Studi, Ricerche e Sperimentazioni :: Research, Studies and Experiences

E-Learning, MOOC e Lingue Straniere: St E-Learning, MOOCs and Foreign Languages:





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A cura di - Edited by Laura Incalcaterra McLoughlin

Andrea Villarini

Napoli 2018





# Università Degli Studi Di Napoli "L'Orientale"





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#### GIORGIO BANTI\*

#### PRESENTAZIONE / FOREWORD

Questo volume nasce dalla collaborazione tra "L'Orientale" di Napoli e *MOVEME – MOoc per studenti uniVErsitari in Mobilità Europea* (moveme-project.eu), un progetto Erasmus Plus che mette insieme l'Università per Stranieri di Siena, la National University of Ireland (NUI) di Galway, la Open University di Milton Keynes (Regno Unito), la FENICE (FEderazione Nazionale Insegnanti – Centro di iniziativa per l'Europa) di Napoli, il Computer Technology Institute & Press (CTI) "Diophantos" di Patra (Grecia), e l'Institutul de Științe ale Educației (ISE) di Bucarest (Romania).

Dopo il primo convegno internazionale di questo progetto, organizzato il 20-21 ottobre 2016 presso la Open University nella sua sede di Milton Keynes, e avente come titolo MOOCs, Informal Language Learning, and Mobility, il prof. Giampiero de Cristofaro della FENICE pensò di proporre all'università "L'Orientale" di ospitare il secondo convegno internazionale del progetto. All'Ateneo piacque l'idea di avviare una collaborazione con un gruppo di università e centri di ricerca europei così importanti sulla tematica della teledidattica e dei MOOC, e in particolare sulle loro possibilità e prospettive nel campo della didattica delle lingue straniere; quest'ultima un'area in cui da più di due secoli esso ha sviluppato un alto profilo, la prima un settore in cui da alcuni anni esso ha avviato una diversificata attività di sperimentazione. Venne così realizzato insieme il secondo incontro internazionale del progetto MOVEME il 13-14 ottobre 2017. Il convegno ebbe un considerevole successo, con più di 100 partecipanti registrati che venivano da un elevato numero di paesi europei (Belgio, Bulgaria, Cipro, Danimarca, Francia, Irlanda, Italia, Inghilterra, Kosovo, Malta, Norvegia, Olanda, Portogallo, Romania, Russia, Spagna, Svizzera) e noneuropei (Algeria, Australia, Cina, Thailandia e Turchia). Le comunicazioni sono state più di 46, divise tra tre sessioni plenarie con keynote speakers e più gruppi di sessioni parallele in tre ambienti diversi, e hanno toccato tematiche quali:

- 1) MOOC,
- 2) e-learning solutions for language teaching and learning,

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- 3) CLIL (Content and Language Integrated Learning),
- 4) mobile-assisted language teaching and learning,
- 5) informal language learning and technologies.

Purtroppo diverse ragioni non hanno reso possibile pubblicarle tutte, e il Comitato Scientifico ha dovuto selezionare tra di esse le 17 contenute in questo bel volume, che affronta da un lato aspetti teorici di grande importanza e, dall'altro, diverse esperienze e sperimentazioni realizzate in questo campo in continua espansione, nel quale si giocherà una parte considerevole del futuro dell'insegnamento linguistico impartito dalle università, sia per quanto riguarda gli studenti che si preparano ad entrare nel mondo del lavoro, sia per la formazione continua e la preparazione di persone più mature che si rivolgeranno al mondo universitario al fine di meglio affrontare la rapida evoluzione e trasformazione delle loro attività lavorative.

Siamo infine contenti che un volume di questa importanza venga pubblicato dal nostro Ateneo. Grazie al progetto *MOVEME*, grazie ai convegnisti, e un ringraziamento particolare al Comitato Scientifico, ai due curatori e al personale tecnico e amministrativo che hanno contribuito alla realizzazione.

\* \* \*

This book is the result of the University of Naples "L'Orientale"'s cooperation with MOVE-ME – MOocs for uniVErsity students on the Move in Europe (movemeproject.eu), an Erasmus Plus project whose partners are the Università per Stranieri di Siena (Italy), the National University of Ireland (NUI Galway), the Open University (United Kingdom), the FENICE - FEderazione Nazionale Insegnanti – Centro di iniziativa per l'Europa (Italy), the "Diophantos" Computer Technology Institute & Press (Greece), and the Institutul de Științe ale Educației (Romania).

The first international congress of this project was held on 20-21 October 2016 at the Open University Milton Keynes campus, and its title was MOOCs, Informal Language Learning and Mobility. Subsequently prof. Giampiero de Cristofaro from the FENICE suggested that "L'Orientale" should host the project's second international conference. This institution appreciated the chance of cooperating with such a group of important European universities and research centres on distance learning and MOOCs and, particularly, on their scope and prospects in the field of teaching foreign languages. Indeed, the latter is a field in which this institution has developed a very high profile over the last two hundred years, while in relation to the former,

"L'Orientale" has launched a rich and diversified package of experimental courses during the last few years. It was thus been to organise together the second international congress of the MOVEME project on 13-14 October 2017. The event was a considerable success, with more than 100 registered participants who came from several European countries (Belgium, Bulgaria, Cyprus, Denmark, France, Ireland, Italy, the United Kingdom, Kosovo, Malta, Norway, the Netherlands, Portugal, Rumania, Russia, Spain, and Switzerland) as well as from outside Europe (Algeria, Australia, China, Thailand and Turkey). There were more than 46 presentations, with contributions by keynote speakers during three plenary sessions and by other researchers in several groups of parallel sessions held in three different rooms. Among the topics that were discussed the following should be mentioned:

- 1) MOOCs,
- 2) e-earning solutions for language teaching and learning,
- 3) CLIL (Content and Language Integrated Learning),
- 4) mobile-assisted language teaching and learning,
- 5) informal language learning and technologies.

Unfortunately, for several reasons it has not been possible to publish them all, and the Scientific Committee eventually selected the 17 contributions that are included in this volume. Some of them discuss highly relevant theoretical issues, while other ones analyse different experiences and experiments in this constantly expanding field. This area of research impacts on a significant portion of language teaching activities in higher education, in regards to both students preparing for their future working life, and more mature learners engaging in lifelong learning and relying on higher education institutions in order to keep up with the rapid pace of change in their jobs and occupations.

Finally, we are happy to see such an important volume published by this institution. We are grateful to the MOVEME project, and to the people who came to Naples for this congress. We are particularly grateful to the Scientific Committee, to the two editors, and to the technical and administrative staff who made it possible to publish this volume.

#### INTRODUZIONE1

# Didattica delle lingue e nuove tecnologie

Uno degli aspetti che maggiormente contraddistingue l'attuale mondo della didattica delle lingue è certamente l'utilizzo delle nuove tecnologie.

L'apporto delle nuove tecnologie non comporta solo, come è naturale, novità dal punto di vista dei supporti alla didattica. Anzi, considerare solo questo aspetto potrebbe far perdere di vista la portata del cambiamento in atto.

Quando parliamo di didattica con le nuove tecnologie oggi, infatti, parliamo di utilizzo della rete. Della possibilità, cioè, di mettere in connessione persone molto distanti tra di loro e di poter attingere a una mole di input linguistici inimmaginabile anche solo dieci anni fa. Insomma, stiamo parlando di modifiche che pertengono alle tecniche, alle metodologie, alle scelte gestionali delle agenzie formative, su su fino alle teorie che sorvegliano i processi di insegnamento delle lingue straniere. Stiamo parlando, in altri termini, di qualcosa che coinvolge a tutto tondo il mondo delle lingue straniere, in tutti i suoi aspetti.

Coinvolge i curatori di materiali didattici, che si trovano a poter creare materiali per le lingue in grado di ricomprendere l'impiego di internet; gli insegnanti che devono imparare a gestire classi di apprendenti legati tra loro solo "virtualmente"; le agenzie formative (università, scuole di lingue, associazioni culturali ecc.) che si trovano nella necessità di pianificare interventi formativi non più legati esclusivamente all'aula tradizionale; e, last but not least, gli studenti stessi che devono imparare a padroneggiare un medium per l'apprendimento (i dispositivi collegati alla rete) mai prima di ora utilizzati per scopi didattico-linguistici.

