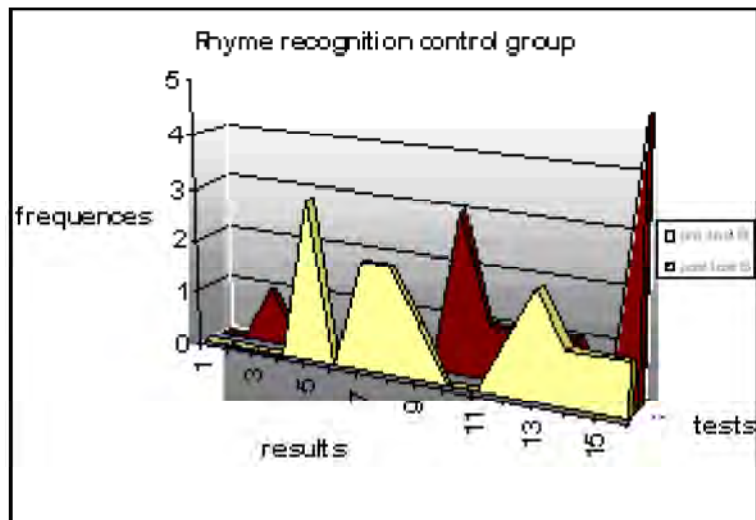


Figure 2. Rhyme Recogn. in pre and post tests Gr.B

In the second phase 17 teachers and 172 children were involved and were divided into 5 groups:

Table 5. Participants in the 2nd phase

	N°	femmine	maschi	età media
4 yr. exp. group	36	19	16	4,6
4 yr. contr. group	16	9	8	4,7
5 yr. exp. group music	58	30	28	5,6
5 yr. exp. group 'literacy'	24	14	10	5,7
5 yr. contr. group	38	18	20	5,6

In this phase it was interesting to compare the differences between two separate control groups among the 5-year-old children: a music group and a 'literacy' group in which children worked on phonological activities such as rhymes, spontaneous reading through wall charts, letters-games, etc.

Table 6. Results in the 2nd phase

	pre		post		T test
	Media	Dev. St.	Media	Dev. St.	P<0,05 (95%)
4 yr. exp. group	67	17,97	77	18,94	0,02
4 yr. contr. group	70	14,29	68	9,63	0,24
5 yr. exp. group	77	15,44	88	15,56	0,00
5 yr. contr. group	81	12,78	86	11,24	0,10
5 yr. exp. group 'literacy'	77	17,89	85	13,41	0,10

The quantitative data still show a great variance in all tests, **nevertheless a description analysis stresses how** the children in the experimental "music" group gained better and more homogeneous results than in the others in the post tests, like in the 1st phase data analysis.

QUALITATIVE ANALYSIS

The questionnaires completed by the parents of the experimental group showed that the children were more involved in new behavioural patterns towards interests and attention to acoustic phenomena, in the manipulation of rhyme, song, nursery rhymes and word games.

One parent felt it was important to highlight the change that had been noticed in the child:

I want to underline that after this experience my son showed far more interest in writing activities, playing with letters etc. things that he didn't seem to care much about before. I have also noticed a marked improvement in skills with letters, numbers, etc. I don't know whether it is all linked, but feel it is important to tell you about it.

All the parents of the experimental group noticed that the children participated *actively* and that they were motivated and enthusiastic about the programme.

From the point of view of the continuity of the spontaneous writing activity during the training, most children from the experimental group began to use semi-alphabetical and alphabetical writing, whereas even children who had previously said they were unable to write (this observation was also confirmed by the parent cited previously), unexpectedly began to write spontaneously. Considering the recognised validity of the research on early reading and writing according to which there is a natural development towards the spontaneous writing stage that is linked to the child's exposure to stimulation in the child's environment, it is not possible to recognise the casual relationship between this phenomena and music training even though it is significant that both appeared to be present in the children from the experimental group.

CONCLUSION

In spite of the data collected, that do not allow an inferential analysis, and the differences between the groups analyzed, that do not allow a statistical comparison, it has been possible to confirm the hypothesis that music training with pre-school children, with simple aural-listening, singing, music-making activities, and specific music activities related to a phonological training programme, as described above, designed to be presented by the classroom teachers themselves, can generally improve phonological awareness and arouse the children's interest and motivation for the acoustic component of the words, being themselves word sounds, with a positive effect on the children's reading and writing achievement.

Describing the frequency distributions of quantitative data collected, it can be argued that there is an improvement in the experimental group highlighted by the fact that, as opposed to the pre-test, the lower results in the post test are nearer to the higher results.

Another interesting finding is that all the children in the experimental group gained better results in the phonological issues, overcoming the initial differences in the pre-test results, especially in rhymes and first syllable recognition; important for reading and writing achievement. Even in the 'literacy' control group, even though there is an overall improvement, the different distribution of the scores persists between the pre-test and post-test. So far, music training can help children who show a lower level of phonological awareness to improve in this area, contributing to the basic skills necessary for the school literacy program.

Finally, having observed the qualitative data in particular, this music programme aroused children's motivation and self-value, specifically with phonological tasks and also with literacy and, because of the link between self-value and achievement it can be assumed that the hypothesis that linking in some way music activities to phonological goals in the pre-school curricula can contribute to academic success in the first years of instruction.

The findings of the present research need to be investigated on a larger and more significant number of subjects and it would also be interesting to observe the data collected in the follow up at the primary schools, within formalized teaching of reading and writing.

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Le discours construit via les nouvelles technologies: une perspective sociolinguistique

*Diana Balaci**

Nowadays communication stands for a highly complex phenomenon, whose technical supports include, among others, new technology use: mobile phones and Internet field. Consequently, the discourse's release, influenced by this medium, altered both its form and deep structure. We intend, throughout the present paper, to stress several levels: graphical appearance, coherence and conversational change.

Keywords

CMC (computer mediated communication), SMS (short message service/ script), discourse, line, consistency.

1. INTRODUCTION

Le discours est le langage mis en action, la langue assumée par le sujet parlant (son synonyme est **la parole**). Une autre définition place ce concept en unité égale ou supérieure à la phrase; il est constitué par une suite formant un message ayant un commencement et une clôture (son synonyme est dans ce cas-ci **l'énoncé**) (Dubois, 1999, p. 150).

Notion élaborée par J-P. Grize sous la forme: «Je considère que tout discours construit une sorte de micro-univers que j'appelle une schématisation» (Grize, 1978, p. 45). Ce micro-univers est constitué d'un contexte (la partie antérieure et postérieure du discours) et d'une situation (l'ensemble des données non-discursives).

Le pré-construit est de l'ordre de la représentation, et possède une dimension interactionnelle qui le rend proche de la compétence encyclopédique (culturelle et idéologique) qu'on retrouve aussi chez Kerbrat-Orecchioni. Le discours est une unité centrale à notre champ d'étude. Nous pensons circonscrire à cette notion structurée sous plusieurs strates, une multitude des circonférences.

On appelle **contexte situationnel** ou **contexte de situation** l'ensemble de conditions naturelles sociales et culturelles dans lesquelles se situe un énoncé, un discours. Ce sont les données communes à l'émetteur et au récepteur sur la situation culturelle et psychologique, les expériences et les connaissances de chacun des deux (Dubois, 1999, p. 116).

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Nous avons pris en compte ainsi les termes de **compétence, de contrainte et de modèle**. Cela dans le sens où il nous semble important de concevoir l'échange de répliques en rapport tangentiel avec les conditions extralinguistiques et la charge socio-linguistique inhérente.

LES DONNÉES À TRAVAILLER: CORPUS FRANÇAIS ET ROUMAIN

Pendant la rencontre avec les étudiants en Licence 1 Psychologie à l'Université Paris X Nanterre nous avons construit un Corpus Français (**CF**). D'autre part, nous avons construit aussi un Corpus Roumain (**CR**), avec des extraits de SMS et conversations sur MSN. Les sujets sont des étudiantes en Traductions Licence 1 à l'Université de Craiova, Roumanie. Les exemples qui suivent font partie de ces deux corpus.

HYPOTHÈSES

Les hypothèses qui ont guidé le parcours de notre présente étude sont les suivantes:

- H1: le canal de transmission du message influence au niveau graphique l'enchaînement discursif;
- H2: le canal de transmission influence la conception du discours;
- H3: la construction discursive construite sur un support nano technologique ne s'intègre pas dans une structure bipolaire (écrit/oral).

MÉTHODOLOGIE

Afin de suivre la réflexion, on a utilisé dans un premier temps **l'analyse graphique**. En traçant **un inventaire phénoménologique grapho-textuel** d'écart de la norme orthographique, le premier niveau d'analyse a été atteint.

Les corrélations entre plan graphique, fonction phonétique et la visée relationnelle ont été mises en évidence lors de l'expérimentation des **programmes de capture de visage**. S'ensuivent une **analyse conversationnelle** et l'encadrement typologique du type de construction discursive présentée ici sur un axe allant de l'oral à l'écrit.

2. LE DISCOURS = TEXTE + LES CONDITIONS DE PRODUCTION. LE TEXTE = LE DISCOURS – LES CONDITIONS DE PRODUCTION

Dans un premier abord, on va se concentrer sur **le texte** et sa construction. La première approche est celle de *l'usage graphique* dont nous passons en revue brièvement les principaux procédés.

Nous utilisons le terme **de néographie** pour désigner, sans jugement de valeur, ni positif, ni négatif, des graphies qui s'écartent délibérément de la norme orthographique. Ce caractère délibéré se manifeste par la saillance de procédés tels que **l'abréviation, la simplification phonétisante, la transcription de prononciations s'écartant du français soutenu**, etc; il atteint le paroxysme avec le verlan (n. soulign.) (Anis, 1999, p. 86). Ce qui suscite l'intérêt c'est aussi la motivation interne d'un tel phénomène: l'attitude ludique, la recherche d'expressivité, l'affirmation de soi, la contestation de la norme et éventuellement adhésion aux valeurs d'une contre-société.

✓ Pour ce qui est des **allomorphes aux formes standard** (les graphies phonétisantes), nous exemplifions certains de ces phénomènes:

- réduction de *qui* à *k* :

ex corpus roumain:

*Fie **k** ziua de azi sa-ti aduca bucurii*

(Je te souhaite que cette journée t'apporte des joies)

ex. corpus français:

Nobody's perfect dit: *attd je me prépare à manger en mm tps, c pas pratik !!*

- reflection phonétisante du diagramme "oi" non abrégative mais expressive; oua al-longe la graphie, le résultat étant des graphies expressives genre ouahhh; récupérer la prosodie c'est donc récupérer l'émotion. Rencontre:
pat de retour à toulouse dit: ***aaééh** y !!*

✓ En ce qui concerne les **graphies phonétisantes** représentant des formes relevant du register courant ou familier de la langue parlée et engendrant **des effets d'oralité**:

- remplacement des e caducs par des apostrophes:

Nobody's perfect dit: *dc j'vai lui dire "ben non, c'est pas possible paske apparemmnt vous voulez pas de moi, j'attd tjrs un coup de fil pour me dire si oui ou non on me paye pr le boulo ke je fai*

- notations de variantes phonétiques diverses:

JS dit: ***po** grave*

- notations d'écrasements phonétiques:

Nobody's perfect dit: ***mouaip** !*

- troncations avec ses variantes apocope et aphérèse:

Nobody's perfect dit: *attd 2 secondes, je descend mon **ordi** comme ca je peu manger en mm tps en je reprend (apocope)*

J S dit: ***'tain**, ca devient cho de chez cho (aphérèse)*

✓ **Les squelettes consonantiques**, rencontrés de façon récurrente aussi sur les forums que sur les SMS, permettent une récupération facile du corps initial du mot via une prononciation intuitive

- sur SMS:

*C est clair et c est bien **pr** ça que finalement que je vais rester chez moi llo! et puis j ai la flemme aussi llo!*

- exemple tiré du forum:

JS: *Hey toi, ça fait **lgtps**! J espère que **tt** va bien, **pr** ma part ça va juste enrhumée. Merci **bcp**, je te souhaite également une bonne année et mes meilleurs vœux! Gros bisous* January 11 at 12:09am

- ✓ **Les syllabogrammes:** il s'agit plus spécifiquement de l'utilisation du nom de lettres pour représenter une syllabe homophone, au prix de la perte de l'identité des mots (Anis, 1999, p. 88).

ad libitum:

ADG: **ca yest** *jsuis diplômée !!*

Nobody's perfect dit: *ms c'est ce ke jefai mon cher!!!*

- ✓ **Les étirements graphiques** figurent aussi parmi les procédés les plus souvent rencontrés via ce type de discours. «Il s'agit d'un procédé expressif reposant sur la répétition des lettres, analogue à ce qui se passe pour les signes de ponctuation. Notons qu'il est exceptionnel qu'une transposition phonétique soit possible» (Anis, 1999, p. 89), comme dans:

EP: *mdrr ohhhh casilee ann annn*

AT: *Pitaing, dur dur au taf... Mauvaise période à passer... pffffff :/Vivement février, la neige, youpii!!!!*

- ✓ **Le verlan** se manifeste aussi à l'intérieur de ces constructions discursives. Force est de constater une certaine rareté de la récurrence, comme en témoignent:

Exemple 1

MM: *ba si tu le supprime je ne met plus de culotte.mdr*

October 28, 2009 at 4:36pm

DH: *pardon?? lol oh le retour de la lune mdr*

October 28, 2009 at 4:4

JS: *ptdr !!!! en mm tps tu ne mets de lottecu mddrrrr okay je supprime*

October 28, 2009 at 5:18pm

La même approche se rencontre dans des études similaires réalisées sur l'Italien:

Esistono alcuni *tratti* tipici dell'italiano parlato digitato (...) Ecco i più significativi: (...) tratti di semplificazione linguistica: la semplificazione in chat è ricercata perché c'è bisogno di un passaggio dell'informazione immediato, perché si ha poco tempo per organizzare il discorso, perché si vuole rivestire ogni enunciato di una forte carica di emotività. È quindi una strategia consapevole attuata del parlante e ricorre in certi tratti che l'italiano digitato condivide con alcuni stili semplificati per scopi speciali: **l'uso tachigrafico di sigle, logogrammi, simboli al posto di lessemi della scrittura standard, la riduzione delle parole al minor numero di lettere possibile**. Per gli stessi motivi di brevità ed enfasi emotiva si ricorre anche a **forme classiche del linguaggio bambinesco** (n.soulin.) (Gastaldi, 2002, p. 136).

3. RÉCUPÉRATION DES ÉCARTS PHATIQUES À TRAVERS LA TECHNOLOGIE

Les nouvelles technologies ont largement influencé le visage de la société actuelle. Les prises de position (pour ou contre) ont enflammé les débats et ont fait couler beaucoup d'encre. Entre la défense d'un traditionalisme archaïque et la sollicitation sans parti pris de la technologie, les opinions modérées se sont lancées sur une analyse entre individualisme et communitarisme, ce qui révèle:

socio-historical context of virtual community and has revealed some of its discursive implications. Specifically it showed that the discourse about the virtual community relies on a set of contradictory values: individualistic and communitarian. These values are reinforced by a belief in self-expression, self-interest, and open communication, which the founders of virtual communities inherited from their countercultural past (Matei, 2005, p. 82).

La technologie vient brouiller certaines conventions des relations réelles pour en définir de nouvelles: la proximité d'un visage sur une webcam, le temps de latence, les indications non verbales, la gestuelle, le volume sonore sont des données contextuelles qui prennent du sens dans les conversations médiées via les systèmes socio-techniques. Le positionnement d'une webcam (cadrage, proximité, positionnement, environnement, couleurs...) influence directement la conversation, la perception que l'on a de l'autre ou de soi, tout comme dans une conversation physique la personne la plus grande donne toujours une impression de domination, rapportent Daniel Lafrenière, Dan Berlin et Jay Steele. En plaçant la caméra à hauteur d'yeux et en arrangeant la pièce pour qu'il y ait un angle de 90 degrés entre les participants, les intervenants à une vidéoconférence se sentent plus à l'aise, explique Judith Olson¹.

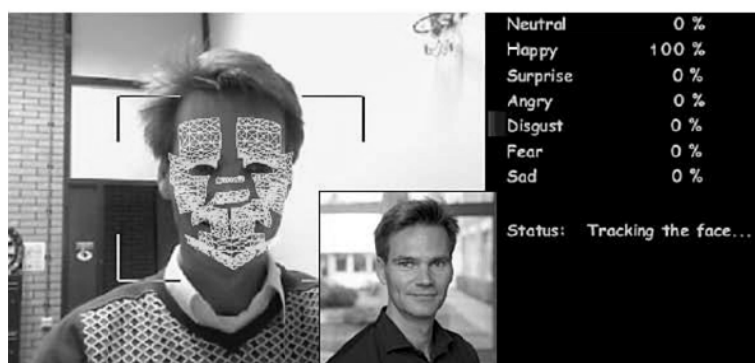


Figure 1. Capture de visage

¹ <http://www.internetactu.net/2009/04/21/comment-faire-entrer-la-communication-non-verbale-dans-nos-ordinateurs/>.

