Editorial

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Multiplicity, fluidity, dialogue and sharing: keywords to understand the complex dynamics between human learning and technology

As editors, we are proud to announce that in this issue, QWERTY publishes its hundredth article! This is a very important milestone for our journal.

Since QWERTY's inception more than ten years ago, the relationship between learning and technology has been an ongoing area of interest. Our journal has consistently supported the evidence that the traditional conception of the relationship between learning and technology as static, transmissive, unidirectional, and individual, is inadequate to understand contemporary learning contexts. Instead, *multiplicity*, *fluidity*, *dialogue* and *sharing* are key to interpreting and understanding the complex dynamics between human learning and technology.

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Multiplicity and fluidity. We don't need to refer to postmodernity (Lyotard, 1979) to know that contemporary learning occurs across multiple and fluid contexts. The lines between formal and informal, real and virtual, internal and external are increasingly blurred and softened. Formal education is now but one of many learning environments. The potential that technology has to multiply learning spaces by crossing or liquefying boundaries means that in school settings, traditional space-time bounded classroom contexts arguably now play a more marginal role than informal or non-traditional learning contexts.

Dialogue and sharing. Both are core characteristics of Web 2.0 technologies. Recent scholarship indicates that dialogue and sharing are among the most effective contributing elements to the construction of deep and significant knowledge (Jonassen & Land, 2012).

Multiplicity, *fluidity*, *dialogue* and *sharing* underpin this issue of QWERTY. Indeed, the papers selected could be visually depicted in a double entry table. Along the vertical, imagine current learning contexts, characterized by *multiplicity* and *fluidity*: school intersecting with beyond-school situations; company services becoming Communities of Practice; challenges to traditional xMOOCs and cMOOCs; interconnected learning environments that stretch across time and space (formal and informal contexts, physical locations, digital sites and so on). In the horizontal direction, imagine the strategies we use to construct deep knowledge; contexts characterized by *dialogue* and *sharing*. Depicted in this way, we believe that the articles in this issue represent an organic picture of the relationship between learning and technology.

Invited author Kriistina Kumpulainen reflects on student learning in and across contexts, analyzing elementary school students' chat interaction during collaborative writing of a school musical script. Kumpulainen takes a dialogical approach, conceiving learning as inseparably linked with existential and social-emotional processes. Learning thus has to be understood as a dialogue between various discourses. The author explores the concept of a *hybrid space* where formal and informal discourses intersect. In their chat interactions, students' various discourses intersect, overlap and coexist to form hy-

brid spaces in which students co-construct the cultural practices of participation and learning at school. It is suggested that, by providing opportunities for student engagement, discourse hybridization and negotiation supports collaborative creative writing.

Student participation and responsibility is also stimulated by mobile technology that provides opportunities to link learning across different contexts. Smørdal, Liestøl and Erstad offer an interesting account of how ninth grade students use augmented reality in a situated and collaborative knowledge-building activity. The authors claim that incongruity between the physical and the digital (experimented by students in the hybrid environment they were asked to explore) may lead students to develop and build knowledge in ways that support a better understanding of the environment.

D'Aprile, Racano, Annese and McLay lead us to other contexts, showing how technology can support the sensemaking processes of Corporate Social Responsibility (CSR). Social media is conceived as a site where Communities of Practice (CoPs) are cultivated, evident in public and asynchronous interaction between companies and stakeholders in Facebook posts. The authors suggest that CSR can be negotiated in different ways depending on an enterprise's typology, and that CSR sensemaking processes co-evolve alongside two aspects in particular: shared repertoire constructed by enterprises and stakeholders (especially customers); and mutual engagement between the participants.

Cesareni, Micale and Sansone propose changes to the traditional, transmissive structure of an xMOOC. Instead, students are offered the opportunity to participate in a collaborative knowledge building activity, aimed at constructing cognitive artifacts. The course participants' take-up of the activity is remarkable, with a minimal attrition rate. This arguably affirms the genuine interest MOOCs students have in being actively and collaboratively involved. The relational and interactive aspects of the activity are analyzed in the article, emphasizing how these dimensions can have a positive impact on learning processes.

Finally, the school context is again considered by Bembich, Cigognini and Paoletti, who explore teacher strategies when involved in a technology-mediated learning activity. The authors consider whether technology can be a source of distraction for teachers when used in a

blended learning environment. Participant teachers report experiencing moments of distraction; however, these do not seem to be linked to external factors. Rather than flowing from the use of seamless technology, the authors suggest that distraction seems to flow from teachers' lack of agency over their own thoughts.

References

Jonassen, D. & Land, S. (2012). *Theoretical Foundations of Learning Environments 2nd Edition*. New York: Routledge.