Come si vede, la relazione tra didattica delle lingue e nuove tecnologie è qualcosa di molto più complesso di una semplice *consolle* di dispositivi da manovrare per presentare nuovi contenuti didattici.

Siamo in presenza, invece, di un fenomeno che scuote dalle fondamenta la didattica delle lingue. Apre nuovi scenari teorici. Amplia le possibilità

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<sup>&</sup>lt;sup>1</sup> Per la stesura di questa introduzione gli autori hanno condiviso i contenuti e suddiviso le sezioni come segue: Incalcaterra McLoughlin è autrice della parte denominata *Lingue, tecnologie e alfabetizzazione digitale,* mentre Villarini è autore della parte denominata *Didattica delle lingue e nuove tecnologie.* La parte nominata *I contenuti del volume,* invece, è stata stesa insieme.

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formative. Chiama in causa nuove possibilità per tutti coloro che sono interessati alla gestione dei processi formativi e (come abbiamo detto) anche per chi intende apprendere le lingue straniere.

Tra i vari fenomeni di cambiamento in atto legati a internet e alle nuove tecnologie per la didattica, l'elemento più innovativo, quello che a tutt'oggi rappresenta la punta più avanzata dell'intero processo innovativo, sono certamente i MOOC (Massive Open Online Courses).

Il loro carattere di forte innovatività risiede nella possibilità non solo di raggiungere apprendenti dispersi in ogni parte del mondo (caratteristica questa che condividono con tutte le esperienze formative su internet), ma di poter arrivare a coinvolgere un numero alle volte enorme di apprendenti (si parla di MOOC che hanno raccolto centinaia di migliaia di iscritti!) che tutti insieme partecipano al medesimo evento formativo.

Numeri e distanze che ridefiniscono i concetti stessi di *luogo per la didattica* e di *classe di apprendenti*, tanto sono diversi da quelli che siamo abituati a concepire. Numeri e distanze che minano, per alcuni, la possibilità stessa di promuovere con questo sistema la formazione linguistica. A noi, invece, piace vedere questi MOOC come delle sfide lanciate al mondo della didattica delle lingue. Sfide che, se vinte, potranno rivoluzionarlo e proiettarlo nel nuovo millennio ormai avviato favorendo l'integrazione e l'innalzamento delle competenze linguistiche per i cittadini del futuro, nonché il potenziamento di tutta una gamma di abilità e competenze più ampie.

# Lingue, tecnologie e alfabetizzazione digitale

Il presente volume si situa pertanto all'interno di una riflessione sulle modalità di sviluppo di quelle abilità informatiche, mediatiche e tecnologiche ormai largamente riconosciute come elementi imprescindibili degli attributi di uno studente che completi un percorso formativo in generale e universitario in particolare. Ma allo stesso tempo va anche oltre tale riflessione per abbracciare il discorso dell'alfabetizzazione digitale che fornisce il quadro di consapevolezza contestuale entro il quale quelle abilità si esercitano. Infatti, la centralità di ambienti virtuali collaborativi, il ricorso a processi di valutazione *peer-to-peer* anche informali e quindi la partecipazione attiva ma sempre relazionale del discente negli studi e nelle sperimentazioni qui presentate presuppongono un adeguato livello di consapevolezza degli ambienti digitali e dell'etichetta dei comportamenti ad essi consoni. La partecipazione a un corso di lingua in *e-learning* in formato collaborativo (e quindi non solo un corso a distanza erogato attraverso un

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mezzo tecnico, ma un vero e proprio percorso di formazione di stampo socio-costruttivista o connettivista) e – forse ancora di più – a un MOOC di lingua richiede non solo abilità tecniche, ma anche la capacità di utilizzare l'elemento di *social network* che essi contengono in modo adeguato, scrivendo commenti con il giusto registro linguistico, cercando, linkando o facendo riferimento a materiale autorevole in LS, informativo e mai offensivo, essendo consapevoli anche di possibili questioni di *copyright*, e così via. Pertanto, percorsi collaborativi online di apprendimento linguistico che mettono in contatto diretto partecipanti spesso provenienti da realtà linguistiche, sociali e geografiche molto diverse tra loro contribuiscono a favorire e migliorare la comunicazione in un'accezione particolarmente ampia e moderna, che comprende anche i contesti digitali. Così l'apprendimento di una LS diventa funzionale alla formazione dei cittadini del futuro grazie all'alfabetizzazione digitale contestualizzata di cui si fa promotore.

#### I contenuti del volume

Il volume che presentiamo raccoglie una serie di studi, riflessioni e proposte operative che prendono in considerazione la didattica con i MOOC e, in taluni casi, con le nuove tecnologie in generale.

Tutti i contributi presentati, suddivisi in una prima parte più teorica denominata "Studi e Ricerche / Research and Studies" e una seconda più applicativa denominata "Esperienze / Experiences", hanno il pregio di proporre strumenti, percorsi, visioni che sono il frutto di progetti già in atto o portati a termine in Italia e nel mondo; e che quindi hanno già superato, diciamo così, il vaglio dell'esperienza sul campo.

Per questo, l'opera che qui licenziamo si candida, a nostro avviso, a diventare un ottimo osservatorio per valutare lo stato dell'arte della ricerca e dei prodotti nel campo delle nuove tecnologie e dell'utilizzo dei MOOC per la promozione delle lingue straniere.

I lavori raccolti sono stati presentati al Convegno Internazionale su "Mooc, apprendimento delle lingue e mobilità" che si è svolto presso l'Università degli Studi di Napoli "L'Orientale" e rientrante tra le attività del progetto Erasmus Plus MOVEME – MOoc per studenti uniVErsitari in Mobilità Europea (movemeproject.eu). La selezione delle proposte di intervento è stata curata da un Comitato Scientifico composto, oltre che dagli scriventi, dai professori Federico Corradi, Anna De Meo, Quian Kan e Joanna Monti, che qui si coglie l'occasione per ringraziare.

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Un ringraziamento particolare va infine al prof. Giorgio Banti che, in qualità di Prorettore Vicario dell'Università degli Studi di Napoli "L'Orientale", ha sostenuto l'iniziativa del Convegno e incoraggiato questa pubblicazione.

1. STUDI E RICERCHE / STUDIES AND RESEARCH	

#### DONATELLA TRONCARELLI\*

# L'INTERNAZIONALIZZAZIONE DEL SISTEMA TERZIARIO DI ISTRUZIONE E L'USO DI MOOC PER LO SVILUPPO DELLA COMPETENZA IN L2: IL PROGETTO MOVE-ME

#### Abstract

This paper presents the rationale behind using technology to respond to international students' language needs. In particular, it focuses on the MOVE-ME project, funded under the Key Action 2 of the Erasmus+ programme, where Massive Open Online Courses (MOOCs) are used to widen access to education al resources for learning English and Italian for academic purposes.

## 1. La dimensione internazionale dell'istruzione superiore

Nell'ultimo trentennio la libera circolazione di capitali, di beni e servizi, congiuntamente all'importanza attribuita alla conoscenza per lo sviluppo economico, hanno fatto crescere l'attenzione verso dimensione internazionale dell'istruzione. Con l'infittirsi dei rapporti economici e commerciali a livello mondiale è cresciuta infatti l'esigenza di disporre di competenze internazionali che consentano di operare su scala globale [1].

Secondo le stime dell'Istituto di statistica dell'UNESCO (UIS) nel 2015 più di 5 milioni di studenti hanno scelto di studiare in un'altra nazione, duplicando i numeri raggiunti dalla mobilità studentesca nel 2000 e triplicando quelli del 1990¹. Diversi studi, tra cui l'ultima pubblicazione del British Council [2] sullo sviluppo dell'istruzione superiore, correlano questa crescita principalmente all'innalzamento generale dell'istruzione in tutti i paesi del mondo, alla consistenza numerica della popolazione giovanile e alle strategie messe in atto per attrarre giovani da altri paesi.