Le programme européen Pasion travaille également sur la communication non verbale en essayant notamment de mieux faire apparaître le comportement et le ressenti des participants. En utilisant des outils pour suivre le déplacement du regard, de la tête, des outils de mesures physiologiques (pouls, température...), Pasion vise à capter l'état émotionnel d'une personne pour montrer si nos correspondants s'ennuient ou s'intéressent à nos propos. Les technologies développées par Pasion pourraient ainsi servir à animer un avatar qui mime les communications implicites, afin de renforcer la présence sociale sans sacrifier la vie privée ou l'anonymat, rapporte Cordis, Innova-News et l'Atelier.

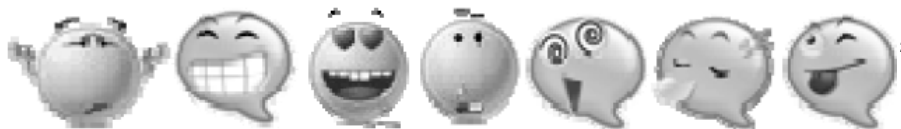
Ceci nous rappelle une des notions phare de Pierre Bourdieu, qu'on voit parmi autres se cristalliser dans l'opus "Le Sens Pratique": l'**hexis corporelle**. Lié à l'**habitus** (un système de définition du monde), le concept tient pour un ensemble de dispositions pratiques corporelles, manières de se tenir, de parler, de marcher... Ces manières, naturalisées dans la logique de l'habitus, renvoient métaphoriquement à la logique catégorique de l'habitus et deviennent par là des manières durables de sentir et de penser. L'hexis corporelle est dans cette perspective l'habitus fait corps. Autrement dit, ces dispositions corporelles ne sont pas naturelles, mais socialement construites, font sens et tiennent leur logique du contexte social et du système des représentations qui les construisent. On comprend mieux alors que via les nouvelles technologies supportent la construction d'une nouvelle hexis corporelle: être "figé" devant une caméra web pour prendre une photo ou même pour parler via "chat" repositionne de façon kinésique le corps, modifiant par la suite notre accord avec le monde autour (cf. fig. ci-dessus).

4. RÉCUPÉRATION DU RELATIONNEL VIA LE RAJOUT GRAPHIQUE

Comme les textes écrits, les productions orales relèvent de genres divers, c'est-à-dire qu'ils se distribuent en "familles" constituées de productions variées mais présentant un certain "air de famille".

La mimesis de la oralidad se evidencia perfectamente gracias al empleo de **los iconos**, lo que en el lenguaje hablado se realiza con la mimica y con los gestos. Y la misma función comunicativa es la de muchos intercambios orales: una comunicacion fática, que sirve para establecer, mantener o verificar el contacto entre los interlocutores, a pesar de servir también como comunicacion informativa. Es todavía un código inmaduro, una jerga que cuando se convierta en un mensaje cifrado requerirá de diccionarios (Betti, 2006, p. 5).

Communication phatique des "smileys", dont l'apparition sur l'écran de l'ordinateur ou même des téléphones portables sert à rendre la communication plus humaine et aussi à éviter en temps record les éventuelles malentendus sur un échange conversationnel économique et souvent laconique.



Nei registri linguistici, avviene una sorta di appiattimento su **forme espressive rapide e sintetiche, allusive, ellittiche**; (...) la parola si contrae in secche e storte sillabe, come qualche poeta ha detto. La parola scompare, come scritta con inchiostro simpatico (Roncallo, 2001, p. 119).

Plus loin

troviamo inoltre fenomeni noti per la loro alta frequenza nel linguaggio giovanile: uso di suffissi espressivi, grafia stilizzata tramite scrittura continua oppure forme di troncamento grafico che giocano su analogie fonetiche; combinazione di codici diversi cioè *l'informal spelling*. (...) La combinazione del codice grafico con segni aritmetici si rivela particolarmente produttiva (Schwarze, 2000, p. 150-151).

A livello microscopico la componente tempo favorisce **l'uso delle sigle**: *msg* per messaggio, *dgt* per digitare, *pls/plz* per please, *tnx/thx* per thanks *prg* per programma, *cmq* per comunque.

Anche **la frequenza del K** potrebbe essere interpretata come un espediente economico che sfrutta la ridondanza grafematica quando sostituisce il diagramma *ch* in *kiedo*, *anke*, *okkio*, *ke*, *skifo*, ma essendone **l'uso pervasivo** (*kome*, *kuando*, *kualsiasi*, *kosa*) credo sia da ricondurre alle consuetudini grafiche degli hackers americani, così come l'uso di 4 per *a* e quello di 3 per *e* (Pistolesi, 1997, p. 231).

Les diverses approches dans les sociétés contemporaines: que cela se passe en Italie, en France ou en Espagne, etc., montrent l'actualité de cette phénoménologie et surtout incitent à une analyse sous plusieurs onglets. C'est une question de style, mais aussi une question de perspective.

Les diverses recherches montrent que le variable stylistique n'est réductible ni à un ordre total (degré de vigilance sociolinguistique) ni à un artefact expérimental (le paradoxe de l'observateur chez Labov), mais liée à la localité de l'interaction (l'enquête étant un cas particulier) (Moreau, 1997, p. 46). Le variable stylistique se prolonge donc par la description de la formation discursive. Sociolinguistique et analyse de discours, ce sont des activités interdisciplinaires centrées sur des points de vue complémentaires. La sociolinguistique prend en compte les conséquences sur le système des formes et le caractère social de la production de sens. L'analyse du discours interpelle les disciplines interprétatives afin qu'elles prennent au sérieux la dimension formelle du langage, qui contraint et limite constructivement les productions de sens (Moreau, 1997, p. 46).

² <http://www.smileyarena.com/>.

Nous essayons de mettre en évidence les particularités ressurgissant en raison pas d'un espace géographique mais des caractéristiques inhérentes des nouvelles technologies.

5. LE DISCOURS CONSTRUIT ON LINE ET OFF LINE: UNE CONSTRUCTION ENTRE ÉCRIT ET ORAL?

Il faut avant tout distinguer entre *le médium* et *la conception*. Pour le médium, la production orale met en jeu le corps entier (la voix, offrant la ressource du supra-segmental, est exprimée au moyens de sons issus d'une bouche), et s'accompagne de gestes et mimiques; l'écrit, lui exploite seulement la main et ses prolongements, en posant une trace sur un support externe. La réception orale passe par l'auditif mais met aussi en jeu des signaux visuels, quand la lecture se ramène au seul usage des yeux.

Quant à la conception, elle concerne les modalités de constitution fonctionnelle et communicative d'un énoncé. Le médium relève d'une dichotomie stricte, quand la conception offre davantage de souplesse. C'est pourquoi un énoncé de l'oral médial peut avoir des caractéristiques discursives de l'écrit, ou l'inverse (Gadet, 2007, p. 47).

Oral et écrit ne suivent pas un même déroulement matériel ce qui a des effets formels et fonctionnels. Le déroulement linéaire de l'oral n'exploite que l'axe temporel, alors que l'écrit est d'abord soumis aux contraintes de l'espace. Une conséquence est l'impossibilité d'effacer à l'oral, qui se manifeste par des bribes, hésitations, ruptures, répétitions, ou la présence des ponctuels (ou marqueurs de structuration de la conversation). Ces phénomènes, sans correspondants écrits, sont en général stigmatisés, alors qu'ils constituent des traces de la constitution/structuration du discours (Gadet, 2007, p. 49). Mais le discours via ordinateur et celui qui surgit des SMS garde, justement, sur ses traces écrites les marques de l'oralité.

De ressort social, actionnel ou technologique, tout surgissement discursif vient occuper une place entre ces deux pôles. Ainsi, le téléphone ou la CMO instaurent des points intermédiaires entre co-présence et séparation spatio-temporelle en des points différents de l'axe, car le téléphone exploite le contact de la voix, quand la CMO n'est qu'un contact virtuel et pas nécessairement synchrone. Ce paramètre, jouant du contact physique, situe les courriels, chats et SMS du côté de la distance, les autres paramètres s'avérant plus ambivalents sur le continuum, ou franchement du côté de la proximité (Gadet, 2005, p. 5).

Rechercher des modèles qui seraient spécifiques à l'analyse des genres de l'oral consiste bien souvent à penser la généralité à partir du modèle de Hymes (1967-1972), comme le signalent C. Kerbrat-Orecchioni et V. Traverso 2003.

Si l'oral a pu devenir l'objet d'étude, bien après l'écrit, c'est avec le franchissement de quelques étapes technologiques: le magnétophone a permis le reproductible; portable, il a donné accès à des lieux où sa présence se fait discrète; les technologies documentaires ont permis de traiter de grandes masses de données. Et la vidéo permet d'étudier la parole en relation avec le corps (gestes, regards, positions des corps ou des mains, expressions faciales) (Gadet, 2007, p. 45) - voir fig. 1.

C'est donc la notion d'événement de communication qui est alors privilégiée, dans ses relations avec celles de situation et de communauté langagière, et avec ses différentes composantes. Or le modèle de Hymes, tel que le présentent par exemple Bachmann, Lindelfeld et Simonin 1981 en s'appuyant sur l'observation d'"un déjeuner familial", comprend une dernière composante appelée *genre*, dont le nom est issu de l'étude du folklore (*folklinguistic*) et qui réfère aux dénominations empiriques en vigueur dans une communauté:

LE MODÈLE SPEAKING DE HYMES (1967/1972)

Setting	(cadre physique et psychologique)
Participants	(locuteurs ou autres personnes présentes)
Ends	(finalité: but et résultat de l'activité de communication)
Acts	(actes: contenu - thèmes - et forme du message)
Key	(tonalité: ton sérieux, taquin, etc.)
Instrumentalities	(instruments, moyens de communication, canaux et codes)
Norms	(normes d'interaction et normes d'interprétation)
Genre	(type d'activité de langage: conte, chant, devinette, lettre commerciale, bavardage à bâtons rompus)

[d'après Bachmann, Lindelfeld et Simonin 1981: 74-76] (Moirand, 2003).

En pays de littératie et l'idéologie du standard, le pouvoir prêté à l'écrit minorise le statut de l'oral. Tout spécialement en français, l'écrit, lieu essentiel où a porté la standardisation apparaît plus homogène que l'oral, où le foisonnement variationnel peut difficilement être jugulé, ce qui réaffirme l'opposition convenue entre *écrit normé* et *oral instable* (Gadet, 2007, p. 45).

Il existe des nombreux termes que la langue met à la disposition des usagers pour caractériser tel échange particulier comme étant une conversation, une discussion ou un débat, du bavardage ou du marchandage, une interview, un entretien ou une consultation, un cours ou un discours, une conférence ou une plaidoirie, un récit ou un rapport, une confidence ou une dispute, etc., l'hétérogénéité d'une telle liste (qui pourrait être allongée *ad libitum*) confirmant la remarque de Maingueneau (dans laquelle se trouvent mêlés genres de l'écrit et de l'oral):

Les locuteurs disposent d'une foule de termes pour catégoriser l'immense variété des textes qui sont produits dans une société: "conversation", "manuel", "journal", "tragédie", "*reality-show*", "roman sentimental", "description", "polémique", "sonnet", "récit", "maxime", "hebdo", "tract", "rapport de stage", "mythe", "carte de vœux"... On notera que la dénomination de ces genres s'appuie sur des critères très hétérogènes (1998, p. 45).

La richesse du lexique utilisé pour étiqueter les genres n'a d'égal que la confusion qui le caractérise, et la situation ne s'est guère améliorée après le constat teinté d'opti-

misme (“Il n’existe pas *encore*...”) que fait il y a cinquante ans Bakhtine (cité par Dolinine, 1999, 27):

Il n’existe pas encore de nomenclature des genres oraux et on ne voit même pas encore le principe sur lequel on pourrait l’asseoir (Kerbrat-Orecchioni, 2003, pp. 2-3).

Il n’existe pas de discours hors contexte, ni oral, ni écrit, et l’écrit est lui aussi tributaire de ses conditions de production. D’où l’importance **des marques de contextualisation** (comme une intonation ironique, des rires, des ralentissements, des accumulations de bribes...), dont l’étude en contexte se distingue de celles d’approches qui attribuent à l’oral et à l’écrit des propriétés transcendantes. L’analyse de la conversation a ainsi su montrer le rôle joué par des détails contextualisants de l’oral, comme pauses, chevauchements, hésitations, allongements... qui sont souvent ceux qu’une transcription ordinaire fait apparaître (Gadet, 2007, p. 54). Nous reproduisons ci-dessous un extrait d’un forum afin de souligner l’encadrement d’un discours “écrit” en ligne à une “conversation” en privé:

gillia1207

Posté le 07-09-2009 à 21:35:29

au boulot, *à l’extérieur*, je me rends compte que beaucoup de gens transforment ce que tu dis et l’interprètent à leur manière... Au travail une collègue est championne pour ce type d’exercic... et cela fait des ravages! Et ce soir je viens d’en faire les frais... une personne m’appelle pour une carte d’identification pour ma chienne en me disant que ils avaient soit disant reçu un mail de ma part exposant mon mécontentement... or c’est totalement faux j’ai posé la question de savoir si c’était normal au bout de 4 mois de n’avoir toujours pas reçu la carte... *A force de m’en défendre au téléphone* la personne a finalement dit “peu importe” mais non pas peu importe je n’ai jamais exprimé de mécontentement, c’est un peu facile de faire dire autre chose que ce que l’on a dit en finissant par “ce n’est pas grave”... Pourquoi suis je abonnée aux personnes “tordues” car j’ai souvent eu droit à ce type de problème? Je suis pourtant *ouverte aux autres* mais j’ai de plus en *mal à communiquer à l’extérieur*³.

L’organisation syntagmatique, la rareté et l’atypicité de la ponctuation de cet écrit conversationnel produit dans l’urgence et chargé d’affect rendent non pertinente la notion de phrase telle qu’on peut l’appliquer à l’étude des documents écrits traditionnels. Au-dessous du message, qui correspond au tour de parole de l’analyse conversationnelle, on définira l’énoncé, entité définie moins syntaxiquement qu’en référence aux valeurs illocutoires, correspondant à l’intervention de l’analyse conversationnelle, constituée soit d’un unique acte de langage, soit d’un acte directeur avec ses actes

³ Source: <http://www.philagora.net/dissert2/communiquer.htm>.

subordonnés; au-dessous, le segment est une proposition complète, une proposition elliptique ou un équivalent correspondant dans certains cas à un langage (Anis, 1994, p. 89).

AU LIEU DE CONCLUSION... DISCUSSION

Cette approche est loin de recouvrir tous les points d'une analyse pertinente. Elle essaie de survoler les grands points d'accroche d'une perspective pluridisciplinaire du sujet en cours. Le présent article espère lancer les principaux jalons d'un futur débat.

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If my bed is a ship... Children in the hospital: between medicine and bibliotherapy

Rossella Caso^{*}

Abstract

Can health become a “matter of tales”? Starting from the research hypothesis that reading aloud could be an effective instrument to support the well-being of the hospitalized child, this article shows a case study conducted at the Anna Meyer Children’s Hospital in Florence. The educational spaces for the research activity were the hospital wards, as well as the playroom, where the educators brought their *Flying Bookshelf*, a full-blown cart loaded with books. In this way the hospital returns a promotion and day care centre of the overall Children’s health in so far as it allows to transform the stressful experience of the disease into a moment to grow and to get a new habit: reading.

Key words

Children, disease, hospitalization, reading aloud, education.

HEALTH: A “MATTER OF TALES”? THE ROLE OF READING IN THE PROMOTION OF THE WELL-BEING OF THE HOSPITALIZED CHILD

The hospital represents a *crossroads* of stories. Stories that meet and sometimes entwine in the waiting halls or in the hospital rooms, in the wards, in the gardens or in the playrooms. Stories of people who live an experience which is always difficult to face, especially in childhood, regardless of the severity of the disease. Winnicott (1992) observed as the disease goes beyond the fears haunting the mind of any child (but also any adult) because it gives a real poignancy of death that is stronger than any other fear.