Lyotard, Jean-F. (1979). *La condition postmoderne: rapport sur le savoir*. Paris: Minuit.

Le dialogue et le partage: stratégies d'apprentissage dans des contextes multiples et fluides

En tant qu'éditeurs, nous sommes fières d'annoncer que, dans ce numéro, QWERTY publie son centième article!

En réfléchissant sur ce parcours de plus de dix ans de publication, on peut noter que l'accent majeur de notre journal a été celui de la relation entre l'apprentissage et la technologie. Avec ses divers numéros successifs, QWERTY a témoigné de comment la vision traditionnelle statique, unidirectionnelle, de transmission et «privée» de la relation entre l'apprentissage et les technologies de première et de deuxième génération, ne représentent qu'un souvenir lointain et peu significatif dans le contexte de l'ère postmoderne que nous vivons. La variété, la fluidité, le dialogue et le partage sont désormais les clés de cette relation.

Variété et fluidité. Il semble inutile d'invoquer le concept de postmodernité (Lyotard, 1979), pour mettre en évidence que l'apprentissage actuel est caractérisé par une ample variété et fluidité de contextes. L'école et la formation institutionnalisée ne représentent que deux des nombreux types d'environnements d'apprentissage; typologie dans laquelle, par ailleurs, les technologies avec leur potentiel de multiplier ces espaces, en surmontant ou rendant les limites fluides, jouent souvent, aujourd'hui encore, un rôle tout à fait marginal par

rapport à ce qui se passe dans les contextes d'apprentissage informels et / ou non traditionnels.

Le dialogue et le partage, composantes spécifiques des technologies Web2.0, semblent également constituer des stratégies particulièrement efficaces dans l'élaboration d'apprentissages significatifs et profonds (Jonassen & Land, 2012).

Dialogue et partage sont également des clés de lecture et d'interprétation des contenus de se numéro de QWERTY.

Le cadre qui, en tant qu'éditeurs, nous semble le plus adapté pour interpréter les différents cas présentés dans ce numéro, est composé d'un tableau à deux voies dont les valeurs sur l'axe vertical représentent des contextes multiples et fluides d'apprentissage, et dont les valeurs de l'axe horizontal représentent les stratégies avec lesquelles un apprentissage significatif et profond a lieu, telles que le dialogue et le partage.

C'est dans le cadre de la relation complexe qu'il existe entre l'apprentissage et la technologie que les articles de ce numéro de revue s'inscrivent.

Attraversare contesti per apprendere: molteplicità e fluidità x dialogo e condivisione

Come editori, siamo orgogliose di annunciare che, in questo numero, QWERTY pubblica il suo centesimo articolo! Riflettendo su questo ultradecennale percorso di pubblicazione, si può rilevare che uno dei principali focus del nostro giornale è stato quello della relazione fra apprendimento e tecnologie. Col susseguirsi dei numeri, QWERTY ha dato testimonianza di come la tradizionale visione statica, monodirezionale, trasmissiva, e "privata" del rapporto fra apprendimento e tecnologie di prima e seconda generazione non rappresenti che un lontano e poco significativo ricordo nell'ambito dell'epoca postmoderna che stiamo vivendo.

Varietà, fluidità, dialogo e condivisione sono oggi le chiavi di lettura di tale relazione.

Varietà e fluidità. Non pare necessario scomodare il concetto di postmodernità (Lyotard, 1979), per rendere evidente come il nostro

odierno apprendere sia caratterizzato dalla più ampia varietà e fluidità di contesti. La scuola e la formazione istituzionalizzata non rappresentano che una delle tante tipologie di ambienti di apprendimento; tipologia nella quale, peraltro, le tecnologie con il loro potenziale di moltiplicare tali spazi, superandone o rendendone fluidi i confini, giocano spesso, ancora oggi, un ruolo del tutto marginale rispetto a quanto avviene nei contesti di apprendimento informali e/o non tradizionali.

Dialogo e condivisione, peculiari potenzialità delle tecnologie Web2.0, sembrano costituire anche strategie particolarmente efficaci di costruzione di apprendimenti significativi e profondi (Jonassen & Land, 2012).

Sono, queste stesse, le parole chiave con cui si propone la lettura di questo numero di QWERTY.

Il framework che, come editori, ci pare interessante proporre per meglio interpretare i diversi casi presentati in questo numero è costituito da una tabella a doppia entrata i cui valori sull'asse verticale sono dati dai contesti di apprendimento, molteplici e fluidi, e su quello orizzontale, dalle strategie con cui l'apprendimento significativo e profondo avviene, ossia dialogo e condivisione. È all'interno di questo sfondo che ci pare gli articoli possano essere letti come un quadro organico rappresentativo del complesso e articolato rapporto fra apprendimento e tecnologie.