Tra le mete favorite dagli studenti in mobilità si collocano attualmente USA, Regno Unito, Australia, seguite da Francia, Germania, Russia, Giappo-

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<sup>&</sup>lt;sup>1</sup> Occorre evidenziare che ci sono discrepanze tra le indicazioni numeriche tratte da diverse fonti dovute alla metodologia di rilevazione dei dati. Alcuni paesi come la Gran Bretagna hanno strutture deputate alla raccolta di dati, mentre altri ne sono privi. Alcuni stati non distinguono gli studenti arrivati per studiare e quelli già residenti per altre ragioni che si iscrivono all'università. Inoltre alcuni includono gli studenti in mobili tà nel numero globale della popolazione studentesca, rendendo difficile individuarne la percentuale.

ne e Canada. Tuttavia nazioni come l'Italia, interessate da flussi meno consistenti di mobilità studentesca, hanno visto in questi ultimi anni rafforzare la presenza di studenti stranieri nei propri atenei e incrementare le partenze di giovani connazionali che si sono trasferiti all'estero per svolgere, completamente o in parte, il loro percorso di studio.

Nell'anno accademico 2015-16, sono stati più di 90 mila gli studenti in ingresso in Italia pari al 5% della popolazione studentesca, mentre gli studenti in uscita dalla nazione per studiare all'estero hanno raggiunto quasi le 50mila unità (dati UIS, [3]). La maggioranza degli studenti che giungono in Italia provengono da paesi europei. Secondo i dati della Commissione Europea [4] [5], il programma Erasmus consente annualmente a più di 20mila studenti di compiere parte dei loro studi in atenei italiani e a 25mila studenti italiani di fare esperienza di studio all'estero. Anche il "Processo di Bologna" ha avuto un ruolo decisivo nella promozione della mobilità studentesca europea attraverso la costruzione di uno spazio comune di istruzione superiore in Europa in cui i percorsi di studio risultano comparabili, i crediti formativi trasferibili e uguagliabili i titoli acquisiti.

L'Italia ha favorito l'internazionalizzazione non solo sostenendo la mobilità studentesca europea, ma adottando anche strategie per attrarre studenti extracomunitari. Tramite il programma "Marco Polo", nato nel 2004 per consentire l'iscrizione di studenti cinesi in atenei italiani, e il successivo programma "Turandot", promosso nel 2009 e volto a sostenere lo studio presso Istituzioni accademiche italiane di Alta Formazione Artistica e Musicale, arrivano attualmente in Italia più di 5000 studenti cinesi all'anno (dati Uni-Italia [6]). A studenti provenienti dall'Azerbaijan, Colombia, Egitto, Etiopia, Ghana, Indonesia, Kazakihstan, Messico, Turchia, Vietnam, Iran, Tunisia e India, in Italia, si rivolge il programma "Invest Your Talent in Italy". Lanciato nel 2006, il programma offre percorsi formativi *post lauream* al fine di perfezionare e mettere a disposizione delle aziende italiane, e favorirne così l'internazionalizzazione, talenti stranieri. I paesi coinvolti sono quelli i cui mercati sono ritenuti di interesse per la nostra economia.

Negli ultimi anni i numeri dell'internazionalizzazione sono stati incrementati soprattutto da studenti provenienti da Cina, India e Korea, che sono giunti a rappresentare il 53% degli studenti internazionali nel mondo. Anche la quantità degli studenti provenienti dall'Africa è cresciuta ed è destinata a diventare ancora più consistente in futuro. Secondo le stime di diversi studi [7] [2] nei prossimi 50 anni il numero di studenti asiatici subirà una contrazione, anche a seguito del decremento delle nascite in alcuni paesi dell'Asia, mentre crescerà il numero di studenti africani. Inoltre la mobilità

studentesca subirà ulteriori incrementi a seguito dell'aumento totale della popolazione.

L'internazionalizzazione costituisce dunque, per gli atenei di tutto il mondo, una sfida aperta che non si limita alla capacità di attrarre studenti stranieri, rivolgendosi a pubblici via, via diversi, ma che presenta anche altri volti:

- la partecipazione progetti di ricerca sviluppati su dimensione internazionale;
- la mobilità dei docenti e la capacità di reclutare dall'estero docenti, ricercatori, postdoc;
- la diffusione di percorsi formativi integrati con quelli di università ed enti stranieri, sotto forma di joint e double degrees, di dottorati internazionali;
- l'apertura di sedi o di corsi in altri paesi.

# 2. Internazionalizzazione e competenze linguistiche

La competenza della lingua di istruzione gioca un importante ruolo nell'attrattività di un corso di studi presso il pubblico straniero. Paesi come gli USA, il Regno unito, l'Australia e il Canada si collocano ai primi posti tra le destinazioni più selezionate dagli studenti internazionali, non solo per il prestigio in campo didattico e scientifico riconosciuto agli atenei, ma anche per la diffusione dell'inglese come lingua seconda e per suo dominio in molti ambiti, tra cui quello degli scambi economici. Al fine di promuovere i propri sistemi di formazione e di offrire maggiori opportunità di collocazione nel mercato del lavoro ai propri laureati, diversi paesi non anglofoni hanno introdotto l'inglese come lingua di istruzione. In Europa, questo è il caso di nazioni le cui lingue nazionali sono poco diffuse come seconde lingue, quali Olanda, Svezia, Norvegia e Finlandia, ma anche di paesi con pubblici più ampi di stranieri che ne apprendono la lingua.

Alla tentazione di utilizzare questa strategia di internazionalizzazione con ricaduta immediata non ha saputo resistere nemmeno l'Italia, dove la questione dei corsi universitari tenuti in inglese è arrivata fino alla Corte Costituzionale [8]. La decisione di attivare corsi di laurea magistrale e di dottorato di ricerca esclusivamente in lingua inglese, da parte del Senato accademico del Politecnico di Milano, ha infatti spinto alcuni docenti a inoltrare ricorso nel 2014 al Tribunale amministrativo regionale per la

Lombardia e poi a sollevare dubbi di incostituzionalità della Legge 240 del 30 dicembre 2010<sup>2</sup>. La sentenza della Corte Costituzionale, del febbraio 2017, non ha chiuso il dibattito sull'inglese come lingua di istruzione ma, richiamando la Costituzione, ha chiarito che la lingua italiana non può essere ridotta a una posizione marginale e subordinata, garantendo una «trasmissione del sapere, maggiormente attinente alla tradizione e ai valori della cultura italiana».

Chi vuole studiare in Italia deve dunque imparare l'italiano, in particolare se vuole iscriversi in un corso in cui il legame tra lingua italiana e produzione culturale e artistica è così stretto da escludere l'impiego di un'altra lingua come mezzo di istruzione.

Il livello di competenza in italiano L2 richiesto per l'accesso agli studi universitari è il B2 del Quadro Comune Europeo di Riferimento (QCER) per tutti gli studenti internazionali ad eccezione degli studenti dei programmi "Marco Polo" e "Turandot" ai quali è richiesto il livello B1. Anche per gli studenti in mobilità europea il livello B1 è quello con cui generalmente è affrontato lo studio in italiano L2. Si tratta comunque di una competenza centrata e misurata in domini d'uso diversi da quello accademico. Come evidenzia il QCER, la competenza linguisticocomunicativa, descrive un continuum multidimensionale, articolato in vari piani, costituiti dalle diverse abilità e dalle diverse conoscenze in gioco nei differenti domini d'uso linguistico. La progressione verticale della padronanza in un dominio non assicura lo stesso livello di correttezza, efficacia e precisione comunicativa in altri domini d'uso in cui le attività da svolgere, i testi da produrre o comprendere sono di tipo e genere diverso e dove è coinvolto l'impiego di specifiche modalità espressive. Molti studenti internazionali o in mobilità, benché abbiano una buona padronanza della lingua italiana per esprimersi in modo fluente nella comunicazione quotidiana, trovano complesso comprendere il parlato monologico di una lezione universitaria o manuali di studio caratterizzati da una sintassi articolata, da scelte lessicali e convenzioni testuali non rintracciabili nell'uso comune, oppure hanno difficoltà a scrivere una tesina e a sostenere un colloquio orale per un esame.