Silvia Kanizsa writes that “the hospitalization is more disruptive for the children than for the adults” (1990, p. 62). In fact it entails a sudden detachment from the daily routine, dragging the child in a completely unknown context in relation with his/her house, and moving him/her away from all what he/she really cares: affective links, habits, objects. His/her world is entirely outside the hospital walls, a place which is often perceived as dark and threatening, populated by strangers – doctors and nurses – always seen as frightening “anonymous white coats” (Capurso - Rocca, 2001, p. 22). The drastic loss of well-known and reassuring benchmarks and the intensity of the emotions that he/she feels, often go beyond the emotional and cognitive capabilities of the child that,

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especially in the pre-school age, has less cognitive and symbolic appropriate instruments which allow him/her to accept the changes, in particular the negative ones, and let him/her properly work out the situations that he/she lives. Therefore the severity of the disease has no importance: in the universe of fantasies and fears crossing his/her mind, in fact, "the incision of a pimple, a blood sample or a tooth extraction can appear as severe as the loss of an eye or a limb amputation" (Freud - Bergmann, 1974, p. 105). The rejection (of setting, persons, and therapies) can often be followed by a phase of calm, but this calm is far more dangerous than weeping, protest and refusal because it is the strongest and most noticeable expression of the child incapability to face the fears and the anguishes that haunt him/her and entwine with the pain, with the fear of the abandon by the parents (often as unprepared as their child to manage a situation full of preoccupations and fears and therefore untenable for them too), with the guilt feelings that can accompany the disease status which can be felt as a real attack to himself/herself. In fact it's not unusual that the child, who has still a confused idea about what getting sick means and about the concepts of health and disease, convinces himself/herself that he/she got sick after disobeying mummy and daddy and so hail to the disease – and the consequent hospitalization – as a torture or a punishment. In that case the doctor becomes the executor of the punishment and needles, medicines and several health care tools become stocks. So a psychic pain is connected to the physical pain and it can turn into regressive or aggressive behaviours, usually addressed to parents and health care staff which, according to the child imagination, wanted his/her hospitalization to punish his/her *evil deeds*. Besides it often happens that the disease force him/her to bring into question his/her own identity because it makes him/her feel different from how he felt before he got sick and therefore different from the friends enjoying good health.

So it becomes basic to avoid that he/she lives the hospitalization experience alone and unprotected, in alienation and in psychological isolation, natural results of his/her sense of diversity. The major risk is that he/she will be negatively and permanently marked by this experience (Kanizsa-Dosso, 1998).

When life becomes upsetting to him/her, as Bruno Bettelheim writes in *The Uses of Enchantment: the Meaning and Importance of Fairy Tales*, «the child needs more and more the capability to understand himself/herself in this complex world with whom he/she has to reach a compromise. For doing this, he must be helped to find a coherent sense in the turmoil of his/her feelings» (Bettelheim, 1977, p. 52). A sense that, according to the scientist, he/she can find through the stories because they – especially the fairytales – transmit to the child, in a subconscious way, that mass of information about life which are necessary to comprehend the sense of life itself. A story is, as a psychoanalytical tradition that goes from Bruno Bettelheim to Antonio Ferro highlighted, *unsaturated* – because everybody can fill it with his/her own contents and transfigure it according to his/her emotional status – and it is a vehicle through which two persons, the reader and the listener, start to weave a full-blown *emotional storyline* remembering the one that the child weaves with the mother in his *primal world*. The voice of the mother gives substance to the story and fills it. Once the child listens to it for the first time, every other voice will be the natural continuation of those *milky words* (Roncaglia, 2003) and will help recognize and check his/her deepest emotional status. Well, is it

possible “to heal with the stories”? Bettelheim didn’t hesitate to state that the stories *heal* and are *therapeutic*, but at the same time stated – like Winnicott – that, in order to carry out their function, they must entertain because a boring story gives no *inner vibrancy*. According to Winnicott it’s necessary to keep “a certain measure of illusion” in the sick child and to avoid a steady insistence on the principle of reality (Winnicott, 1992).

In the hospital the need for finding a balance with the pain in order to fight it, stresses the relevance of reading or listening to a story because it enables the fantasy in the child, a dimension linking the storytelling practice to the everlasting playing of the child. Game and narration allow the sick child to keep his/her own childhood safe: the reason why most of the hospitals provide a playroom (which reminds him to be a child) is to protect the young patient from the hardness of the surrounding setting.

Since the beginning of the XX century, Sigmund Freud highlighted how the narrated story could become a sort of “ludoscenico”, an instrument able to give the child the same emotions of a game, which allows him to see performed and perform, in the legendary and far places of *once upon a time*, his/her own expectations and desires but the most dreadful and hidden fears (Cfr. Freud, 1996-1980). Separated and moved away in a fairy *elsewhere*, the child lives them through the fairytale that will give him/her back in a less terrifying form because the tales always show a chance and a certainty, even in the most difficult situations. The child who, like *Tom Thumb*, is lost in the wood of his/her own emotions, will finally find the road to come back home (Canevaro, 1995).

And every fairytale certainly works because it does justice to the children’s mind where the characters are good or evil, where the hero wins even if little and hangdog, where solitude and abandonment – externalized in the tale – find comfort in the natural landscape from the children’s desires of dependence towards the independence (Trinci, 2008, p. 27).

The fairytale keeps and contains the child’s attention somehow and tries to give a name, a plot, a sense to the fears and to the anguishes which obscurely pervade it. Fears and anguishes that the hospitalized child, compared to the healthy one, lives in a painful reality in which he needs more and more the *healing power* of the fairytale. However, as Manuela Trinci warns, it is important to bear in mind that the *painkiller book* doesn’t exist. It was born from a *therapeutic culture* that led parents and educators to try the book in the pharmacy rather than in the bookshop or in the library. Talking about care instead than therapy is crucial, and the book can give this only if there is an adult who acts as an intermediary. Telling the story the adult establishes a cheering relation with the child that reminds the primal one that he/she established with the mother through the voice. In this sense it is possible to talk about what the scientists call *bibliotherapy* (cfr. Schlenther, 1999).

A story is made up of light and unsaturated matter and works because it allows the creation – between the narrator and the listener – of what Trinci defines: «an intermediate space, a work *camp* fed and passed by ties and emotions» (Trinci, 2008, p. 27). The story, through reading, becomes a transitional moment, an intermediate salvation area between the painful contents of the world and the world outside: it’s easier to talk

about the fear of the dark when it is lived by a little bear or a bunny! It's easier to talk about the hospitalization drama if it is lived through the adventures of Andrea, Lu and a mythical *stellar fish soup*! (Nava, 2008).

In this sense health can really become a "matter of tales"!

«IF MY BED IS A SHIP...»: READING BETWEEN TREATMENT AND EDUCATION. MEYER HOSPITAL'S EXPERIENCE

The case study shown in this article was conducted in 2009 at the Anna Meyer Children's Hospital in Florence and it is a part of a larger research, entitled "If my bed is a ship...", involving in addition to Meyer, Giovanni XXIII Children's Hospital in Bari and the Paediatric Ward of the "Ospedali Riuniti" Hospital in Foggia. Three different realities linked by the mission of making hospitalization a growth moment whether for the child or for the family through instruments, as for example the school, the game, but also the book and the reading that can help the young patient overcome the stress of hospitalization and rebuild a dimension of daily normalcy. Reading promotion projects started in all the three hospitals and in different periods. These projects led the storytelling practice in the paediatric wards: in Florence the *Flying Bookshelf* and the reading workshops; in Bari and Foggia the project *Reading for Growing up*, promoted by the pharmaceutical company Glaxo: their common purpose is to ease the pain caused by disease and hospitalization and to support, promoting the overall health of the child, the continuation of his/her growth path. These activities became so much important during these years that now they are part of the welcome and support projects of the hospitals and an essential component of the assistance provided to the children and their families.

The purpose of this research is to verify the hypothesis that read-aloud programs could be effective to promote the well-being of the child, whether he/she lives a long or short hospitalization, encouraging his/her active participation, entertainment and communication. In fact, the studies conducted in this field by R. Felder Puig et al., E. Schlenther e J. Pardeck demonstrated that when there are the conditions to do, enjoy and, above all, communicate in a proper way, the hospitalized children enable the resilience, that is the skill to face and overcome the adversities of life and pull through them strengthened or even changed (Cfr. Felder Puig, Maksys, Noestlinger, Gadner, Stark, Pfleuger, Topf, 2003; Schlenther, 1999; Pardeck, 1998).

The theoretical reference is the *bibliotherapy for the development* (RTG), as it was defined in the 90s by Matthews and Lonsdale, authors of the first and more important research about reading in the hospital: «reading to promote the development and the well-being of the child and to favour him/her to get the maximum gain during the hospitalization experience» (Matthews-Lonsdale, 1991; Matthews-Lonsdale, 1992). M. Anderson, in *Hospitalized children and books* (1992), now a classic text in the matter, highlighted how the books connecting to the inner needs of the child can help and constantly foster the children, through the experiences narrated in a story, through the caring attention of the adults – because the book is not therapeutic in itself, but it is reading that establishes a dialogue between the adult and the child.

If the term *therapy* in this context must be considered in the meaning of *treatment*,

bibliotherapy can be used as a method to promote the growth and the adaptation of the young patient, as well as a recognized modality to achieve that change which could help to take back the adversities of life into a normalcy frame. Readings have a potentially therapeutic value because they provide the young patient with the chance of empathizing with the character's deeds, sometimes funny, sometimes sad, but always fantastic. In this way, living them through a third party by means of the protagonist, the reader will be able to penetrate in his/her own problematic situations and face it. Therefore a well organized plan of animated readings can *normalize*, according to Anderson, the hospitalization experience through the entertainment caused by the activation of the fantastic dimension: as underlined by the scientist, if the entertainment is often the substance of life as well as the antidote for every form of sadness, even more so in a paediatric ward!

The reference educational spaces of the research activity, apart from the playroom – a real *transitional space*; a *free zone* without examinations and treatments and therefore a retaining place of anguishes and sufferings – were the wards, where the educators brought their *Flying Bookshelf*, a full-blown cart loaded with books.

Although there are issues in the *assessment* of an activity closer to art than the science, as Matthews and Lonsdale (1992) warn, it was chosen to verify the research hypothesis using the instrument suggested in the scientific literature, mostly the American and the Anglo-Saxon ones: unstructured observations, games, essays, drawings, questionnaires, interviews, audio and video recordings (Todahl-Smith-Barnes-Alves Pereira, 1998). Regarding observation and monitoring, it was chosen to use a logbook and some survey forms of the quantitative data concerning access to the playroom and participation in the read-aloud activities and, more in general, in the recreational activities proposed by the educators. In relation with the survey methods, three different typologies of instruments were used: a depth interview, addressed to the educators dealing with read-aloud programs; a questionnaire addressed to the parents and, finally, a simple assessment form on the appreciation of the reading activities addressed to the children. The goal is to build as much as possible a complete frame of the perceived well-being level related to this practice, taking into account the perspective of all the other players involved in the process: educators, children and parents. The interview with the educators, inspired by the one stated by Matthews and Lonsdale in the 1990s for the research *Children in Hospital* is articulated into three sections: the first section is aimed to establish the definition and the use of bibliotherapy; the second section is aimed to define which dynamics are concretely enabled as opposed to the classical model; the third section is aimed to establish the effectiveness noticed by the operators with regards to this practice in terms of welfare perceived by the children and their parents.

The questionnaire for the parents, inspired by the *Babar* model worked out by the *American Academy of Paediatrics* and applied within the National Project of reading promotion *Nati per Leggere (Born to Read)*, is also structured into three sections: the first section is dedicated to the personal data gathering and is aimed to reconstruct the family socio-economic situation and its possible correlations with the child and the parents' reading habits; the second section focuses on the relationship between the parents and the hospitalized child and is aimed to reconstruct a scenario, as exhaustive as possible, of the activities that they prefer to do in that particular context; the third section is dedicated to the assessment of the efficiency of the reading workshops in terms

of child well-being promotion.

Finally the form for the children is articulated into four questions: in the first two «Did you like the story?» and «How did you feel?», the answers are associated with some simple emoticons, conceived to facilitate the expression of the emotions in relation with the performed reading workshop; the last two, instead, allow to establish what was the nicest character, also to assess the possible identification of the child with the story that he/she has listened to and if he/she wishes to listen to it once again. In fact, research in this field demonstrates that the child usually wants to hear the most reassuring stories more times or the ones in which he/she particularly recognizes himself/herself.

The study consisted of ten days of participant observation and involved 6 educators, 54 adults (mothers and fathers) and 212 children of which 133 boys and 79 girls. 112 children were between 0 and 5 years old, 83 between 6 and 11, 18 were older than 11. It's important to underline that reading represents only one of the activities conducted in the Hospital to promote the patient well-being. In the playroom the children prefer games (board and symbolic games) and the artistic works (drawing, painting, plasticine, etc.). They often prefer to read in their rooms, borrowing books from the library. They read alone or with the parents, except when the educators arrive to narrate their favourite stories, making them choose from the *Flying Bookshelf*. This, together with the fact that checks and examinations often interrupt reading, is the cause of the meagre sample: only 19 children – 8 aged between 0 and 5, 9 aged between 6 and 11, and 2 older than 11 – and 27 adults. Among them, only 18 children and 12 parents were submitted to the elaborated assessment questionnaires. There are different kinds of book in the bookshelf always organized to satisfy all the age groups with a large number of subjects. Not only stories about hospital, on the contrary, as the educators explain, the children usually prefer stories allowing to escape from the reality they are living: so monsters and vampires stories are definitely the most popular among the young patients. Therefore the data obtained by the assessment demonstrated what came out from the operators' perceptions and from the subject literature: the child's needs to escape from the reality in which he/she lives through fantasy. So, no more stories talking about hospitals, but fantasy and funny ones. After all in 1992 Anderson already stated that, since laughing helps release endorphins which are natural antibodies against pain, humorous stories can help reduce stress and pain and so they result particularly adequate for the education of the young patient (Cfr. Anderson, 1992). After reading, all the children were asked to describe their emotional status choosing one the following options: *sad, happy, scared, angry, bored* coupled with classic *emoticons*, useful to simplify their expression. They asserted to feel happy and 98% wanted to listen to the story again. This datum confirms one of the most important scientific piece of evidence about reading aloud: children love to hear more times the most reassuring stories or the ones in which they particularly recognize themselves. Then the evidence that the entirety of the sample identified itself with the hero, the protagonist of the story (the "nicest" character) who, although little and undefended, finally wins, is the further testimony of this argumentation: the happy ending communicates to the child that, even in the most difficult circumstances, there is always a chance of salvation and a certainty.

Even the adults declared to feel a greater sense of calm (98% of the cases) after the reading activities. Moreover in 50% of the cases they asserted to see their child

quieter than usual, and the remaining 50% more communicative with the others. Fathers and mothers elected the reading of tales as one of the three things that they prefer to do with their child during hospitalization (9 preferences). Reading is followed by games (9 preferences) and cartoons (4 preferences). The parents perceive the same activities as the favourite ones of their child during hospitalization, but with different numbers: this time the primacy is for games (10 preferences), followed by reading (7 preferences) and cartoons (5 preferences). The read-aloud practice remains, in 7 cases, the most significant new habit that parents will keep after hospitalization. There are several reasons, according to what was recorded by the questionnaires, that will prompt mothers and fathers to practice it at home: reading helps relax, fulfils the curiosity and the will of knowledge of the child and helps express his/her own emotions. Besides it creates intimacy and sharing moments between adult and child. Therefore the practice of reading aloud in the hospital can have positive effects in the parent-son/daughter relationship too: for the adult, in fact, it could become an opportunity to test a more intense meeting way with his/her own child and to reactivate a communication that maybe the illness interrupted, and at the same time activating and strengthening a habit, reading together, very important for the child's psychological and cognitive development.

Also, according to all the educators who were interviewed, read-aloud is a very helpful activity for supporting the well-being of the hospitalized child. In fact, the book can become, according to their insight, a tool to get in touch with the sick child. By means of the book the child can open up with the educator, talk about himself/herself, express his/her own emotions, sometimes regain his/her own active part (leafing through the pages or participating in the reading of the educator, for example). On the other hand, they are a bit contrary to the use of the word "therapy". Nicolò Muciaccia, representative of the *Cooperativa Arca* that has been taking care of the Meyer's paediatric patients for decades, states:

game, music, theatre, reading are not treatments to be submitted in a pinch to who is living a suffering, but they are natural dimensions of life and child life, which help not getting sick (or not getting sick furthermore) before healing.

For this reason, as already highlighted by Matthews and Lonsdale, the control of these instruments should become an integral part of the operators' competences, in the effort to improve the situation of the children in difficulty.

CONCLUSION

Regarding what emerged from the collected data, reading in hospital assumes a particular value for all the subjects involved in the activity. For the children it can represent the chance to test the *therapeutic* power of fantasy and creativity, to be used as a strategy for the modulation and the normalization of anxieties and fears connected to the disease experience, to hospitalization, to diagnostic and therapeutic treatments:

then “healing with the tales”, in this sense, is possible! For parents it is an opportunity to get new knowledge in regard to the development of their children as well as to the strategies to improve it, besides a moment to learn the habit to the reading practice, to be repeated at home too. Finally for the educators it is a moment to reflect about the most qualifying part of their professionalism: taking comprehensive care of the child in his/her person and in his/her world.

The present case study, in brief, far from providing a solution to the problems connected with child hospitalization, demonstrates that the practice of reading aloud can have positive effects on the health education of the young patient and his/her family. Therefore it should become part of the skills of every person working in the paediatric wards. This hypothesis will be object of further deepening in the further stages of my research.

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Analysis, assessment and monitoring of PhD students' competences

Gina Chianese *

Abstract

PhD students are called to contribute to the objectives of the Lisbon strategy: making Europe the most competitive and dynamic knowledge-based economy. In order to achieve this aim, it is necessary to form them, to withhold them, to increase their mobility, to improve and to give them a better continuing training. A personal development plan (PDP) can represent a personal and social management tool in order to manage, to get a better learning process in PhD courses, to analyze, to monitor and to document competences.