Allo scopo di sostenere lo sviluppo della competenza in L2, molte università offrono corsi mirati agli specifici bisogni di questi studenti. Si tratta generalmente di corsi che precedono l'iscrizione all'università o la mobilità in Italia, cioè svolti prima che lo studente stesso si misuri con la comunicazione accademica. In alcuni casi i corsi sono svolti durante

<sup>&</sup>lt;sup>2</sup> Si tratta della legge nota come "Legge Gelmini" che all'articolo 2, comma 2 lettera l consente l'attivazione di corsi di studio in lingua straniera.

l'anno accademico registrando poche adesioni degli studenti che, dovendo seguire le lezioni universitarie e impegnarsi nello studio delle discipline comprese nel curricolo intrapreso, hanno poco tempo da dedicare all'apprendimento formale della lingua. Pertanto, lo studente affronta spesso autonomamente le difficoltà derivate dallo studio in una lingua non materna e non sempre gli sforzi profusi portano a buoni risultati, incidendo sui tempi di conclusione del ciclo di studi e, nel caso degli studenti in mobilità europea, sulla possibilità di migliorare le competenze linguistiche in modo duraturo e spendibile in contesti specialistici d'uso della L2.

# 3. Il progetto MOVE-ME: una proposta per il sostegno della competenza nella lingua mezzo di istruzione

Le tecnologie didattiche rappresentano un utile ausilio per costruire percorsi di apprendimento flessibili e sostenibili, in grado di guidare lo studente internazionale o in mobilità verso l'esplorazione delle convenzioni compositive, proprie della comunicazione in ambito accademico relativa al proprio settore di studi, offrendogli la possibilità di seguire ritmi individuali di apprendimento e quindi di conciliare lo sviluppo della competenza linguistico-comunicativa con gli altri impegni di studio.

Tra la pluralità di soluzioni impiegabili, i MOOC presentano una serie di aspetti da considerare:

- la relativa facilità di sviluppo e implementazione dei percorsi;
- la replicabilità dei corsi;
- la possibilità di raggiungere un pubblico vasto, non circoscritto a un singolo ateneo;
- la possibilità di usare un'eterogenea comunità di apprendimento come risorsa;
- il ridotto impegno di erogazione, senza dover rinunciare a guidare l'apprendimento;
- la capacità di motivare gli apprendenti, dovuta all'utilizzo di audiovisivi come spina dorsale del corso;
- l'integrabilità dei materiali didattici con le risorse offerte dalla rete.

Allo scopo di valutare le potenzialità di questa metodologia di insegnamento-apprendimento è stato elaborato il progetto MOVE-ME

(MOoc per studenti uniVErsitari in Mobilità Europea), finanziato dalla Commissione Europea all'interno del programma Erasmus Plus³ e realizzato da un partenariato composto dall'Università per Stranieri di Siena, la National University of Ireland di Galway, la britannica Open University, il Computer Technology Institute and Press "Diophantus" di Patrasso, l'Institutul de Stiinte Ale Educatieidi Bucarest e la Federazione Nazionale Insegnanti con sede a Napoli.

Il progetto si centra sulla produzione di una serie di risorse didattiche *on line* aperte, che possano consentire di superare i limiti posti dalla formazione d'aula rivolta a studenti in mobilità e internazionali. Tra queste le principali sono rappresentate da un MOOC per l'apprendimento dell'inglese e tre per l'apprendimento dell'italiano per lo studio all'università, sviluppati sulla piattaforma FutureLearn. Mentre il percorso per l'inglese, lingua per la quale sono disponibili in rete molti tipi diversi di materiali, si focalizza essenzialmente sulle abilità di studio e sulla capacità di imparare ad apprendere la lingua, i percorsi per l'italiano affiancano a queste due componenti l'approfondimento di aspetti linguistici e testuali relativi alla comunicazione accademica in tre macro-ambiti disciplinari: linguistico-letterario, economico-giuridico, scientifico-matematico.

#### 3.1 La struttura dei corsi

Tutti i corsi elaborati nell'ambito del progetto MOVE-ME hanno una struttura comune e si articolano in sei moduli didattici della durata complessiva di 6 settimane, ciascuno dei quali è composto da sezioni centrate su specifici obiettivi di apprendimento.

Nel primo modulo vengono introdotte le caratteristiche del discorso accademico e i generi di testo, utilizzati per la comunicazione in ambito universitario, attraverso itinerari induttivi che guidano lo studente alla scoperta e alla riflessione. Ampio spazio è dedicato al ruolo dell'uso consapevole di conoscenze, competenze e strategie impiegate nel processo di apprendimento, al fine di promuovere un atteggiamento attivo e riflessivo degli studenti e fornire strumenti per un efficace studio autonomo. Lo sviluppo dell'autonomia e il potenziamento della capacità di imparare ad apprendere, che come già accennato costituiscono obiettivi primari del progetto, sono promossi da discussioni e da attività

<sup>&</sup>lt;sup>3</sup> Il progetto è stato finanziato enll'ambito della linea KA2,- Cooperation for Innovation and the Exchange of Good Practices - Strategic Partnerships for higher education, ed è coordinato dall'Univesità per Stranieri di Siena.

collaborative, che inducono gli studenti ad essere costantemente attivi, a condividere conoscenze ed esperienze e a sostenersi reciprocamente nell'apprendimento.

Il secondo modulo è dedicato all'abilità di ascolto con la presentazione di testi espositivi propri della comunicazione accademica, quali la lezione, il seminario, la conferenza. Accanto ad attività di preparazione all'ascolto, di esercitazione alla comprensione, di approfondimento degli aspetti linguistici che caratterizzano i generi presentati e l'esposizione nell'ambito disciplinare di interesse, sono proposte attività volte a migliorare le abilità di studio e a promuovere la riflessione sulle strategie di apprendimento messe in atto e le competenze coinvolte. Il lavoro individuale dello studente è integrato da discussioni, da attività collaborative che sostengono il singolo nello svolgimento di compiti cognitivamente o linguisticamente complessi, nonché distanti dall'impiego della lingua per la comunicazione quotidiana.

In modo analogo è organizzato il terzo modulo che mira allo sviluppo dell'abilità di comprensione scritta. I testi presentati appartengono a generi quali il manuale di studio, la recensione, il saggio scientifico, l'articolo su rivista, la voce di dizionario enciclopedico. Le attività proposte, oltre a guidare alla comprensione, all'individuazione e alla riflessione sulle convenzioni che caratterizzano l'esposizione accademica, focalizzano l'attenzione sulla funzione del paratesto che integra, spesso insieme ad altri codici di comunicazione, il contenuto linguistico del testo.

Il quarto modulo si centra sullo sviluppo dell'abilità di scrittura e guida lo studente all'impiego di forme e convenzioni linguistiche da utilizzare nella produzione di tesine e relazioni, alle modalità di ricerca e citazione delle fonti, all'organizzazione del testo, ai livelli informativi in cui l'esposizione può articolarsi. Le attività proposte richiedono l'elaborazione di testi discussi e valutati tra pari.

L'abilità di produzione orale è invece oggetto del quinto modulo. Nei MOOC per la lingua italiana, accanto alla presentazione orale è preso in considerazione l'esame orale. Per molti studenti stranieri sostenere un colloquio risulta difficile, sia perché questo tipo di prova di verifica delle conoscenze può non essere utilizzato nel sistema scolastico da cui proviene, sia perché realizzare turni lunghi di discorso in L2, trattando argomenti specialistici, costituisce un compito cognitivamente e linguisticamente complesso.

L'ultimo modulo, corrispondente all'ultima settimana del corso, ha la funzione di tirare le fila ricapitolando gli obiettivi didattici conseguiti con il MOOC, le caratteristiche dell'esposizione sia orale che scritta in ambito accademico e le strategie di apprendimento utilizzate nei vari compiti. Vengono inoltre illustrati strumenti reperibili in rete che possono sostenere lo studio e l'approfondimento autonomo, in modo che lo studente possa continuare a sviluppare la propria competenza anche dopo la fine del corso.

# 3.2 La gestione didattica e la partecipazione degli utenti

Sebbene i MOOC siano modalità di apprendimento in cui l'azione didattica è guidata dal materiale videoregistrato che ne è alla base, è difficile pensare che possano essere utilizzati in completa autonomia da parte dello studente. Accanto al tipo di attività proposte, la figura del tutor rimane comunque importante per motivare l'apprendimento, promuovere e sostenere la collaborazione tra i partecipanti, indirizzare verso ulteriori risorse disponibili.