Key words

Lifelong learning, knowledge, skills, competences, assessment.

1. THEORETICAL FRAMEWORK

The topics of lifelong and lifewide learning are the background for the key words of the research plan: lifelong learning, knowledge, skills, competences, assessment learning, metacognition and competences.

The necessity to learn all life long appears essential in a complex, mobile, "liquid" context which continuously changes (Baumann, 2003). It is necessary to achieve new competences and skills in order to respond as well as possible to the complexity of society and to avoid risks of illiteracy return.

Each person actively participates in the construction of his/her own learning process (Duffy, Lowyck and Jonassen, 1993) and this process is *situated* and is carried out by particular kinds of collaboration and social negotiation (Doise and Mugny, 1982).

In this context metacognition, self-formative ability and the sense of self-efficacy seem very important. Metacognitive ability turns out fundamental as well as the reflection about the learned competences and to learn.

2. QUESTIONS RESEARCH

The core questions are:

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1. Who are PhD students?
2. What kind of competences do they effectively need?
3. In which way is it possible to assess their competences?

2.1. WHO ARE PHD STUDENTS?

PhD students and researchers are called to contribute to the objective of the Lisbon strategy: making Europe the most competitive and dynamic knowledge-based economy, realizing a sustainable economic increase with new and better workplaces and greater social cohesion.

In order to achieve this aim, it is necessary to form, to withhold and to attract competent researchers, to increase their mobility, to improve and give them a better continuing training. It is also important to give them skills and competences in order to grow up both in the academic career and in the job market.

PhD students and researchers' training for the job market is a true challenge: currently, in the greater part of European universities or institutions, PhD students are trained near only for an academic perspective. But PhD students and researchers would also be formed for a larger job market. However, this kind of training needs a radical change of usual habits.

PhD students get an academic title that is not useful both in academic field and in the job market, especially because it is very difficult to define a "PhD student".

There are many documents and institutional subjects that concur to define it: the Bologna Process, the Lisbon strategy, universities, the 7th Framework Programme. They have defined a European framework of the PhD title, but often they conflict with each other. There are also many differences between European and Italian universities, but also between universities within the same country.

About the status of PhD students, there are two main positions: according to the Bologna Process, a PhD student is considered as a student (III cycle of education) whereas for the European Chart of Researcher a PhD student is defined as an early stage researcher (table 1).

Table 1. PhD status. EUA 2007

Status	Number of countries	Countries
Students only	8	Czech Republic, Estonia, Georgia, Iceland, Italy, Latvia, Russia, Scotland, UK
Employees	3	Bosnia-Herzegovina, Denmark, Netherlands
Mixed	22	Albania, Andorra, Armenia, Austria, Belgium-Flanders, Belgium-Wallonia, Croatia, Cyprus, Finland, France, Germany, Greece, Liechtenstein, Lithuania, Malta, Norway, Poland, Romania, Slovak Republic, Spain, Sweden, Switzerland, Turkey

Other differences concern the management of doctoral courses: graduate schools or doctoral/research schools. The first ones include all doctorate courses, often also master courses. Such a model is typical in the United Kingdom and in Denmark. The

second ones include only the doctorate courses, they carry out multidisciplinary activities and they develop national and international research activities. This kind of schools is the most common in Europe and the Finnish model constitutes the more interesting example of it (table 2).

In Italy important inputs come from the research and the campaign of ADI¹ for PhD status². In Europe interesting inputs come from researchers of EUA, that have emphasized the importance of training for research purposes. They have underlined, in fact, that monitoring and supervision by tutors are important in order to develop transferable skills useful both in the academic field and in the job market.

Table 2. Organization of doctoral education. EUA 2007

Organisation of doctoral education	Number	Countries
Individual education only (1)	5	Bosnia-Herzegovina, Cyprus, Georgia, Malta, Montenegro
Structured programmes only (2)	4	Croatia, Estonia, Lithuania, Spain
Doctoral/graduate research schools only (3)	3	France, Liechtenstein, Turkey
Mixed (1) and (2)	11	Andorra, Austria, Belgium-Flanders, Czech Republic, Greece, Iceland, Latvia, Poland, Romania, Russia, Slovak Republic
Mixed (2) and (3)	2	Italy, Norway
Mixed (1) and (3)	2	Belgium-Wallonia, Netherlands
Mixed (1), (2) and (3)	9	Albania, Armenia, Germany, Denmark, Finland, Scotland, Sweden, Switzerland, UK

2.2. WHAT KIND OF COMPETENCES DO THEY EFFECTIVELY NEED?

The “Framework for Qualifications of the European Higher Education Area”³ has also made clear the necessary outcomes for each cycle of education. They are called Dublin’s Descriptors and are developed on the following elements: knowledge and understanding; applying knowledge and understanding; making judgements; communication skills; learning skills.

The levels of mastery of these pointers are different for every cycle; in details for the third cycle, the academic titles can be conferred to students who:

- have demonstrated a systematic understanding of a field of study and mastery of the skills, but also methods of research associated with that field;
- have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;

¹ The European University Association (EUA) represents and supports higher education institutions in 46 countries, providing them with a unique forum to cooperate and keep abreast of the latest trends in higher education and research policies. For info: <http://www.eua.be>.

² Associazione dottorandi e dottori di ricerca italiani. Italian Association for PhD students and researchers. For info: <http://www.dottorato.it>.

³ http://www.bologna-bergen2005.no/Docs/00-Main_doc/050218_QF_EHEA.pdf.

- have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;
- are capable of critical analysis, evaluation and synthesis of new and complex ideas;
- can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;
- can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.

There are, also, many studies that focus on “transferable skills” and some good practices.

In my research I have interviewed experts in many research fields, made focus groups with researchers of the Free University of Bolzano/Bozen and made a round table in order to identify the skills and the competences for a PhD student. From the analysis of these data, I have identified a set of competences including seven competences areas, in detail:

- skills and research techniques;
- research management;
- personal effectiveness;
- communication skills;
- networking and team working;
- career management;
- transferable skills.

Every area includes many skills and competences.

2.3. IN WHICH WAY IS IT POSSIBLE TO ASSESS THEIR COMPETENCES?

First of all it is fundamental to specify the typology of assessment. Making PDP for the research, I have chosen **assessment for learning** as the way to “give value” to the achievement of a person and to support motivation, reflection on competences.

Black and William (1998) define as “assessment for learning” all those activities, undertaken by teachers and/or by students, which provide information as feedback in order to modify the teaching and learning activities in which they are engaged. Assessment for learning also develops the learners’ ability for self-assessment. In this way they can become more reflective and can manage their learning in order to seek out and gain new competences and skills.

It should enable all learners to achieve their best and to have their own efforts recognized.

In my opinion PDP can represent the answer to develop assessment for learning.

3. PDP

PDP is a «structured and supported process undertaken by an individual to reflect upon their own learning and/or achievement and to plan for their personal, educational and career development» (Guidelines for Progress Files, Quality Assurance Agency, 2001). It is a **tool** but is, at the same time, a **process**.

The PDP designed and realized for my research is a tool made of four steps and it has been made through a benchmarking activity between European documents, focus groups, interviews with some experts and a round table with national firms. These are the steps:

1. self audit: during this phase PhD students carry out an analysis of personal competences and define a SWOT analysis;
2. definition of the plan: during this step PhD students can define their personal learning plans based on the areas of improvement and the competences to develop;
3. diary of the activities and monitoring: PhD students register the activities made in order to improve the skills and competences underlined during the self audit and the definition plan. In this step there is also a monitoring phase of the activities;
4. definition of the report: with the annual report it is possible to turn out the progresses made and it is the base for the plan of the following year.

PDP is related to seven competences area: skills and methods of research; research management; personal effectiveness; communication competences; team working and networking; career management; transferable skill. This set comes from the benchmarking activity between European documents, focus groups and interviews with some experts and a round table with national firms.

Every competence area is detailed in many competences and/or skills. For each competences/skills it is necessary to indicate the level (1 to 6) which must in turn be supported with “authentic evidence”.

PDP supports 3 types of reflection:

- **What?** (past): my past. What I have achieved about my life/work/ learning. – *ex ante* –. In self audit of the competences;
- **So What?** (present): reflection about personal learning achievement. What my work and activities show about my learning – *in itinere* –. In the diary of activities;
- **Now what?** (future): future aims/objectives. What is the direction for the future – *ex post* –. In the report phase.

4. RESEARCH HYPOTHESES

Could it be possible to analyze, to monitor and to assess competences and skills in a PhD course using a PDP?

Managing this tool, is it possible to improve reflection competencies *in action* and *on action*, to increase mobility and employability of PhD students?

5. RESEARCH OBJECTIVES

The research objective is to make, through a pilot survey, a Personal Development Plan (PDP) that will be used during a doctoral course. Such instrument concurs to define objectives of learning and personal development based on the acquisition of com-

petences and skills. It concurs moreover to supervise the development of a personal and professional path. PDP wants to contribute to show learning goals, to develop aims based on the acquisition of competences and skills, and to give the opportunity to personalize PhD courses. Moreover, PDP contributes to monitor *in itinere* personal courses, giving the possibility to make some changes.

6. THE RESEARCH PROJECT PLAN

The research activity has developed a survey which has involved a group of PhD students and researchers at the Faculty of Education of the Free University of Bolzano/Bozen (LUB).

The research comprises four phases:

1st phase - description of the European framework (research, studies, documents) and of the European organizations involved in PhD situations: the Bologna Process, the Lisbon Strategy, the 7th Framework Programme (FP7).

Moreover, a huge part of the research examines the state of the art about skills, competencies and their assessment. There is, in detail, the description of good practices about the use of PDP and e-portfolio in European and American universities.

2nd phase - *making a PDP draft and making a final model*, using inputs from the focus group led with PhD students and researchers at the Faculty of Education of LUB (Libera Università di Bolzano, Free University of Bolzano/Bozen), from the interviews with some experts in the fields of the research and from a round table with national firms.

3rd phase - *self audit of the competences*. PhD students make a self audit competences (*ex ante*). There is also a test for tutors/supervisors of PhD students, about the same competences. For each competences' area they point their level on a scale from 1 to 6 (Likert scale).

4th phase - *PDP testing*. PhD students of LUB use the PDP during one academic year. Every 3 months there is a monitoring phase.

5th phase - *data analysis*. The last phase makes the collection and analysis of the emerged data. In this phase PhD students had a questionnaire to complete (*ex post*) about PDP use.

7. DATA ANALYSIS

The data were analyzed using quanti-qualitative analysis. The data are about:

- a. self audit of competences. It is a test filled out by:
 - researchers at the Faculty of Education of LUB;

- PhD students involved in the research both in the *ex ante* and in the *ex post* phase;
- tutors related to competences of their PhD students;
- b. focus group led with researchers at the Faculty of Education of LUB;
- c. interviews with experts in many fields of the research;
- d. round table with national firms;
- e) *ex post* questionnaire about PDP's use.

The data collected from the self-audit test were analyzed using SPSS⁴. Quantitative data were supplemented and better explained with the suggestions come from focus groups led with researchers of LUB.

Quantitative data related to PhD students were analyzed using SPSS and comparing *ex ante* data (before using PDP) with *ex post* data (after using PDP). The quantitative data were supplemented with qualitative data come from PDP managed by PhD students.

The quantitative data of the self audit filled out by PhD students were also compared with the same test filled out by their tutors in the *ex ante* phase.

For the interviews with experts a SWOT matrix was used in order to underline the strengths, weaknesses, opportunities and threats about some important areas for PhD students (for example: competences, career, role in society, ...).

There was also a lexical analysis in order to show the frequencies of some words (student, researcher, competences, career, work, ...).

The suggestions from the round table were used to establish the main competencies that are useful not only for the academic career and they were also included in PDP draft.

The data of the *ex post* questionnaire about PDP use contain quantitative and qualitative data.

8. RESULTS AND FUTURE DEVELOPMENTS

As a result of the research, it is possible to say that PDP:

- gives a support to identify and to define competences and the context in which they are developed;
- supports the definition of their own area of strengths and the area of improvements. These areas are useful to design a map of their own competences and to define a plan;
- is useful both to describe and to reflect upon competences achieved and to describe the activities done to develop them. It is also useful to analyze the activities and the competences achieved not in academic context (non formal and formal learning);

⁴ Mean, median and mode were analyzed in detail.

- supports aware learning;
- improves the ability to understand “what” and “how” a person is learning and to plan, review and take responsibility for his/her own learning;
- develops a “narrative thought”;
- supports reflection “in action” and “on action”;
- can show informal learning and non formal learning.

During the research the “additional model” was used (fig. 1). In this model, PDP is parallel to curriculum and there is no integration with the curriculum.

As a future development, the Free University of Bolzano could integrate PDP and curriculum in order to have a “curriculum plus model” (fig. 2) in which PDP and curriculum are integrated.

In order to achieve it, it is necessary to create a PhD student profile with a clear description of the competences and of the activities that will be promoted by University.

As a possible future development, there is also the possibility to support PDP with an e-portfolio system in order to support the following processes:

- linking and thinking;
- storytelling;
- collaboration;
- publication.

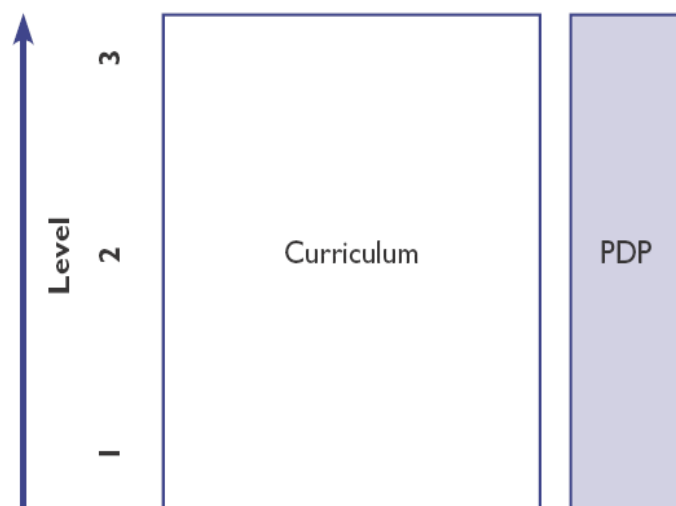


Figure 1. Additional model

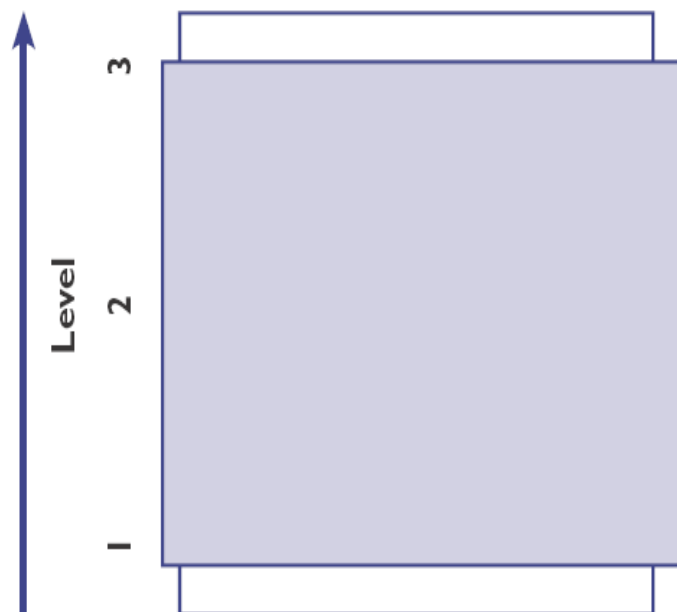


Figure 2. Curriculum plus model

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Evaluating research, assessing in research: the Terni school network experience

Francesca Corradi, Paola Mirti*

Abstract

The core of the research constitutes new educational practices, paths and learning contexts, reconsidered with the purpose of building knowledge, techniques, tools and assessment methods to detect the performances in order to certify the mastering of a steady competence. Addressed to the teachers of a 13-school network, the project aims at contributing to teachers' professional development by organising curricular planning and innovation tracks. The variables brought up in the research were surveyed in the final phase through a Likert-type scale questionnaire. The initial phase of the research was based on theoretical lessons, individual studying, focus groups, and innovation planning pathways. Subsequently, teachers put into practice innovative pathways. Nine schools out of thirteen planned the curriculum re-articulation on competence, Eight schools out of thirteen elaborated innovative pathways, six schools experienced and documented innovative pathways. 70% of teachers declared to have gained a deeper consciousness of the cognitive, meta-cognitive and affective-relational process and to have observed a greater involvement of all the students.

Key words

Assessment, evaluation, innovation, competencies, educational practices.

INNOVATION AND COMPETENCIES

Innovation is a complex process implying the involvement of numerous components and actors and requires the development of solutions related to the context in which innovation is envisaged. The active participation of all those involved in the processes of change, both at the stage of problem analysis and at the stage of deciding on the solutions to be adopted, promotes, on the part of those involved, the acquisition of awareness and a greater motivation to change (Schratz, Jakobsen, MacBeath, Meuret, 2003).

The training-research project¹ was built around the objective to construct curricula aimed at building and developing "competence".

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¹ The Project was implemented under the agreement between the Department of Educational Design, University of Roma Tre and the Terni school network.

The term “competence” comes from the field of vocational training where it is traditionally used to indicate what a worker “should” actually do according to the performance he is called to do. At present, the term “competence” indicates the ability to “mobilize” one’s repertoire of knowledge and skills to face complex tasks in daily or working contexts and to face and solve problematic situations. This ability demands the consciousness of (cognitive and operative) processes that are carried out (Pellerey, 2004).

This ability involves an affective-motivational dimension, relating to the tasks and the contexts to be faced.

The idea of transferring this responsibility from the world of vocational education to general education has its origins in the debate on the knowledge society, and refers to an attitude of lifelong learning. In a society characterized by an increasingly rapid process of transformation, the knowledge that the school can provide and help construct is inevitably destined to become quickly outdated and obsolete.

The focus in education is gradually being addressed to some key skills, called “key competencies”. The key competencies are considered essential for the individual to fully participate in society. Many of the competencies overlap and interconnect: aspects essential to one domain will support competence in another. The relevant legislation² states that

competence in the fundamental basic skills of language, literacy, numeracy and in information and communication technologies (ICT) is an essential foundation for learning, and *learning to learn* supports all learning activities. There are a number of themes that are applied throughout the Reference Framework: critical thinking, creativity, initiative, problem solving, risk assessment, decision taking, and constructive management of feelings play a role in all eight key competencies.

In terms of educational research, the PISA³ project has set as its objective the definition, development and evaluation of the afore-mentioned competencies. The definition of recognized competence in PISA is illustrated in the conceptual framework of the project¹⁴.

² Recommendation of the European Parliament and of the Council of 18 December 2006 on key competencies for lifelong learning (2006/962/EC).

³ Programme for International Student Assessment. PISA is an internationally standardized assessment promoted by OECD - Organization for Economic Co-operation and Development jointly developed by participating economies and administered to 15-year-olds in schools. Four assessments have so far been carried out (in 2000, 2003, 2006 and 2009). Results for the last assessment are scheduled for release at the end of 2010. Key competencies for lifelong learning. A European Reference Framework, Recommendation of the European Parliament and the Council of 18 December 2006.

⁴ The definition of scientific literacy in PISA 2006 is perhaps the most articulated (compared to those in reading and mathematics) and allows to better identify the components of competence according to the formulation of Pisa. Scientific literacy is defined as the sum of «scientific knowledge and use of that knowledge to identify questions, acquire new knowledge, explain scientific phenomena and draw evidence-based conclusions about science-related issues; understanding of the characteristic features of science as a form of human knowledge and enquiry; awareness of how science and technology shape our material, intellectual, and cultural environments; willingness to engage in science-related issues and with the ideas of science, as a reflective citizen».

To design a curriculum that has the objective of building and developing the skills and implementation of educational activities consistent with achieving this goal would require the input of a group of teachers related to different disciplines in order to compare possible teaching strategies and procedures to be adopted. This is especially so if you start from the concept of “competence”, which is not traceable to a specific and unique disciplinary field and if the attention is directed towards the key competencies.

The concept of competence adopted in the training-research path, is that of the project De.Se.Co.⁵. This project identifies three categories of key competencies such as the use of interactive tools, the interaction within heterogeneous groups, the acting autonomously.

The objectives of competence provided by the *Indicazioni Nazionali per il Curricolo*⁶ and the competencies for citizenship are characterized in this way.

The consequence of such a setting, from an academic point of view, is that the attention, rather than the identification of competencies linked to specific subject areas (and materials), should be directed towards clarifying what the contribution of different disciplines (materials) may be to the construction and development of these key competencies. It is, therefore, necessary to clarify, which, among the subject knowledge and competencies that can be built within the learning activities, can be ‘mobilized’ to deal with the situations and the problems that, by their nature, are not necessarily disciplinary, but do indeed have a pre-disciplinary character.

Pellerey states that “by its nature a competence is a personal inner quality which is not directly observable. What we can grasp is its external manifestation, that is the ability to complete the assigned task properly” (2004, p. 113). To assess competencies, it is necessary to create environments in which students are actually allowed to use their knowledge and their skills in terms of concrete problems, to diversify the techniques and tools for recognition, to use both qualitative and quantitative procedures and techniques for assessment.

THE FIELD RESEARCH

The project we will illustrate has been realised in cooperation with the thirteen schools involved in the Terni school network. It has been an opportunity to compare and reflect on the methodological and scientific support of the schools’ activities of teaching planning and professional development (Greenwood, 1998).

The research arose from the schools’ demand to work out a vertical and horizontal curriculum based on the need to put the indications for the Italian National Curriculum to the test.

The encounter between University and School gave rise to binary research:

1. the teachers’ (and schools’) research on their own teaching planning and on the organization of curricula geared to the building of competencies;

⁵ *Definition and Selection of Key Competencies*. De.Se.Co. is a project promoted by OECD.

⁶ *Indicazioni Nazionali per il Curricolo per la scuola dell’infanzia e per il primo ciclo d’istruzione* are the Italian Directions for the curriculum of pre-primary and the first cycle of education, D.M. 31 July 2007.

2. the researchers' reflection on their activity of supporting planning and teachers' professional development.

The hypothesis put forward is that stimulating the debate on learning process documentation and cooperative work practices would improve the ability to reflect on the teaching practices (Schön, 1987).

The common perspective in these two paths is the reflection on participants' professional practice within the contexts in which it is realized.

In the present paper we will illustrate and deepen the aspect related to reflection on the activity of teaching and researching, which interrelate and converge continuously in the process of their development.

THE TRAINING-RESEARCH PATHWAY

OBJECTIVES AND LOGIC BEHIND

The focuses of the research have been recognized as detecting whether teachers reflect on their own teaching activity and on competency-based curricular design and how; identifying the methodologies that help to reflect in a systematic and documented way within the contexts in which this practice is realized.

Starting from the objectives of our research, we were interested in verifying whether stimulating the debate on learning process documentation, on data collection and analysis and cooperative work practices, would lead to an increase in the qualitative level of the teaching practices.

We avoided bringing forward pre-established patterns, but we tried to provide tools to build an original hypothesis of curricular planning and designing.

To reach this goal, we tried to stimulate the debate on documentation, data collection and analysis and cooperative work practices, to help teachers link the individual dimension to class and school dimensions.

The basic idea was that reflectivity, seen as the skill of thinking in a critical way about one's own professional behaviour, represents the distinctive feature of quality teaching.

This idea comes from some studies on teachers and teaching, chiefly on the OECD's research *Quality in Teaching*, which led to the identification of five main factors that concur to determine the quality of teaching: deep content-area knowledge, the possession of a range of different teaching styles, management and organisational skills, socio-relational competence, reflectivity.

METHODOLOGY

The participants in the research are 25 pre-primary school teachers, 43 primary school teachers, 27 secondary school teachers from schools in the province of Terni, both state and *pari-status* private schools.

In the preliminary phase of research a group discussion was organised in order to detect the teaching methods used by teachers, the curriculum organization and the cooperative dimension among teachers.

A Likert-type scale questionnaire was administered at the end of the training-research project in order to detect the changes as a result of the research path.

The first round of meetings was structured so as to provide theoretical lectures, group work and focus groups (Fern, 2001).

The topics discussed included the definition of competence, the monitoring and documentation of processes of innovation, the competency-based assessment and the schools self-evaluation. The second round of meetings was focused on planning innovative pathways, reflective activities, experimentation, group work and reflection.

VARIABLES AND TOOLS

As regards the first objective of this research, “detecting whether teachers reflect on their own teaching activity and on competency-based curricular design, and how” we measured the variables relating to school organization, relationships among teachers, assessment methods, observation of students, and documentation of students’ achievement. The latter variable is related to the purpose of providing systematic evidence of students’ performance.

As far as the second objective of research “identifying the methodologies that help to reflect in a systematic and documented way within the contexts in which this practice is realized” is concerned, the variables considered are related to the collaborative dimension of teachers, the planning and trying out a vertical curriculum, the planning of classroom activities with the purpose of building a competency-based curriculum, and the triangulation of the assessment methods used to evaluate the level of competence achieved.

Information on classroom activities, relationships among teachers and curricular organization were gathered through discussion groups.

They proved to be effective, as they provided the members with an opportunity to talk freely and spontaneously about their activities with the students.

During the group work, the teachers were guided in preparing observation and assessment tools. The teachers’ output helped us in gathering data of innovation implemented as a result of the research project.

The Likert-type scale questionnaire was administered at the end of the training research pathway in order to evaluate the project.

OBSERVATION AND DOCUMENTATION

The collection of information on students’ achievement should be conducted collaboratively. Using a series of techniques and tools to gather the information helps us to start thinking about changes and comparing different points of view. For these reasons, during the training-research project, we proposed activities that were intended for teachers to develop a greater awareness of the importance of documentation in the paths of innovation. This issue was given specific attention, through case studies, experiences from other schools and the reflection on problematic situations.

This activity has helped to develop methods and strategies of individual and collective reflection, to identify techniques and tools to document the paths.

Among the techniques used to provide evidence of the students’ learning processes, special attention was devoted to the observation and its procedures and tools. Rather than on technical aspects, we insisted on those aspects which acquire a particular importance from a methodological point of view. In particular, we focused on the need to

identify the questions that guide the observation, on the need to identify the objectives, subjects to be observed and the moments in which to conduct observation, on the distinction between collection, processing and interpretation of data, on the influence of subjective factors on the interpretation of data, on the awareness of the potential limits, constraints that characterize the use of specific instruments, and finally on the relationship between the observer and those being observed. We especially emphasized the importance of comparing observations and interpreting different perspectives, also through the use of a combination of assessment methods.

The working method adopted was based on the presentation of a film and materials and on the simulation of observation methods in order to stimulate the teachers to plan possible research projects centered on observation. The objective was to prepare the ground to the observation of teaching activities related to innovative competency-based curriculum design.

Innovation processes can be implemented only in the medium-long term. Keeping “memory” of what happens, of specific events that are of particular importance, of observations done at specific stages of development, therefore, is a significant factor. The proposed tool for this purpose was a diary. The “diary” is characterized by its flexibility and adaptability, as well as for its effectiveness. It allows a person to be prepared in different ways to record ‘facts’ as well as comments, impressions and evaluations. It can be drawn not only by the teacher (or teachers) responsible for the activities, but also from other actors (the observer, the critical friend). Despite it being an individual key tool, it is nevertheless very useful for setting a collective comparison. It is not only a tool for individual reflection on the processes in which the teaching and the learning take place, but also gives important support to the reflection in the team of teachers.

It was interesting to note that, in the experience of the training-research project, among the tools proposed, the diary was the instrument that most teachers used. It was drafted by both the activities leader and the critical friend, that is the person who had the role of observing from an external perspective. Because he was detached and not involved personally with the students, the critical friend with his helpful critiques was able to start a positive confrontation with the teacher responsible for the activities.

RESULTS

Within the research project, the reflection on the “research logic” that should drive innovation was central. Reflecting and documenting are two activities that are intertwined with innovation.

Documentation, in particular, enhances the reflection on educational processes, thus allowing different perspectives and different interpretations to be compared.

The most relevant data collected through the Likert-type scale questionnaire is the following: forty teachers out of sixty-three claim to have modified/innovated their teaching methods, approaches and assessment (fig. 1).

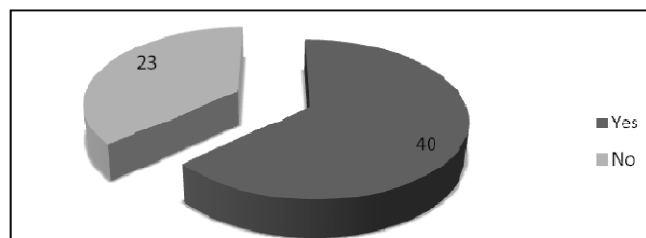


Figure 1. Innovation of teaching methods and assessment

As far as the “output” (materials and assessment documents) created by the teachers is concerned, nine out of thirteen planned a curriculum based on building competence; eight schools out of thirteen planned innovative pathways for their classroom activities based on a collaborative dimension and the use of a multiple perspective assessment; six schools out of thirteen experimented and documented systematically innovative teaching, assessment and evaluation (Table 1).

Table 1

<i>Variable description</i>	<i>Schools’ output</i>	<i>Number of participating schools</i>
Planning a curriculum based on building competence	9	13
Planning innovative pathways for their classroom activities based on a collaborative dimension	8	13
Planning the use of a multiple perspective assessment	8	13
Experimenting innovative teaching	6	13
Experimenting a multiple perspective assessment and evaluation	6	13

The relation between school level and implementation of innovation shows that there is only a slight difference between primary school and secondary school teachers. Nearly half of those teachers and 1/3 of pre-primary school teachers have implemented innovative teaching (Fig. 2).

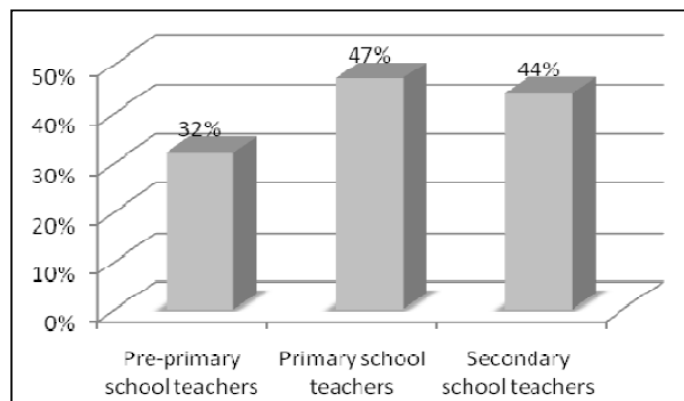


Figure 2. School level/Innovation

From Figure 3 it emerges that the most innovative teachers are the most experienced in teaching.

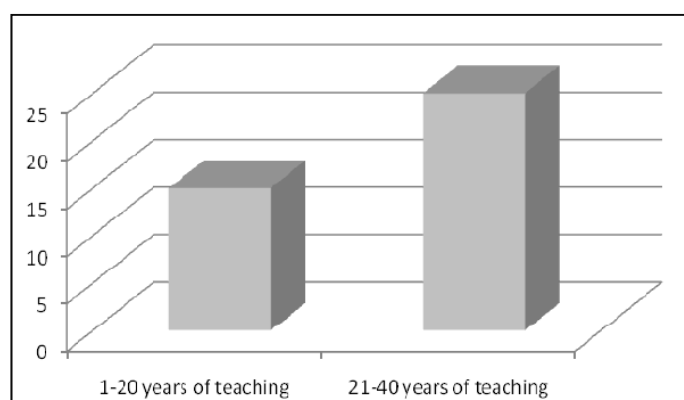


Figure 3. Years of teaching/Innovation

From the teacher focus group it emerged that 70% of the teachers declared they had gained a deeper awareness for what the teaching learning process implies from different points of view:

- cognitive
- meta-cognitive
- affective
- socio-relational.

We acknowledge that the theoretical lessons, the stimulus and invitation for individual studying, the teacher focus group, the reflective discussion groups, and the colla-

borative work, have actually had a positive influence on the quality level of teaching, this being shown by the “output” produced by schools.

In addition to that, teachers declared they have acquired a higher level of confidence in controlling and addressing students’ learning processes and in challenging students’ motivation.

CONCLUSION

We all believe this is to be considered as a starting point for an innovative approach: the role and the profession of teachers where personal involvement in learning, studying, reflecting, discussing with peers, experimenting, are the basic elements on which innovation is envisaged at any level.

In this research project, a small group of teachers was involved who, in turn, have experimented on only a few classes of students.

An oncoming potential development of the research could be seen as moving from the single experiences to the daily classroom activity routines, from “intuitive” assessment and evaluation to systematic performance evaluation.

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Éduquer à l'évaluation à travers la co-construction du e-portfolio

L'expérience du Master *Nuovi Media e Formazione*
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Abstract

The article focuses on the use of new assessment learning methods in higher education contexts. In particular, it deals with the experience conducted within the education activities of the Master Course, New Media and Education, at the University of Foggia. Beginning from a learner-centered approach, a testing was launched involving students as "designers". In fact, this experience focused on the e-portfolio co-creation, considered as a chartered tool of the authentic assessment, able to facilitate the overcoming of the binomial assessment-judgement, in favour of the binomial assessment-education. Besides e-portfolio is an efficient tool able to promote learner's self-assessment skills, thus allowing a greater awareness of his/her own learning and of his/her own capabilities and weaknesses. In this scenario, assessment is considered as an efficient learning instrument and not simply as the final act of an education process. The emphasis is laid on the opportunity to integrate education with assessment involving students as active partners of the assessment process.

Keywords

E-Portfolio, Educative Assessment, Authentic Assessment, Constructionism, Learner-centered approach.