Le forme di tutorato realizzabili dipendono dalle funzionalità della piattaforma utilizzata e dal numero di partecipanti. La piattaforma di FutureLearn, impiegata per i corsi del progetto MOVE-ME, permette al tutor di intervenire nelle discussioni aperte per ogni *step*, di cui si compone un modulo didattico, di filtrare gli interventi a seconda di criteri quali l'importanza attribuita dagli utenti ad un commento o a una richiesta, per esempio, e di seguire i post di un singolo partecipante. Questi strumenti possono essere integrati da altri per consentire la condivisione di documenti scritti o audio, in modo da poter dare spazio alle produzioni degli studenti e fornire un *feedback* in un'ottica collaborativa. Gli studenti possono quindi essere coinvolti in attività di *peer review* e contribuire attivamente allo sviluppo delle conoscenze e competenze obiettivo di apprendimento.

Il grande numero di partecipanti, che un MOOC può raggiungere, può indurre a credere che sia difficoltoso poter promuovere e sostenere una dimensione sociale dell'apprendimento con questa modalità di formazione. Occorre però considerare che solo una parte di coloro che si iscrivono diventano partecipanti attivi e tra questi solo una percentuale prende parte a discussioni e ad attività basate sulla condivisione.

Al piloting dei corsi English for Academic Purposes e Studying in Italian - Language and Literature, i primi due MOOC realizzati per il progetto MOVE-ME, hanno partecipato rispettivamente 5989 e 2551 iscritti<sup>4</sup>. Nel percorso per la lingua inglese solo 2,682 (64,2%) degli iscritti hanno partecipato

<sup>&</sup>lt;sup>4</sup> I dati si riferiscono al 15 luglio 2017, data di conclusione dell'attività in rete. Il numero dei partecipanti è variato da 1480, registrati nei primi giorni di apertura del corso, a 3029 raggiunti a due mesi dalla chiusura delle attività.

attivamente e 1212 (29%) è stato il numero di coloro che hanno contribuito alla dimensione sociale dell'apprendimento<sup>5</sup>. Hanno invece completato più del 90% degli *step* del corso solo 98 partecipanti. Nel percorso per la lingua italiana solo 1090 (56,8%) sono stati gli apprendenti attivi e di questi solo 266 (13,9%) hanno preso parte alle discussioni e ad altre attività che richiedevano la collaborazione in rete. Infine solo 44 partecipanti hanno completato più del 90% del percorso didattico previsto.

Si tratta di numeri sempre elevati, ma che non impediscono di contare sull'interazione didattica in rete per lo sviluppo di competenze specifiche, riguardanti la comunicazione in ambito accademico, e di competenze inerenti le abilità di studio e la capacità di imparare ad apprendere, necessarie per condurre con successo gli studi all'università.

#### 4. Conclusioni

L'efficacia dell'utilizzazione di MOOC per la costruzione di percorsi formativi affiancabili ed integrabili con curricoli universitari è connessa a una serie di fattori tra cui la produzione di risorse specifiche, centrate sul conseguimento di obiettivi ben delineati, l'adozione di strategie didattiche in grado di utilizzare le potenzialità di questa modalità di formazione, la scelta del provider che ospita il percorso di apprendimento, il quale può avere maggiore o minore capacità di diffusione del corso e può offrire una piattaforma più o meno adatta al tipo di corso che si intende implementare. Nel caso specifico della formazione linguistica di studenti internazionali o in mobilità europea, che rappresentano un pubblico composito con esigenze di apprendimento diversificate, sia sul piano del livello di competenza, sia su quello delle conoscenze e capacità da sviluppare, il ricorso a MOOC consente di superare problematiche legate alla formazione in presenza e di poter attrarre studenti altrimenti costretti a dover provvedere in modo autonomo e isolato all'acquisizione delle competenze necessarie per lo studio universitario in L2.

L'adesione ai corsi proposti dal progetto MOVE-ME, seppur non sia confrontabile con il numero di partecipanti ad altri MOOC circolanti in rete, mostra comunque un interesse, che è andato crescendo lungo lo svolgimento dei corsi, da parte di pubblico in cerca di proposte formative in grado di rispondere alle esigenze specifiche di chi usa una seconda lingua come mezzo di istruzione.

 $<sup>^5</sup>$  Future Learn definisce *social learner* coloro che hanno inserito almeno un commento in qualsiasi step di cui si compone il corso.

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#### LAURA MENICHETTI\*

#### LA SFIDA EDUCATIVA DEI MOOC

#### Abstract

MOOCs show their added value according to a strategic-organisational perspective. Are they also valid from the educational one? Can they ensure effectiveness for students, sustainability for teachers, and quality of created resources? Any advantage over on-campus education? Feedback and peer tutoring strategies can be applied to these objectives.

## 1. La prospettiva strategico-organizzativa<sup>1</sup>

Lo sviluppo delle tecnologie ha supportato in maniera progressivamente sempre più efficace il superamento delle distanze geografiche e temporali in ambito formativo, dando luogo alle diverse generazioni di distance learning [1][2][3].

I MOOC si inseriscono in questo quadro evolutivo: dal punto di vista tecnologico, infatti, le diverse modalità di e-learning identificate con il termine MOOC [4] [5] [6] – grazie a potenze elaborative e spazi di archiviazione appropriati per la multimedialità, reti comunicative ad alta velocità, nuove funzioni e convergenza di dispositivi digitali [7] [8] – realizzano uno spazio di apprendimento unico sia per coloro che accedono da postazioni fisse sia per chi è in situazioni di mobilità / nomadismo, garantiscono inclusività rispetto a contesti economicamente e geograficamente svantaggiati, offrono possibilità addizionali nel lifelong learning [9] [10].

Tali caratteristiche, però, rientrano ancora nell'uso delle tecnologie per il superamento di barriere, indirizzando nel migliore dei casi un ambiente di apprendimento analogo a quello di cui lo studente potrebbe disporre se partecipasse in presenza.

Esistono invece alcuni tratti distintivi dei MOOC che vanno al di là della mera soluzione di problemi, rappresentando un reale valore aggiunto per le università o i grandi player che le affiancano: occorre considerare, ad esempio, il vantaggio in termini di brand management quando un corso – ma anche un intero percorso o l'intera istituzione – acquisiscono visibilità oltre il

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proprio tradizionale bacino di utenza; il contributo alla qualità dell'intera didattica conseguente alla sistematizzazione dei materiali necessaria per attivare un MOOC (fu questa una delle principali motivazioni che indussero il MIT verso gli OpenCourseWare); il risparmio sulla preparazione agli esami per l'accesso ai corsi a numero chiuso o sull'allestimento di corsi rivolti alla acquisizione di competenze di base; la possibilità di rilevare la footprint in rete degli studenti e di analizzarne i comportamenti attraverso i learning analytics; la collaborazione o la sponsorship che si possono instaurare con aziende interessate al capitale umano in via di formazione; e, non ultimo, il ricavo economico derivante dall'adozione di un modello di tipo long tail che effettivamente negli ultimi anni sta provocando uno spostamento di questi corsi almeno dall'area free all'area freemium (a pagamento possono risultare alcuni servizi per gli studenti come il tutoraggio, la correzione di compiti, il rilascio di attestati ecc., così come eventuali pubblicità attraverso la piattaforma) [11] [12]. Coursera, per alimentare e sostenere il suo partenariato, ha esplicitato le principali strategie di monetizzazione [5].

Oggi la definizione dei MOOC come *disruptive innovation* [13] non è più così condivisa come quattro-cinque anni fa, ma possiamo assumere che larga parte dell'innovazione si concentri proprio nel modello di business.

# 2. La prospettiva pedagogico-didattica

Dal punto di vista didattico, invece, i MOOC talvolta rischiano di riproporre il vecchio concetto erogativo di lezione, modernizzato solo dalle tecnologie usate, basandosi quasi del tutto su video del docente-guru, la bibliografia consigliata, il testo del compito da svolgere.

Laddove i risultati dei compiti sono predefiniti (spesso nelle discipline tecnico-scientifiche o nei corsi orientati al trasferimento di conoscenze) si è già attuata una correzione da parte degli studenti stessi, in modo da rendere la gestione del corso sostenibile per il docente. Il problema nasce nelle discipline "deboli", quelle in cui la conoscenza prodotta non è rapportabile in maniera deterministica ad una rubrica valutativa e quindi si preferisce una mera erogazione.

Ci si chiede quindi se ancora una volta questo e-learning non costituisca un surrogato dei corsi in presenza, trovando il proprio punto di forza unicamente nella gestione della distanza temporale e geografica. D'altra parte l'obiettivo primario dell'Università è quello formativo, quindi l'Università, non solo dal punto di vista della ricerca ma anche da quello etico, è chiamata ad esplorare strade per massimizzare l'efficacia dell'intervento didattico verso gli studenti, la sostenibilità per i docenti e la qualità delle risorse create.

Tra le molte definizioni di e-learning [3] alcune restano centrate sulla tecnologia, altre fin dagli albori mettono in rilevo la completezza dell'esperienza di apprendimento. Clark e Mayer [14] richiamano il processo formativo nella sua interezza: la "e-" si riferisce a come l'insegnamento viene erogato (ad esempio testi scritti o parlati, immagini statiche o in movimento, in forma digitalizzata), "learning" include da un lato che cosa viene insegnato (quindi contenuti e aspetti didattici che consentono l'apprendimento dei contenuti), dall'altro perché viene insegnato (può essere a beneficio del singolo individuo o di un'organizzazione, in ogni caso con lo scopo precipuo di costruire conoscenza a fronte di specifici obiettivi di apprendimento).

Calvani [15, p. 206] con il termine "e-learning" intende "un complesso di metodologie volte ad impiegare le TIC in maniera da offrire ad allievi [resi] liberi da vincoli di tempo e di spazio i dispositivi di cui un ambiente di apprendimento normalmente si avvale (risorse informative, stimoli all'apprendimento, interazioni con docenti e/o compagni)". In questo senso l'e-learning assume una valenza molto più profonda e più ampia della distance learning: il suo obiettivo non si risolve nel mero superamento di un limite (la distanza fisica), ma si apre verso l'acquisizione di opportunità (rendere presenti ed efficaci tutte le potenziali interazioni utili tra lo studente e i docenti, i pari, l'ambiente, i risultati della ricerca, le comunità).

La capacità di creare un ambiente emotivamente valido, ricco di rapporti interpersonali, è enfatizzata già negli anni '90 come un elemento fondamentale [16] [17] [18] [19] [20], ma nonostante ciò buona parte dell'elearning ancora oggi si sviluppa in maniera scarsamente interattiva, solo con l'uso di strumenti tecnologicamente diversi.

La percezione e la gestibilità della distanza geografica e temporale portarono presto a considerare altre distanze, di carattere psicologico e sociale: con l'avvento dell'e-learning, Moore riformula e contestualizza una teoria che aveva già in parte espresso negli anni '70 a proposito dell'apprendimento individuale e parla di "transactional distance" [21] [22]. L'intervento (transaction) che chiamiamo distance learning mette in relazione docente e allievi in un ambiente che ha come connotazione fondamentale la separatezza tra i soggetti ed è proprio questa caratteristica che guida larga parte dei comportamenti degli interlocutori: vi è uno spazio psicologico e comunicativo che deve essere attraversato, uno spazio di potenziale incomunicabilità o fraintendimento. Questo spazio di rischio può essere gestito agendo su tre fattori principali [23]:

- il livello di interazione tra docente e studenti, che nella sua essenza più generale include tutte le modalità comunicative e nella sua forma più positiva si connota come dialogo;
- la struttura del corso, cioè definizione degli obiettivi, strategie didattiche adottate, integrazione dei media, modalità di valutazione;
- il grado di autonomia degli studenti, cioè quanto essi siano capaci di avvicinarsi alla materia e allo svolgimento delle lezioni senza necessità di intermediari e quanto essi siano motivati a farlo.

La funzione delle tecnologie appare inderogabile quando si tratta di integrarsi con forme di apprendimento basate su realtà aumentata [24] [25], sensibili al contesto [26] [27], o di allestire ambienti ricchi di *affordance* per l'apprendimento (ambient learning) [28].

Le tecnologie, però, possono servire anche per indirizzare in modo specifico i tre punti visti sopra, amplificando la cooperazione tra pari e con l'insegnante attraverso l'uso di strategie didattiche ad alta efficacia.

Si è deciso di adottare una strategia basata su workshop: gli studenti, all'interno di un Learning Management System, costruiscono nuove conoscenze [29] sotto forma di risorse educative aperte. Il percorso prevede l'uso di strategie didattiche ad alto Effect Size (ad esempio peer tutoring ES = 0.5, feedback ES = 0.7) [30], con il feedback dei colleghi e degli insegnanti, gli studenti hanno la possibilità di riflettere sul proprio lavoro e sul lavoro dei colleghi, che diventano un input per l'autovalutazione e la ristrutturazione. Il miglioramento della classe si ottiene con una sequenza di cicli di apprendimento esperienziale [31] che gli studenti eseguono lavorando in piccoli gruppi e a livello di classe, guidati da una rubrica di valutazione condivisa (Figura 1).

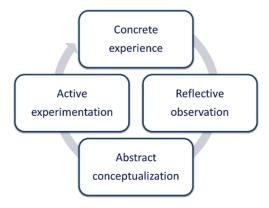


Figura 1 - Ciclo esperenziale di Kolb.

# 3. Una esperienza condotta a livello universitario

L'esperienza qui di seguito descritta è stata svolta all'interno del Laboratorio di Didattica, al primo anno del Corso di Studi di Formazione Primaria dell'Università di Firenze, ed è stata la prima di tale genere, ma altre esperienze simili sono state messe in atto negli ultimi tre anni e i risultati si sono dimostrati coerenti.

In questo caso l'obiettivo era l'acquisizione di competenza sulla comunicazione visiva e la progettazione di interventi didattici in una classe della scuola dell'infanzia o della scuola primaria facendo un uso appropriato di comunicazione visiva. In altri laboratori l'argomento è stato diverso, ma la metodologia è stata replicata pressoché identica.

Nell'arco dei tre mesi in cui il laboratorio si è svolto, il docente ha tenuto due lezioni iniziali in presenza e un'altra lezione a metà periodo, ha fornito materiale esplicativo sulla comunicazione visiva sotto forma di slide, suddiviso in una decina di percorsi diversi (per l'autismo, per il potenziamento cognitivo ecc.), e ha partecipato almeno una volta a settimana ai forum in piattaforma. I forum erano comunque presidiati da alcuni studenti più disponibili che fornivano ai colleghi il proprio supporto soprattutto su questioni organizzative (date, nomi dei file, reperimento di materiale ecc.), in modo da alleggerire il docente.

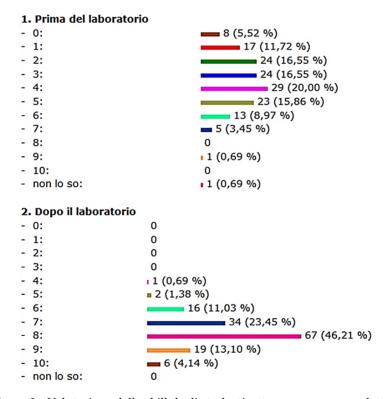
La classe è stata divisa in piccoli gruppi costituiti da quattro persone ciascuno: ogni studente, confrontandosi con il piccolo gruppo ha proposto il proprio intervento didattico e successivamente, grazie ai feedback dell'intera classe, ha svolto un primo ciclo di miglioramento.

Le strategie didattiche efficaci applicate sono state le seguenti:

- models to goals (ES = 0.50), esplicitando con chiarezza traguardi, prove, percorsi, strumenti, esempi, ... Verificando i prerequisiti e applicando un metodo di gestione del rischio per anticipare problemi, alternando momenti di modellamento guidato e spazi di autonomia per lo studente;
- feedback (ES = 0.73), da parte di pari e del docente, frequentemente fornito, ben strutturato in modo da reindirizzare verso l'obiettivo, favorendo l'applicazione in contesti diversificati per contenuti e complessità di intervento;
- peer tutoring (ES = 0.55) e cooperation (ES = 0,4), a livello di piccolo gruppo e di intero gruppo classe, alternando i ruoli all'interno dei gruppi;

 metacognizione (ES = 0.69), chiarendo termini e concetti, selezionando i passaggi chiave e ripetendoli per memorizzarli, eliminando dubbi e malintesi, rappresentando i flussi attraverso schemi grafici e riusando gli organizzatori come scaffold.