UNE APPROCHE ORIENTÉE AUX COMPÉTENCES POUR ÉDUIQUER À L'ÉVALUATION

Un des principaux défis dans le contexte des formations supérieures aujourd'hui n'est pas vraiment de transférer des connaissances et des compétences aux apprenants, mais plutôt de les aider à développer le sens de l'autonomie et de l'indépendance dans le processus éducatif, en répondant adéquatement à leurs besoins de formation. Dans un tel scénario, il faut mettre l'accent sur une nouvelle approche des processus d'enseignement, d'apprentissage et d'évaluation (Jönsson et al, 2007): en particulier, l'évaluation de l'apprentissage est depuis quelques années au centre de nombreux débats focalisés sur la possibilité de déplacer l'objet d'intérêt des connaissances aux compétences. Le dépassement du système traditionnel d'instruction qui reposait sur la

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conviction que les apprentissages peuvent être “mesurés” (dans le sens de “contrôle systématique” de la quantité des connaissances assimilées) à travers des épreuves objectives, souvent standardisées, avec des tests à choix multiples, a ouvert la voie à une nouvelle approche qui voit l'évaluation comme une étendue naturelle de l'apprentissage (Comeaux, 2005).

Comme soutient Philippe Perrenoud:

lorsque l'évaluation peut “avoir des conséquences”, l'évaluateur est perçu comme un juge sévère, voir un procureur, davantage que comme un défenseur des intérêts de l'élève. Du coup, on examine son examen avec suspicion, prêt à défendre ses droits. Ce qui pervertit l'évaluation des connaissances – sans toutefois la rendre impossible – ruine toute évaluation intelligente des compétences. Si ces dernières sont estimées au gré d'une observation continue des élèves au travail, elle passent nécessairement par un jugement complexe du professeur-formateur-coach-observateur. Il ne faut pas lui demander un décompte de points et un barème (Perrenoud, 2004, p. 7).

Les nouveaux modèles d'évaluation sont plutôt centrés sur l'évaluation des compétences des étudiants, vues comme l'habileté à employer la connaissance de façon créatrice pour résoudre des problèmes dans des contextes réels (Gielen, Dochy & Dierick, 2003). En effets, l'enquête OCSE-PISA (Program for International Student Assessment), menée en 2000, a relevé qu'il existe des caractères problématiques de la part des étudiants et dans l'application des connaissances à des situations concrètes, et dans la difficulté à arguer les opinions personnelles à partir de concepts et procès de nature scientifique (Nardi, 2001).

Là où l'évaluation selon l'optique traditionnelle vise à considérer la réalisation d'objectifs d'apprentissage précédemment établis à travers des moyens qualitatifs et quantitatifs de mesurage, une approche basée sur les compétences vise à considérer les contenus disciplinaires non comme quelque chose d'extérieur par rapport à l'individu, mais plutôt comme l'intégration des savoirs (théoriques et pratiques), d'aptitudes et de compétences qui contribuent au développement d'une figure professionnelle complexe (Roland, Jutras & Hensler, 1996).

Une approche basée sur les compétences ne peut pas se limiter à la dimension quantitative des savoirs acquis puisque, comme le soulignent Christine Lebel et Louise Bélair,

les compétences ne peuvent pas se mesurer en matière de pourcentage, il importe d'envisager un système de notation qui puisse rendre compte de la qualité de cet apprentissage et non pas de la quantité d'éléments obtenus en vue d'une certification. Dit autrement, une compétence se développe, s'assume et se qualifie, mais ne se quantifie pas (Lebel, Bélair, 2004, p. 506).

Selon David Perkins (1993), pour que l'évaluation ne soit pas seulement une étape (entre autre l'étape finale) d'un procès d'apprentissage-enseignement, et pour qu'elle ne représente qu'un nombre ou un barème, il est nécessaire qu'elle devienne une partie intégrante du procès entier, à travers une série de feedbacks constants et d'oppor-

tunités qui puissent stimuler la réflexion de l'étudiant jusqu'à le rendre totalement conscient de ses propres succès et changements parallèlement aux compétences acquises. Les études de Grant Wiggins et de Jay Mc Tighe (2005) suivent la même direction: ils affirment que c'est dans la performance qu'on peut vérifier l'apprentissage, et en effet la compréhension se révèle comme la possibilité de transmettre idées, connaissances et compétences, conçues comme des tâches importantes dans de nombreux contextes. Cette nouvelle approche de l'évaluation ambitionne la proposition de tâches significatives pour le sujet en relation avec les objectifs formatifs à atteindre. En somme, l'objectif est celui d'évaluer une *compétence* à l'intérieur des situations du monde réel. Ces situations se caractérisent par une authentique valeur opérationnelle et contextualisée qui prend ses distances avec l'application rigide et répétitive de formules à l'intérieur de contextes artificiels (interrogation orale, test à choix multiples, etc.) qui est typique du traditionnel système d'évaluation (Rossi et al., 2006).

L'*educative assessment system*, en effet, s'adresse aussi bien aux étudiants qu'aux professeurs, et vise à favoriser les possibilités d'apprentissage chez les premiers et à améliorer la qualité de l'enseignement chez les deuxièmes. Ce système d'évaluation naît essentiellement d'un problème moral qui jaillit du droit de recevoir une évaluation éducative de la part des étudiants, mais aussi du droit de faire référence à un système qui facilite l'enseignement pour les professeurs. En outre, il est important de souligner que entre ce qu'on veut enseigner et les effets de l'enseignement existe un profond écart que les éducateurs ignorent souvent.

Afin qu'il soit possible d'entamer un procès éducatif dont l'objectif serait justement celui d'éduquer et non de mesurer, il est nécessaire de travailler sur l'amélioration des performances à travers des tâches difficiles à évaluer aussi avec des stratégies d'auto-évaluation (Wiggins, 1998).

LES ÉTUDIANTS EN GUISE DE “DESIGNERS” DE L'ÉVALUATION : LA CO-CONSTRUCTION DU E-PORTFOLIO

Dans un scénario d'éducation orienté à la compétence et qui vise à considérer le système d'évaluation selon l'optique d'un *educative assessment* et d'un *authentic assessment*, fondé sur un arrière-plan de nature constructiviste, il est nécessaire de réfléchir sur des instruments qui puissent faciliter le dépassement du binôme évaluation-jugement, en faveur du binôme évaluation-formation (Benigno, Vallarino, 2007). Dans la “new assessment era”, ainsi définie par Gielen, Dochy et Dierick (2003), l'évaluation est vue comme un instrument valide pour l'apprentissage. Emphase est posée justement sur la possibilité d'intégrer l'instruction avec l'évaluation et de faire participer les étudiants comme partenaires actifs du procès d'évaluation. À partir de ces considérations, à l'intérieur des activités didactiques du Master post-diplôme de premier degré “Nuovi Media e Formazione” (NMF), on a activé un projet de co-construction de l'instrument d'évaluation: l'e-portfolio. Le choix de cet instrument est due à de nombreuses raisons, parmi lesquelles celle d'allier le procès d'évaluation avec les principaux objectifs du Master; et encore:

- enseigner les médias et à travers les médias, à travers le développement de compétences didactiques, pédagogiques, communicatives et technologiques;
- utiliser des ressources numériques afin de projeter des parcours éducatifs d'innovation;
- projeter des contenus pour l'e-learning.

Le but intrinsèque du e-portfolio relève justement de l'opportunité d'activer la "*réflexion sur les pratiques*" de la part de l'étudiant engagé dans le processus de sélectionner et de montrer, afin de démontrer à lui-même et aux autres les compétences acquises à travers ses productions. En ce sens, l'e-portfolio est considéré comme un instrument valide, qui active les processus de métacognition, mais aussi un moyen d'*empowerment* collectif qui implique les professeurs et les étudiants (Varisco, 2008).

L'e-portfolio est considéré comme l'un des moyens privilégiés de l'"*authentic assessment*" et s'insère dans le paradigme constructiviste, puisqu'il permet aux sujets en formation de se sentir les principaux acteurs dans la construction de leurs propres connaissances et compétences, ainsi que de leur processus d'évaluation. Les milieux d'apprentissage de nature constructiviste demandent de nouvelles formes d'évaluation, en mesure de donner une valeur à l'expérience de vie de l'individu et en mesure de promouvoir l'apprentissage réfléchi, actif, contextuel et social. D'après David Jonassen, la connaissance doit être considérée comme une véritable "construction de sens" autour de laquelle tournent trois pôles: le *contexte*, qui détermine la *collaboration*, qui à son tour facilite la *construction* du processus de réflexion et de négociation intérieure (Varisco, 2008).

Papert a utilisé le terme "constructionism" pour expliquer que le processus de construction de la connaissance dérive de la construction des choses. Lorsque les étudiants assument le rôle d'*auteurs des objets*, ils apprennent beaucoup mieux l'importance de ces objets que lorsque, par contre, on se limite à étudier les caractéristiques de façon passive (Jonassen, 1998). Selon Stiggins (1997), le projet de l'évaluation devrait être la première étape d'une intervention formative. Dans le projet de co-construction de l'e-portfolio, les étudiants du Master NMF ont assumé le rôle de "projeteurs", en ligne avec les plus récentes théories sur les milieux constructivistes qui voient l'étudiant comme une partie active du processus de construction de la connaissance. L'étudiant, en effet, est vu comme un participant actif qui interagit avec le milieu qui l'entoure, afin de créer sa connaissance personnelle, laquelle est donc le résultat d'une construction et non pas la simple reproduction du savoir du professeur (Jonassen, 1998).

L'e-portfolio semble, donc, répondre efficacement aux objectifs prévus par l'*authentic assessment* et, en particulier, les technologies semblent offrir des instruments en mesure d'aider l'étudiant à développer la pensée critique et un sens d'auto-efficacité qui produit des effets sur les attributions de succès et de faillite, sur les auto-évaluations, sur le choix des objectifs et des activités (Young et al., 1997). Par conséquent, se profile l'idée du e-portfolio, vu comme un instrument valide, en mesure de répondre au profil du *learning-centered assessment*, dans lequel il serait possible, comme soutenu par Grant Wiggins, "to promote excellence, not just measure efficiently" (Wiggins, 1998, p. 7). L'e-portfolio représente un moyen d'évaluation longitudinale, puisqu'il se déroule *over time*, et se construit à travers un recueil systématique "de travaux, ou de performances, retenus significatifs et choisis du sujet qui les a produits, en suivant des buts et des critères partagés, et en donnant une justification explicite pour ses choix"

(Varisco, 2008, p. 271). La possibilité de réfléchir sur son travail, en activant des processus de métacognition, de conscience, de responsabilité et d'autonomie représente la louable finalité éducative du e-portfolio.

LES ÉTAPES DU CHANGEMENT : DU FOCUS GROUP À LA CRÉATION DU E-PORTFOLIO

Le projet qui concerne le changement du processus d'évaluation à l'intérieur des activités didactiques du Master se réfère à une enquête menée pendant la précédente édition du Master NMF. Cette enquête avait relevé que parmi les causes qui peuvent conduire à l'abandon du parcours universitaire il y a aussi l'insuccès lié à l'évaluation, qui très souvent ne coïncide pas avec les attentes de l'étudiant, et qui n'est conçu que comme un jugement sévère et décontextualisé. À partir de ces révélations, à l'occasion de la successive édition du Master NMF, il a fallu réfléchir sur la possibilité d'innover le système méthodologique et didactique à la base des cours; à partir des évaluations, justement, on essaiera de conjuguer les objectifs d'éducation du parcours universitaire avec les besoins des étudiants.

LE FOCUS GROUP INITIAL

Dans ce but, pendant les premiers cours, des focus groups se sont constitués afin de relever les attitudes et les représentations de l'évaluation de l'apprentissage de la part des étudiants. En particulier, les comportements suivants ont été remarqués: résistance et faible perception d'auto-efficacité, stress et anxiété («J'espère toujours que le professeur se soit bien réveillé le matin de l'examen»; «Quand je ne passe pas un examen je me sens découragé au point que j'ai envie d'abandonner mon parcours»). Ensuite, en ce qui concerne la représentation, on a observé une perception d'inefficacité des méthodes d'évaluation traditionnelles (examens oraux, test écrits, quiz) par rapport aux éventuelles finalités d'éducation, à côté d'une séparation catégorique entre l'évaluation et les parcours d'apprentissage («Je voudrais bien m'en passer»; «C'est le pire moment d'un parcours de formation»).

LA FORMATION AUX NOUVELLES FORMES D'ÉVALUATION ET AU E-PORTFOLIO

Après avoir observé les représentations et les attitudes des étudiants à travers la réalisation des focus groups guidés par des chercheurs et des tuteurs du Master, on a entamé un bref cycle de laboratoires destinés à faire connaître les nouveaux modèles d'évaluation, tels que l'évaluation authentique, l'évaluation éducative, l'e-évaluation, mais aussi les instruments de ces nouvelles formes d'évaluation: l'e-portfolio et les *rubrics*.

En particulier, on a démontré que l'e-portfolio s'inscrit bien parmi les instruments de l'évaluation authentique qui peuvent transformer le processus d'enseignement-apprentissage-évaluation dans une optique *centrée* sur l'apprenant et orientée sur les compétences. Comme démontré par la définition de Carole Eyssautier-Bavay,

le portfolio se veut un témoin et un instrument de développement des compétences de l'élève, un outil de structuration de la pensée de l'apprenant. Plus

précisément, les objectifs visés par l'utilisation d'un portfolio sont multiples. Tout d'abord développer les capacités métacognitives des apprenants en demandant à l'élève de s'auto-évaluer, d'observer ses progrès en réfléchissant à ses productions, en les évaluant et en prenant conscience de ses forces et de ses faiblesses (Eyssautier-Bavay, 2004, p.4).

LE LABORATOIRE DE CO-CONSTRUCTION ET DU E-PORTFOLIO

Après avoir formé les étudiants aux nouvelles formes d'évaluation et après avoir illustré les nombreux modèles d'e-portfolio dans la littérature, le «laboratoire de co-construction du e-portfolio» a été créé: à l'intérieur de ce laboratoire les étudiants ont été les protagonistes d'un procès de conception collaborative de son propre instrument d'évaluation. Quelques professeurs du Master experts en scaffolding technologique et didactique y ont participé et ils ont cherché à supporter de façon flexible les activités des étudiants à travers des structures et des supports matériels, en fournissant des stimulations, des explications et des éclaircissements. Le modèle d'e-portfolio que les étudiants ont décidé de réaliser se réfère en particulier à celui proposé par Helen Barrett (2000), qui prévoit 5 phases: *collection* - *selection* - *reflection* - *direction* - *connection*. Ces phases ont été traduites en quatre principales sections dans lesquelles l'e-portfolio Master NMF a été subdivisé: *My Blog* - *My Future* - *My Results* - *Toolkit*.

LES SECTIONS DU E-PORTFOLIO CO-CONSTRUIT

L'e-portfolio a été donc subdivisé en quatre macro-sections:

1. *My results*

Il s'agit de la section qui concerne l'évaluation. Les étudiants ont choisi à l'unanimité d'utiliser les *rubrics*, c'est-à-dire les "réceptacles" de tous les objectifs d'éducation prévus par le parcours de formation du Master. La rubric, donc, peut être définie comme un modèle qui contient tous les éléments importants qui sont utiles pour l'évaluation de la prestation de l'étudiant, mais aussi les critères pour les mesurer. Pour que la rubric devienne un instrument d'évaluation authentique, il faut qu'elle soit partagée et discutée avec le sujet en question. C'est pour ces raisons qu'on a choisi d'utiliser, pour la réalisation des rubrics aussi, le modèle du partage et du co-projet. La rubric partagée non seulement favorise l'auto-évaluation de la part des étudiants, ce qui permet le développement d'une plus forte conscience de son propre procès d'apprentissage et des demandes du professeur, mais elle représente aussi un important moment de réflexion et de développement professionnel pour le professeur. La réalisation d'une rubric «oblige» à s'interroger sur les attentes qui concernent le devoir assigné en termes de chaque prestation. Cette pratique réflexive aide à clarifier les objectifs préfixés et pourrait entraîner la reconsidération du parcours projeté et des stratégies didactiques supposées.

2. *My Blog*

Chaque étudiant peut insérer ses propres pensées, opinions, réflexions (à propos du master, sur son propre rendement, sur ses collègues, sur les professeurs, etc.), considérations et ainsi de suite, en utilisant de nombreuses ressources multi médiales comme des images ou des vidéos.



Figure 1. Screenshot de la Home Page du e-portfolio réalisé par les étudiants du Master NMF - Université de Foggia

3. Toolkit

Dans la section dédiée à la *collection*, chaque étudiant peut collectionner et archiver les matériaux fournis par les professeurs pendant les cours, mais aussi tous les instruments qu'ils jugent avoir contribué à leur propre formation ou qu'ils croient être utiles pour leur propre futur professionnel.