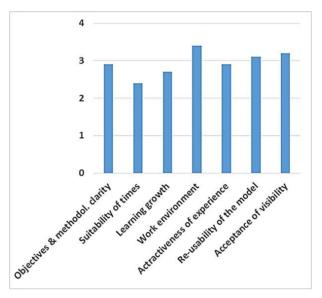
Gli studenti che hanno partecipato a questa prima esperienza sono stati 160 e 154 di essi hanno sostenuto l'esame con esito positivo al primo appello, con un significativo contenimento del *dropout* che di solito si manifesta al primo anno di corso.



**Figura 2 -** Valutazione dello skill degli studenti, attraverso prove condotte prima e dopo il laboratorio. La moda passa da 4 a 8, su una scala 0-10.

Al termine dell'esperienza, sia pure con i limiti che possiamo ravvisare nell'uso di prove sintetiche, è stato proposto un questionario nel quale si sono rappresentati alcuni comportamenti plausibili nell'uso della comunicazione visiva e si è chiesto agli studenti in quale dei comportamenti descritti si ritrovassero maggiormente per condurre un intervento ottimale. Il risultato è mostrato in Figura 2.

Agli studenti è stato proposto anche un questionario di soddisfazione (Figura 3).



**Figura 3 -** Valutazione del laboratorio da parte degli studenti relativamente alle dimensioni indicate in ascissa e su una scala 0-4.

Dalla Figura 3, emerge che il risultato è stato molto positivo, anche se vi sono state alcune critiche per quanto riguarda la sostenibilità dei tempi. In realtà non vi è stato obbligo di frequenza al di fuori di 3 lezioni in presenza (contro 12 normalmente necessarie per questo laboratorio), ma la fase di miglioramento ha coinvolto a tal punto da richiedere agli studenti alcune ore addizionali.

I risultati concordano con quelli di Figura 4, in cui si scende maggiormente nel dettaglio per esplorare punti di forza e criticità del laboratorio così organizzato.

Nella rilevazione di Figura 4 ogni studente ha potuto attribuire un punteggio positivo o negativo a ciascuna delle voci che ha ritenuto importanti, senza limiti o vincoli di quantità delle voci su cui si è espresso.

Le rilevazioni i cui esiti sono rappresentati in Figura 3 e Figura 4 sono servite agli studenti per ripensare il lavoro svolto insieme e sono state discusse anche a scopo metacognitivo.

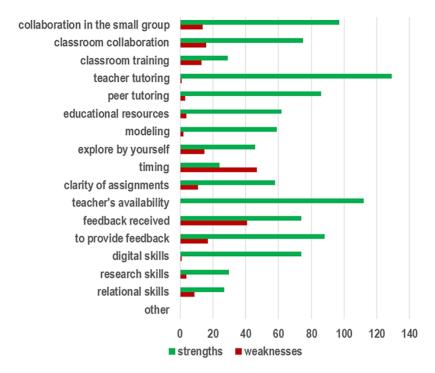


Figura 4 - Punti di forza e criticità rilevate dagli studenti.

#### 4. Conclusioni

I MOOC offrono agli studenti la possibilità di acquisire conoscenze a livello universitario a costi prossimi allo zero e costituiscono una delle promesse più interessanti nel panorama internazionale degli strumenti per la formazione. Essi sono associati a modelli di business con indubbi vantaggi nell'area strategico-organizzativa, ma obiettivo della ricerca qui avviata è una verifica della loro efficacia pedagogica e didattica. In effetti da un certo punto di vista essi potrebbero rappresentare un ritorno alla lezione meramente espositiva.

Un'alta interazione e l'uso intensivo di feedback tra pari può aiutare il conseguimento degli obiettivi.

Da alcuni anni il termine "massive" dell'acronimo MOOC si riferisce non solo all'alto numero dei partecipanti, ma anche alla dimensione della conoscenza scambiata, grazie ad un nuovo paradigma partecipativo.

Il modello qui mostrato, sulla base del quale si stanno realizzando alcune esperienze presso l'Università di Firenze, genera una pratica educativa

aperta guidata dall'applicazione di strategie didattiche efficaci, in cui il concetto di "apertura" deve essere inteso in senso epistemologico, come ristrutturazione della propria conoscenza, a volte offrendo anche la possibilità di andare oltre la conoscenza dell'insegnante e le opportunità offerte da corsi in presenza, beneficiando del supporto dell'intero gruppo discente e docente, laddove la dimensione può diventare un valore aggiunto anziché una criticità, soprattutto per discipline e relativi compiti con esiti non deterministici.

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#### VERUSKA DE CARO-BAREK\*

# INNOVATION IN LANGUAGE TEACHING AND LEARNING: HOW TO MAKE A LANGUAGE MOOC GENUINELY INNOVATIVE

#### Abstract

By sharing experiences from the process of creating a Massive Open Online Course (MOOC) in Norwegian as a Second Language at the Norwegian University of Science and Technology (NTNU), this paper aims to raise awareness of the need for improved technology solutions with a critical look at how course developers can build more innovative and interactive Language MOOCs within the frame of self-instructed courses.

#### 1. Introduction

In 2005, George Siemens argued the need for a new theory of learning in the digital age [1]. Especially in the past decade, access to worldwide information in the form of continuous streaming from social media and fast developing new convergent technologies have radically changed our way of connecting and interacting with the world around us and our approach to learning. New emergent technologies offer different models and structures to support learning, and disrupt the notion that learning should be controlled by educators and educational institutions [2].

Following the enthusiasm for "The year of the MOOC" as highlighted in a well-known article in the NY Times in 2012 [3], we have seen a fast-growing interest in MOOCs connected to language learning. For example, the MOOC provider FutureLearn enrolled over 370,000 students on the preparatory course to the English language proficiency test, IELTS. This is so far the biggest MOOC in the world [4].

While the general research literature on MOOCs is fast-growing, the emergent body of specific research literature on MOOCs for language learning is still very limited [5] [6]. MOOCs are a hot topic in the context of online teaching and learning research and practice, with numerous ardent supporters as well as fervent opponents.

Among the arguments set forth by the opponents, high dropout rates have, for instance, been interpreted as an indication that barriers to persistent learning in MOOC environments are present and are a steep wall to climb and conquer for course developers, independent of the subject field [5]. The

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wider lay audience of the general public has also argued that this situation could well manifest a symptom of an exaggerated hype around MOOCs and an overrated and overestimated focus on supposed teaching and learning innovations [7][8].

This paper is framed within the field of second language didactics and presents a practical standpoint focusing on sharing experiences from the perspective of a Language MOOC developer in the process of making a MOOC in Norwegian as a second Language at the Norwegian University of Science and Technology, NTNU.

Specifically, I readdress the topic of innovation in language teaching and learning that supporters of MOOCs and providers of MOOC platforms predicate. I will try to raise awareness of the technological limitations for Language MOOC development as presented by the two largest MOOC platform providers, Edx and FutureLearn, with special attention to oral production and interaction. I then address the need for improved technological solutions with a critical look at how course developers can build more innovative and interactive language courses, especially in the case of self-directed learning.

## 2. MOOCs in the Norwegian context

The strong Scandinavian tradition of a welfare-based social model has shaped the Norwegian education system. This implies, for instance, that the Ministry of Education and Research is responsible for the entire educational system, including research, and is the *de facto* owner of universities in Norway. The implementation of technology for educational purposes has long been on the Ministry of Education agenda. In 2010, The Norwegian Centre for ICT was established with the mandate to implement government policy.

Already in 2013, the government appointed a commission to examine the possibilities and challenges accompanying the development of MOOCs and similar offers in higher education (HE) [9]. In the Strategy Document for the digitalisation of the HE sector published by the Ministry of Education for the period 2017-2021, it is clearly stated that the digitalisation process in HE, as government policy, aims at innovating, ameliorating and strengthening the use of technology in the sector [10].