4. My Future

Il s'agit d'une section dans laquelle chaque étudiant peut présenter ses meilleures créations en utilisant de nombreux médias. Il pourra donc charger une vidéo-curriculum, les images d'un de ses produits, la registration d'un cours, etc. Cette section peut être utilisée pour se présenter aux éventuelles entreprises auxquelles on décide d'envoyer son CV, en représentant donc un moyen innovant de chercher un emploi.

L'ÉVALUATION DU CHANGEMENT

Les principaux objectifs de la co-construction et de l'emploi du e-portfolio étaient essentiellement deux:

1. réaliser un e-portfolio qui sert comme instrument d'évaluation, d'auto-évaluation et d'évaluation entre pairs (en permettant de modifier la perception négative initiale des étudiants à l'égard de l'évaluation de leur apprentissage);
2. réaliser un instrument en mesure d'activer des procès de réflexion qui puissent soutenir l'étudiant au cours de sa croissance et de sa formation, à travers des feedback constants qui proviennent de ses pairs, du professeur, du contexte, mais aussi de la conscience de ses propres conquêtes en termes de compétences développées, un véritable *praticien réfléchi* qui, comme souhaité par Donald A. Schön, sait-en-action, réfléchit-en-action et en cours d'action (Schön, 2006).

À la suite du co-projet et à l'emploi du e-portfolio, un deuxième focus group a été créé afin d'étudier les éventuels changements produits pendant la représentation de l'évaluation de la part des étudiants. Cette enquête a relevé que 95% des étudiants ont modifié radicalement leur propre attitude à l'égard de l'évaluation et 85% des étudiants ont déclaré qu'ils ont atteint un bon niveau de conscience de leurs compétences et potentialités. En outre, le focus group a mis en évidence que la co-construction de l'instrument a rendu les étudiants protagonistes/concepteurs du procès d'enseignement-apprentissage-évaluation, en leur attribuant un rôle complètement nouveau par apport aux pratiques didactiques les plus ancrées. Les étudiants ont déclaré qu'à travers le co-projet le système des sens attribués à l'évaluation a été réalisé par le groupe des pairs, au lieu d'être une prérogative exclusive d'un sujet à l'extérieur ou au-dessus du groupe. On a observé que cette activité a revêtu de la valeur dans l'explicitation du sens et dans la discussion de ce qui généralement n'est pas exprimé, déclaré ou partagé, mais constitue seulement l'objet d'une action. De l'analyse quantitative des données émergentes du focus group on a remarqué que la représentation initiale de l'évaluation (étudiée à travers le premier focus group) est changée: d'une idée de *jugement*, *mesurage*, *contrôle*, elle est maintenant expression d'*apprentissage*, *conscience* de ses propres compétences, *innovation* et *croissance personnelle* («Parfois je ne pense plus que mes activités soient destinées à recevoir une note», «La possibilité de projeter notre propre instrument d'évaluation m'a fait ressentir pour la première fois que j'étais le protagoniste de mon apprentissage», «À travers l'emploi des rubrics, le moment de l'évaluation ne constitue plus une surprise pour moi, car je connais déjà quels sont les éléments sur la base desquels je serai évalué»). À la suite du constant emploi du e-portfolio et grâce à la pratique de l'auto-évaluation, les étudiants ont remarqué que leurs stratégies métacognitives se sont activées, résultant essentielles pendant l'entière parcours de croissance personnelle à l'intérieur du procès de formation du master NMF. Tous les étudiants impliqués ont déclaré que l'e-portfolio et sa co-construction ont:

- encouragé l'auto-évaluation du progrès personnel en termes de compétences acquises;
- contribué à développer un sens d'auto-efficacité;
- activé des procès d'auto-perception de ses propres habilités, à travers la reconnaissance des succès et des échecs;
- promu le développement de la responsabilité personnelle dans le procès d'apprentissage.

CONCLUSIONS

L'expérience conduite à l'intérieur du Master NMF a amplement démontré comment la participation directe des étudiants à la mise au point des instruments didactiques entraîne l'activation d'un espace de réflexion auto-formative absolument indispensable afin d'introduire des instruments d'évaluation qui sont encore peu connus. En définitive, cette micro expérimentation a confirmé et les avantages du e-portfolio et ceux du projet des instruments, déjà présents dans la littérature scientifique internationale, comme:

- l'e-portfolio, un instrument qui apparaît flexible, en mesure de s'adapter au processus d'apprentissage et de croissance de l'étudiant, de dévoiler ses tendances et ses originalités, ses limites et ses richesses (Comoglio, 2004);
- l'e-portfolio promeut chez l'apprenant la capacité de s'auto-évaluer, permettant ainsi une plus forte conscience de son propre apprentissage, de ses potentialités et de ses lacunes. Ce processus de responsabilisation conduit l'étudiant pendant l'entier processus d'emploi et de réalisation du e-portfolio, du moment qu'il se sent finalement un élément actif impliqué dans le système d'évaluation (Cole et al. 2000);
- le projet d'un instrument didactique de la part des étudiants leur permet d'apprendre de façon significative son emploi (Jonassen, 1998).

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Computer interface usability and communicative effectiveness.

A case of “expert” and user assessment

*Rosaria Pace**

Abstract

The research project is placed in the field of interaction design, with particular attention to kids as users of digital devices.

The contribution is based on a case study concerning the analysis of an interactive website interface (Musenet). The research hypothesis is that the perception of usability and satisfaction with a museum website vary between kids and adult expert users. Starting from this assumption, the research aims at surveying the Musenet website usability both for kids (10-12 years old) and for experts (educators using instructional technologies and web designers) and providing suggestions to be implemented in some sections of the website.

A user-centred version of the museum website could be designed through an interactive and participative design process based on users' needs. The case study analysed could, hence, offer some suggestions for similar experiences.

Keywords

Computer interface assessment, interaction design, user interface design, web usability, human computer interaction.

MUSEUMS, THE WEB AND CHILDREN

Exploration, discovery, interactivity: these are the keywords linking museum and audience nowadays, as international research suggests (Hein, 1995; 1998; Hooper-Greenhill, 1999; Nardi, 2007; Henderson & Atencio, 2007). A museum that surpasses itself widens in space and time, until it reaches the everyday domestic and school life of the visitor. The contemporary museum is enriched with communication devices and environments which extend contact with the works and the collections; it holds technologies in its spaces or “inhabits” them in order to establish an active debate with the audience in the context of a deep museum “mediatization” (Henning, 2006).

Communication devices are precious when they represent not only a “technological presence”, but also support user participation, which facilitates the creative and collaborative construction of learning experiences. This is demonstrated by multimedia devices and digital environments which more and more often support school museum vis-

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its, also before and after the physical meeting (Bitgood, 1994; Falk, J.H. & Dierking, L.D. 1992; 2000).

Thus, a school museum visit will preferably include a pre-visit lesson where questions are formulated, continue during the visit with the collection of evidence and information, and conclude post-visit with interpretation of evidence and drawing of conclusions (Vavoula et al., 2009, p. 287).

Therefore school and museum are closer, thanks to the Web, too. Museum websites turn from mere showcases into platforms for specific education actions. The digital environment promotes interaction among the players (schools, kids, museum operators) and encourages the participation, the manipulation, the reading and the re-writing of the museum contents. Such digital spaces, sometimes extensions of the visit, should be developed as welcoming and comfortable settings, ready to receive the visitor and meet his/her expectations. The instructions provided by the interaction design (Norman, 1998; Raskin, 2003; Shneiderman 1998; Soro, 2008; Preece, Rogers & Sharp 2004) and usability research (Nielsen & Loranger 2006; Park & Lim, 1999; Rubin & Chisnell, 2008) contribute to the design of a user-tailored environment. In addition to these studies there is specific research on instructional interfaces and in-depth analysis about cognitive and informative needs of specific user groups, such as children. More profoundly than in the past, museums nowadays involve visitors in the creation of both virtual and real environments, asking of them an active participation, arousing questions and providing answers. Paying particular attention to the school user group, the research field of museums and the Web is today crossed with studies about specific design guidelines for instructional environments and web interfaces (Lohr, 2000) and children are considered as a special user group (Gilutz & Nielsen 2002; Markopoulos & Bekker 2003) or, even more, as design partner (Druin, 2002; Chen et al., 2004).

Present and future museums are a blend of personalization and interactivity (both online and offline), and they are particularly related to the notion and practice of user-generated content. The evaluation of these spaces and contents is the first step in the realization of a real participatory museum.

MUSENET WEBSITE AND CHILDREN: A CASE STUDY

Dealing with software or a website, evaluation is “a process of systematic data collection about the probability that a specific group of users may use a given product for a given task in a given setting” (Preece, Rogers & Sharp, 2004, p. 339).

57% of visitors to the Civic Museum of Foggia are school groups (visitor data for the year 2007), followed by other groups, families and single visitors.

Since the museum is addressed to school groups, it should be designed to meet the needs of both an adult audience and children, who represent a large range of the museums' visitors.

In the role of *user*, *tester*, *informant*, or *design partner* (Druin, 2002), children are increasingly involved in the design processes and in tests of use. The children's active

role is supported by theories and research experiences (Nesset & Large, 2004) that reveal the increasing importance of their involvement in the design choices.

Nevertheless, despite the more child-oriented approach, «very little is known about how children actually use websites and how to design sites that will be easy for them to use» (Gilutz & Nielsen, 2005, p. 3).

Starting from this assumption, the study is aimed at submitting a museum website to the assessment of two user groups: children and “expert” adults. The purpose is to start an initial comparison between two audience categories and to engage in an experience that involves children as aware and experienced users of a device, not only as content readers.

THE WEBSITE AND THE SECONDARY SCHOOL CHOICE

Musenet is the website of an online network of City Museums in Foggia. It was chosen for the following reasons:

- the network of Civic Museums in the province of Foggia (Civic Museum of Foggia, Bovino, Torremaggiore) aims at creating a specific education and information project through the website. With this goal in mind, Musenet offers an appropriate section dedicated to school users, called “I laboratori per le scuole” (School workshops). The idea is to provide teachers and students with online instruments and services that could be useful for the collection of information, for research and sharing of materials produced by each institute;
- the Musenet website has recently been created (online in June 2009) and for this reason some sections had not been completed at the time of the research. So the study should provide some hints to the creation and modification of some website areas, especially those addressed to the younger audience.

Starting from this scenario, children were involved in the usability assessment of the website. The study was conducted at the Zingarelli Secondary School of Foggia. It was selected among the three pilot schools (one for each town of the network) of the Musenet project. Each school will be involved in historical workshops realized in collaboration with the Museum. The research experience here described represents the first phase of a process that will lead to the creation of the website contents.

RESEARCH HYPOTHESIS AND GOALS

The research starts from the specific hypothesis that the usability perception and satisfaction with the museum website vary between young and adult users.

Starting from this assumption, the research aims at achieving the following goals:

- to collect some clues about usability perception and layout preferences of the Musenet website for the two “audiences”: 10-12 years old kids (*user assessment*), and experts in instructional technologies and web design (*expert assessment*);

- to compare the results of user assessment and expert assessment regarding specific elements of the website;
- to provide suggestions to be implemented in some areas of the website or to modify some elements in the case of didactic use of the website.

RESEARCH DESIGN AND SELECTION OF THE SAMPLE

The research has been developed into three stages:

- user assessment: the Musenet website was “explored” by 47 children, 27 male and 20 female between 10 and 12 years old. Student-users were observed while familiarizing with the device (a few minutes of direct observation for each group of students). After this stage, students were asked to fill in a user interface assessment questionnaire, in order to gather their opinion about the interface aesthetics, the usability and effectiveness of navigation and the layout. Finally, a session of interviews was conducted in pairs. During the last stage of the research creative design proposals and spontaneous comments by the kids emerged. The age of the children – between 10 and 12 years old – guaranteed on the one hand engagement and conscious answers, usually very difficult to be obtained with very young children. On the other hand, it allowed proposals and requests to be obtained from an audience with specific needs;
- expert assessment: at this stage the Musenet website was “explored” by 12 adults with specific expertise related to web design or instructional technology. Internet use among the experts was very high: more than 30 hours per week for half of them. Experts also demonstrated extensive ability in the use of digital devices in educational contexts;
- comparison between “expert assessment” and user assessment.

RESEARCH METHODS

The investigation was realized via a questionnaire made up of both open and closed questions. The questionnaire was administered to children in a classroom provided with a PC with an Internet connection for each pupil. After a few minutes of free exploration of the website, the children had the chance to answer the questionnaire observing the website and surfing on it.

Answering the questions, the students expressed their own opinion in terms of layout, ease of navigation, aesthetics, and usability of the Musenet website.

The questions aimed at considering different kinds of comments. Adopting a classification proposed by Rolf Molich (2006), they enquired about:

- problems
- positive findings
- suggestions from test participants
- functional bugs
- usage scenarios.



Figure 2. Screen shot of MUSENET home page

The questionnaire created for the children included the same kind of questions as those posed to the experts, with some differences in lexical choices and sentence construction. In particular, the questions for the children were constructed using clear and plain language, without complex terms or stiff syntax. In order to check whether the questions were comprehensible, before the administration of the questionnaires a pre-test was conducted, with two 11-year-old kids not attending the Zingarelli Secondary School.

The test included brief exercises, with the purpose of enabling the children to achieve some tasks following precise instructions: for example, reaching an area within the website or pointing out the links included on a specific page.

Finally, a pair interview was conducted with the children, in order to extract user comments and findings. The choice of pair interviews was due to its marked effectiveness with kids: couple working makes the task more natural and allows mutual support by means of dialogue (Preece, Rogers & Sharp, 2004). Moreover couple interviews:

- reduce the problems of the think-aloud technique applied to children and kids: lack of awareness, disorientation, frustration in the case of navigation difficulties;
- reduce the problems connected with focus groups: limited familiarity among the members of the group, difficulties expressing non-conformist opinions on a complex theme.

RESEARCH EXPERIENCE RESULTS

Questionnaire items were grouped into five areas: visual elements, textual elements, ease of navigation, website structure and interactivity.

As for the visual aspects, user and expert judgements focused on layout, fonts, images, colours and, in general, graphics. The answers were (in decreasing order of presence):

Tab. 1. Comparison between users and experts about the website's visual aspects

MUSENET: VISUAL ASPECTS		
	Positive Evaluation	Negative Evaluation
Experts	• Clean and ordered graphic style; • Simple, straightforward layout; • Good page organization; • Clear font; • Elegant graphics; • Appropriate images; • Good text-image balance.	• Static unappealing layout; • Overly serious graphic style; • Too many colours; • Poor text-background contrast; • Poor consistency in some parts; • Too small fonts; • Too large images if compared to texts; • too neutral and serious colours.
Users	• Pretty colourful images; • Nice website colours; • Good image-text distribution; • Pleasant graphics.	• Too small fonts; • too small images; • Background colour unappreciated; • Too much text; • Too few pictures; • Text not colourful enough; • Text difficult to read • Too dark colours.

During the research, suggestions or positive feedback related to informational content and text readability were also pointed out.

Tab. 2. Comparison between users and experts about the website textual aspects

MUSENET: TEXTUAL ASPECTS		
	Positive Evaluation	Negative Evaluation
Experts	• In-depth information; • Clear, simple, brief text; • Clear and accurate information.	• Overlong text in some places; • Texts not differentiated between users; • Presence of typos; • Information on works and rooms lacking;
Users	• Useful information; • Clear and simple texts; • Good quality information; • Useful and interesting contents.	• Too complex texts; • Some ambiguous information; • Meaning of "forum", "newsletter" and "FAQ" unknown.

The third aspect investigated referred to the browsing of the website. In this section, users identified one difficulty which they noticed while they came out of the “virtual museum”. Experts’ comments, instead, were more accurate and critical.

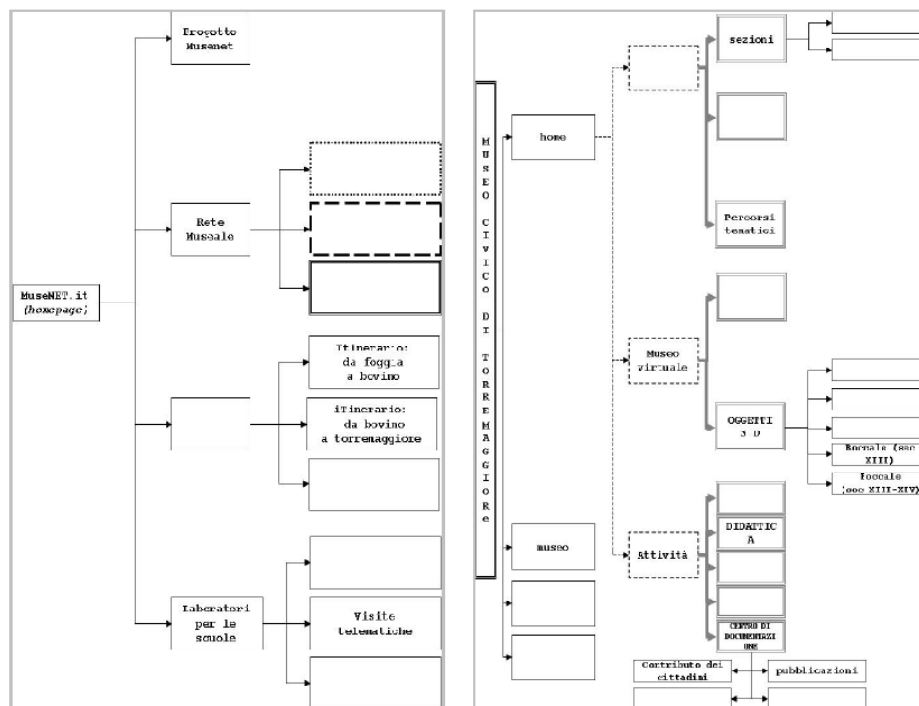
Tab. 3. Comparison between users and experts about the website’s ease of navigation

MUSENET: EASE OF NAVIGATION		
	<i>Positive Evaluation</i>	<i>Negative evaluation</i>
Experts	• Intuitive navigation path	• Links between sections sometimes missing or unclear; • Moving image at the top distracting; • Some links hard to recognize; • The virtual museum area does not allow direct access to museum rooms; • Confusing menu; • Important sections not inserted in the main menu.
Users	• Easy navigation	• Difficulties in exiting the virtual museum

Many suggestions regarding the website structure emerged from the questionnaires. Experts’ positive comments underlined the simplicity of the structure and the website’s logical organization into four well defined areas. The structure was also defined “ordered”, “intuitive”, “clear”, “traditional” and “classic”. But there were also negative comments which defined the structure as “complex”, “not intuitive enough”, “disorganized”, with unclear links between the different sections of the website.

On the contrary, children unanimously seemed at ease within the website. After filling in the questionnaire, they were asked to complete some tree diagrams, filling in the empty spaces on the paper diagram. Each box was completed with the precise name of the website area identified during navigation. Children, who showed no difficulty or orientation problems within the website, declared to have easily performed their task, without any mistakes.

Below there are two of the exercises proposed to children:



Figg. 2-3. Structure diagrams with empty boxes to be filled in by the kids

Referring to the last aspect, interactivity, the experts detected some features of the Web2.0 and they found areas where children can upload materials and documents.

Nevertheless, they pointed out some critical aspects: “information cannot be tagged or shared”; “some links are broken”; “toolbar and its functions are not well defined”; “important pages are difficult to reach (e.g., exhibit description)”; “there are no concrete possibilities for document manipulation and co-construction of information”.

Children, instead, did not understand the meaning and the functions of Forum, FAQ and Newsletter areas. So they needed the teacher’s help to use those tools.

MUSENET AS AN EDUCATIONAL DEVICE AND USERS’ DESIRES

In the last stage of the research, the experts evaluated the possibility of transforming Musenet into an educational tool. They noticed the chance to activate explorative and interactive instructional activities, as well as the capability of 3D visualization allowing visitors to learn about or re-visit the museum’s areas and objects.

The experts, moreover, pointed out the need to create thematic paths based on specific curricular requirements. They also underlined opportunities for further development in a multimedia direction and for the addition of information (the research was conducted when the website had not been completed yet).

In particular, some of the experts' comments about Musenet were:

- lacking in current multimedia solutions offered by the Web
- exploration requires too much effort
- the website does not offer interesting points for didactics: little information, no interactivity, poor organization of some areas
- few references to museum collection
- website designed without a didactic purpose
- upload and download options are missing, as spaces for the sharing of school-derived information, experiences and knowledge
- designed for an adult audience or for students assisted by teachers.

Finally, experts and children gave some suggestions for improving the website. The following "wishlist" is a summary of their ideas:

Tab. 4. Users' and experts' "wishlist" and proposals to improve the Musenet website

MUSENET "WISHLIST"	
Experts	• To allow students to suggest ideas for the website layout • Let young visitors share pictures and comments about their visit experience; • To insert tagging functions; • To develop upload and download options; • To improve interactivity and collaboration areas.
Users	• More vivid colours; • More images and information about images; • Larger writing; • Larger images; • A new website name; • Faster page loading and faster navigation; • Game tools.

Referring to experts' and children's answers, some differences emerged. On the one hand, experts evaluated website functionality, focusing their attention on interactivity, ease of navigation, manipulation and co-construction of contents and information. They graded the website 6.5 on a scale from 1 to 10.

Children-users, instead, concentrated on website aesthetics and content readability. Their evaluation was more "naive" but at the same time more creative. They appreciated the Musenet website, with a total grade of 8.2.

The research experience confirmed the hypothesis that the usability perception and satisfaction with the museum website vary between young and adult users. The knowledge of visitors' needs and, in particular, of children's preferences, is the first important step towards a "participatory museum", allowing public involvement inside and outside its physical boundaries.

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The Development of Internet Research Skills in University Students.

A Case Study

Chiara Ravagni*

Abstract

The impressive presence of new technologies in education has led to new pedagogical issues and has made it necessary to increase research in this field, both from an empirical and a theoretical point of view. This research study aims at finding the approaches to Internet searches that are most effective among several groups of university students, and to check if the less effective approaches can be modified by a lesson on this topic. Data have been qualitatively analyzed, and the instruments were: a questionnaire for investigating the perception of the relationship with the Internet and information searches, the recording of the Internet search practical tasks, and the written interview as feedback for the lesson. The outcomes can be used to plan courses on Information Literacy and Internet Search with individualized programs, and to propose methods to assess the learning in this field as well.

Keywords

Internet Search Skills; Search Engines; Internet Search Courses; Information Literacy; Computer Fluency.

INTRODUCTION

The rise of the Internet has greatly changed the approach to information. Once (and it is a “once” without a certain year, because the process was continuous) to obtain information on a topic you had to subject yourself to an infrastructure. You would eventually obtain the information you wanted, but with the conditions and the timing given by that infrastructure, sometimes after waiting for a long time. But then usually you could rely on the information you got, because it came from a recognized and accepted *auctoritas*.

With the Internet, however, access to information is instantaneous (all you need is a PC, an internet connection, and a little familiarity). Instantaneous, but not “immediate”, given the imposition of filtering technologies. However, you often face an amount of information which is too wide to deal with. Moreover, very little of this information is relevant to your purposes, while the rest is obsolete, inaccurate, biased, or simply not what you want.

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These changes have also had a stunning impact on learning (mostly because of the feeling of being able to find information quickly) but the difficulty of finding relevant and reliable information has shown the need to learn how to search on the Internet.

The aims of this research study are to find the approaches to Internet searches that are most effective among several groups of university students, and to check if the less effective approaches can be modified by a lesson on this topic. The results are supposed to allow tutors to design more effective courses through individualization.

NEED FOR RESEARCH

The impressive presence of new technologies in education has led to new pedagogical issues and has made it necessary to increase research in this field from both an empirical and theoretical point of view.

Luigi Guerra, reflecting Umberto Eco's extremes of "apocalyptic and integrated" (Eco, 1964), declares that

one can easily see that the computer and its applications still generate passion. It is, as we said, mostly a theoretical opposition between proponents and detractors of the computer, not for or against a certain use of computers, according to an old attitude to blame or to beautify the object (Guerra, 2002, p. 12).

Full acceptance and full rejection of technology are both extreme and anachronistic. Technology must be used critically, because it lacks the overall view of education that only teachers can have. But, on the other hand, it cannot be entirely avoided because of its enormous educational potential. Moreover, even if banned from class, it is present and widely used in other contexts.

One of the most frequent usages of the Internet in education is that of distance learning (e-learning). In this case, however, it is only used as a medium for delivering educational content. Paradoxically, it is therefore not very different from the nineteenth-century correspondence courses in which the teaching material was distributed by mail and the homework was sent to the teacher in the same way.

In this research, however, the analysis will not be addressed only to e-learning but to general learning processes which transform what is found online into new knowledge. Thus, it does not depend on the presence or absence of a teacher who supports the student.

Due to the former lack of an Internet infrastructure in schools, the Internet is traditionally linked to informal learning and learning at home, where the student searches the Internet alone or, less often, with friends or colleagues.

Consequently, many different approaches to the medium have spread, and with them an objective difficulty in planning Internet search courses, since everyone has his/her own way to search and a unique perception of his/her search skills. That is why delivering a course where every participant is forced to follow the same learning path

may originate feelings of frustration, unease, or boredom, thus reducing the learning potential offered by the course.

Computer fluency and Internet search skills are not related to just one subject or discipline, but to information, and therefore they affect them all. They are considered part of a much broader field called Information Literacy.

According to the ACRL (American College and Research Libraries), one of the first institutions to offer definitions and parameters of evaluation in this area, the Information Literacy is a set of skills that lead the individual to «recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information» (Presidential Committee on Information Literacy, 1989).

The first definition of *information literate* traces back to the seventies:

people trained in the application of information resources to their work can be called information literates. They have learned techniques and skills for using the wide range of information tools as well as primary sources in molding information solutions to their problems (Zurkowski, 1974, p. 6).

These skills are the basis of a healthy and effective relationship with information, in both the study and every sphere of life, and are mostly crucial in the field of lifelong learning¹.

The spread of the Internet and of the widely different and new ways to obtain information, multimedia as well, imposes the need to revisit the relationship with information and the manner by which we draw knowledge from it.

Moreover, the massive presence of accessible information in a non-filtered way, by, for example, a drafting committee, a peer group or a publisher, leads us to re-visit the concept of *auctoritas*, showing the issues of accuracy, up-to-datedness and reliability of the found text, and therefore requiring a critical analysis which is much more difficult than before.

One of the main interests of UNESCO, as well, is to spread methods to acquire the skills required by the so-called “knowledge society” and to assess them. One of the priority areas is Information Literacy, which is considered the basis of the ability to «make sounder and timelier decisions to cope with your personal and family health and welfare, educational, job-related, citizenship and other challenges» (UNESCO, 2007, p. VI).

RESEARCH DESIGN

My research is divided into three hypotheses: the first concerning the possibility of applying the same research tools in other courses on this theme, while the second and

¹ «Developing lifelong learners is central to the mission of higher education institutions. By ensuring that individuals have the intellectual abilities of reasoning and critical thinking, and by helping them construct a framework for learning how to learn, colleges and universities provide the foundation for continued growth throughout their careers, as well as in their roles as informed citizens and members of communities» (*Information literacy competency standards for higher education*, 2000, p. 4).

third relate to the impact of the lesson on students, in terms of their perception and in terms of assessing their actual Internet search skills through practical tasks.

The first hypothesis is that the combination of an initial questionnaire, two tasks – and a lesson in-between – and a written interview provide a set of assessment tools to better fit the course to its target.

The questionnaire in which the students describe their relationship with the Internet and information is on its own not enough to fully describe a real situation, because it focuses on the beliefs and perceptions of the participants and does not include a way to compare the responses to the real situation (in the case, for example, of social desirability).

The first hypothesis is therefore that the questionnaire works only when combined with multiple practical search tasks placed at different times of the course (in the case of this research, one before and one two weeks later) and that this combination is also suitable for measuring the skill situation at any given time in other training courses. The results of the pre-tests will be used for verifying this hypothesis.

The second hypothesis is that the lessons match the needs of the Internet search skills of the students.

The perceived literacy needs were expressed by participants in the last open question of the questionnaire, while their real problem areas were shown by the tests. For this hypothesis the written interview – held two weeks after the course – will be used.

The third hypothesis is that the lesson makes their way of searching the Internet more conscious, critical and effective. It will be verified by the comparison between the first and the second practical tasks.

METHODS

This research is based on the case study method, and data are qualitatively analyzed. The case study is a research method that applies to situations which are not easily repeatable or when the study cannot be replicated in similar conditions and with similar results. Therefore, it consists of a large number of different instruments in order to collect as much data as possible, even of different types, in the attempt to describe the case as fully as possible.

The choice of the case study is motivated by the fact of the multilingualism of the Faculty of Education of the Free University of Bolzano, which is unique in Italian universities. There are students whose mother language is Italian, German or Ladin, and bilingual or trilingual students as well. The students for the degree in primary education follow their courses in their mother tongue, while those on the degree course for Professional Educators follow them both in Italian and German. The result for many students is a considerable fluency in many languages that allows them to search the Internet in all of them.

The uniqueness of this scenario and the impossibility of repeating this study under different circumstances, was the reason for choosing the qualitative method of case study.

During this research project, participants were free to use Italian or German, or both if they wanted. The questionnaires and tasks were administered in a bilingual form.

Students did an Internet search and answered the open questions of the questionnaire and interview in the language of their choice.

Open questions and feedback were analyzed through keywords. The keywords were identified in every sentence, collected in the original form and then reduced in the same language for analysis. Then the data evaluation was based on their frequencies.

The lesson to the Italian-speaking group was held in Italian, while that of the bilingual group (with a clear majority of German speakers) was held in German, with additional explanations in Italian, if requested.

INSTRUMENTS

Three instruments were used for the research: a questionnaire for investigating the perception of the relationship with the Internet and information searches, the recording of the Internet search practical tasks, and the written interview as feedback for the lesson.

The questionnaire was prepared in bilingual form and was composed of 46 items subdivided into 28 questions, of which 23 were closed single responses, 3 multiple choice and 2 open. Being an anonymous research project, the only personal information requested was details of sex, date of birth, and degree.

The items were divided into the following groups:

1. demographic analysis: date of birth, sex, degree, year of study and year of registration;
2. timing of use of the PC and the Internet: how many years of use of a PC and access to the Internet and how often used;
3. relationship with the Internet: mostly used programs, creation and readings of blogs and websites, access to social networks;
4. relationship with information: how study material is searched for;
5. relationship with information on the Internet: how to search for it, how to evaluate it and if Internet search courses have been attended;
6. self-assessment of search capabilities and personal impressions;
7. skills that the student considers necessary to manage digital information.

The items included in items 5 and 6 are then compared with the practical search tasks to determine how the perception of the skills that students express in the questionnaire corresponds to reality.

The practical search task was developed because of the need to compare the perception and the reality of the Internet search processes by the students. Following the example of international studies (e.g. Lazonder, 2005) each student was given a question whose answer was to be searched for online. Their search was then recorded with software (Techsmith Camtasia) and studied through an evaluation grid to highlight the differences in the search patterns. This test was repeated twice: the first one at the beginning of the research phase (with the questionnaire) and the second two weeks after the lesson on Internet searches. The participants were aware that the practical tasks were recorded. For the tasks a list of exercises was prepared in the form of a question. The answer was then to be found on the Internet and the questions were presented in both Italian and German.

The recording was started when the task was given and interrupted when the participant stated that he had found the answer and highlighted it with the mouse. As questionnaires, the recordings were saved on digital media anonymously, through an ID number and date of birth of the participant, to correctly copy them with questionnaire and interview.

To analyze the recordings an evaluation grid was developed on several factors grouped into these categories: correctness of response, time spent on searching, means used to search, search attempts, search syntax, visualization of results.

The choice of subjects on which the research was conducted fell into three groups of students in the first and second year of the Faculty of Education. The total number of the participants was 78 people.

OUTCOMES

The collection and analysis of data from questionnaires, written tests and interviews made it possible to achieve these results.

The first hypothesis (that the combination of an initial questionnaire, two tasks and a written interview provide a set of assessment tools to better fit the course to its target) was verified. The combination of instruments proved to be proper and functional and can be used more times during an Internet search.

The second hypothesis (that the lessons match the needs of the Internet search skills of the students) was also verified. The percentage of students who found the lecture interesting and adequate to their information needs was very high (above 73%). The interviews also highlighted the perception, in many cases, of an improvement in their practical search skills. The interviews were useful, finally, to highlight important issues in Internet usage. Focusing on them during Internet search courses can help reduce the feeling of insecurity when searching.

The third hypothesis (that the lesson makes their way of searching the Internet more conscious, critical and effective) was only partially verified. The second test shows real improvements in the Internet search and evaluation methods in some students, but also highlights an unexpected deterioration in others. The analysis of the second task shows that the students that were more familiar with the Internet effectively broadened their search tactics. In contrast, other students, trying to apply the new techniques, may have been overtaken by confusion. This may have caused the increase in the number of students who abandoned the search out of frustration.

These results show the importance of continuing to investigate these fields, and trying to differentiate the Internet search courses fitting more accurately the level and the needs (assessed by the practical tasks) of the participant.

FURTHER RESEARCH POSSIBILITIES

The results can be used to plan courses on Information Literacy and Internet Search with individualized programs, or to propose methods to assess learning in this

field (for example, the combination of questionnaire and screenshot recording). Moreover, they can be used for designing similar research studies in different contexts, as in secondary schools or lifelong learning programs, or other research studies that may start from this model and differentiate themselves into new directions.

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L'École Doctorale Internationale (EDI) *Culture, éducation, communication*, fondée en 2005, propose une formation de haut niveau à la recherche qui permet aux doctorants d'acquérir des compétences transversales indispensables à tout chercheur, de maîtriser les langues et cultures de l'Union Européenne, et de créer un réseau international de jeunes chercheurs. L'École est constituée par les Universités d'Avignon et Pays de Vaucluse, de Foggia, de Lisboa, de Paris Ouest Nanterre La Défense, de Potsdam, de Roma Tre (siège légal).

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