More often than not, the relationship between political intentions and reality is a strenuous one. From the information presented in Mooc.no [11], the official web site for all MOOCs produced in Norway, regardless of the institutions involved and platforms used, it appears that in spite of 40 cour-

ses available, Norway has a long way to go to catch up with the international development in educational digitalisation. This applies across the entire educational sector, from primary education to HE. In spite of the strategic policy to develop MOOCs in Norway, there is a lack of technological infrastructure and sufficient funding that has the potential to prepare the ground for MOOCs.

So far, digitalisation processes at Norwegian universities and colleges have largely been initiated by enthusiastic teachers and researchers, and to a lesser extent by management and overall institutional strategies. Studies also indicate that newly educated teachers have not acquired sufficient competence in implementing technology services and tools in the curricula at the end of their professional training [10]. Is this a symptomatic sign of a possible lack of interest or knowledge in the Norwegian HE sector on the matter?

The challenges facing the HE sector in meeting technology are multiple, the foremost being how to adapt a static institutional system and traditional teaching and learning patterns to the new dynamics offered by technology services. The paradoxical result is that even in the presence of technological availability for implementing newer and more effective learning processes, historical and cultural barriers from a bygone era of education philosophy and practice create hindrances to innovation processes [12]. That is why, for instance, the 'lecture' teaching model is still the most popular and most widely applied in the HE sector nowadays (ibid.). This creates somewhat dysfunctional learning and teaching environments where technology is applied, yet not fully understood, nor is it used to its fullest.

Learning Management System (LMS) and MOOC providers want to sell to and be used by institutions within the HE sector. However, HE institutions have their own specific requests. They have an interest in continuing institutionalised learning patterns, so technology must yield to the requests of HE institutions. Thus, we can end up reproducing the classical teaching paradigm, only 'updated' with new technologies. The situation could very well resemble another case of the Emperor's new clothes. Everything changes – or does it really?

As highlighted by Bahadur Singh from the University of Oslo, during the 2016 MOVE-ME conference in Milton Keynes, UK, the journey to real innovation in MOOC developmental technology is just beginning [13]. In the words of G. Siemens [14 in 13], there are two types of MOOCs: cMOOCs and xMOOCs: The "cMOOC model emphasizes creation, creativity, autonomy and social networking learning" while xMOOC model emphasizes "a more traditional learning approach through video presentations and short quizzes

and testing. Put another way, cMOOCs focus on knowledge creation and generation whereas xMOOCs focus on knowledge duplication" [ibid.].

Reviewing the existing research literature on MOOCs and investigating the pedagogical approaches applied to the very first international Norwegian MOOC offered by the University of Oslo through Future Learn in 2015, Bahadur Singh confirms the results available from other meta studies [13] and concludes in his Master's thesis that the pedagogical practices in the MOOCs are neither entirely new nor radically innovative [14]. Despite the claims of innovation, disruptive learning technology methods and a revolution in learning approaches, the general teaching setups in most MOOCs seem to rely on a classic behavioristic teaching paradigm, with pre-produced and teacher-supervised study paths and fairly linear learning sequences. Knowledge is passed on to a mostly passive audience through video presentations or streaming from classroom practices. This seems to occur both in teacher supervised learning environments, as in most xMOOCs, and in self-teaching or autonomous learning environments oriented to a more connectivist approach, as in cMOOCs, the connectivist side being the student fora available on the MOOC platform [14].

The problems Singh highlights in his review are certainly true for language courses as well, even if the examples in this area are scarce in Norway with just a couple of MOOCs available, one from the University of Oslo and one from NTNU.

# 3. The case of Language MOOCs

With regard to the worldwide development of language MOOCs, also called MOOLCs (massive open online language courses [18]), Spain and USA are in the lead with a solid academic legitimacy but also an extensive commercial production. It is therefore not surprising that the most prolific Language MOOCs are in Spanish and English. In the rest of Europe, the situation is quite different and Language MOOCs are often developed under the umbrella of smaller, specific research projects.

Platform selection and technical functionality vary greatly according to funding and this impacts correspondingly on the final product. The kind of Language MOOCs which have been developed, whether these are meant to be self-instructed courses or tutored, also imposes specific didactical and technical choices, along with cost management strategies.

In a very first attempt to gather and categorise research on learning and teaching experience in the emerging field of Language MOOCs, Bárcena and

Martín Monje have edited a pioneering and insightful meta study that covers paramount topics relevant to a language MOOC developer. The conundrum for language courses, irrespective of their possible categorisation as cMOOCs or xMOOCs, is defined as follows:

"Language learning is not only knowledge-based, in the sense that it requires the rather passive assimilation of vocabulary items and combinatory rules, but is mainly skill-based, in that it involves putting into practice an intricate array of receptive, productive and interactive verbal (and non-verbal) functional capabilities, whose role in the overall success of the communicative act is generally considered to be more prominent than that of the formal or organizational elements (Halliday, 1993; Whong, 2011)." [16]

What then, are the requirements for developing a successful Language MOOC and how does the technology available on MOOC platforms cater for such a challenge?

In a comprehensive research project, Perifanou and Economides proposed the MOILLE framework (Massive Open Online Interactive Language Learning Environment – framework) in order to evaluate all the Language MOOC (MOOLC) initiatives offered up to 2014 [17]. According to the researchers, it is possible to identify and define six main categories for the development of a successful Language MOOC or MOOLC, as they prefer to refer to it [ibid.]:

- CONTENT: Authentic educational resources; Use of multimedia/tech; Variety of activities that promote all basic language skills and support cultural awareness.
- 2. PEDAGOGY: Communication (peer-peer, student-teacher, open class community); Collaboration (CL) (group projects, forums etc.); Collective intelligence; Autonomy (Autonomous/Self-paced/SL Learning/Reflection); Engagement-Motivation; Playful/Game based learning; Number of instructors.
- **3. ASSESSMENT:** Ongoing Assessment/Scaffolding (peer-peer, student-teacher, open, automated) Final Assessment; Evidence-Based improvement (data mining, analytics); Feedback (comments, reviews).
- **4. COMMUNITY:** Social Community building as Massive and Open (Social Media third part tools integration and other tech tools).
- **5. TECHNICAL INFRASTRUCTURE:** Maximum number of participants, Platform's performance, Security, Usability).

# **6. FINANCIAL ISSUES:** Profit. Charges for Course or Certification/ Accreditation.

This framework lies at the very core of designing and evaluating a Language MOOC and emphasises a constructivist approach to language learning as well as fostering collective intelligence through a connectivist view of MOOCs. Unfortunately, when looking at the research conclusions, there are very few Language MOOC initiatives that provide a promising MOOC environment for language learning [17].

## 4. LearnNoW - A Norwegian Language MOOC at NTNU

During the period 2016–2017, I worked on a Language MOOC project initiated by the Department of Language and Literature at The Faculty of Humanities, NTNU. This was initially in collaboration with the Ministry of Foreign Affairs to produce a self-instructed introductory Norwegian Language MOOC for foreign embassy employees around the world. During the period it took to develop this first Language MOOC on the EdX platform, NTNU took a clear stand for the digitalisation of education at the university; the NTNU-DRIVE programme was established with funding for five years. The programme was structured as a network of academics from different research fields, from pedagogy to change management and technologists to multimedia experts. The programme aimed at achieving the strategic organisational goals of NTNU in the digitalisation of higher educational programmes by strengthening faculties' digital competence and digital practices. As a consequence of this development, we are currently producing a new version of LearnNoW, this time on FutureLearn and with the ambition of reaching a far wider audience.

However, working with both MOOC platforms, I experienced that the provided technology limits the possibilities for a developer to construct a MOOC for language learning, defining and somehow constricting the teaching approach in a more traditional manner. Even if MOOC platforms in general undoubtedly offer a considerable improvement on online language course development, the technological advancements are not sufficiently developed to meet the specific requirements of language didactics. For example, it is a fact that none of the existing platforms has embedded technology which can enable course participants to fully develop their oral interaction skills. Most of the course content relies on written interaction, with the exception of fully tutored Language MOOCs, where feedback on the par-

ticipants' oral performance takes place with the aid of external technological resources such as videoconferencing. In self-instructed courses, such as those developed at NTNU, there is neither the possibility for oral interaction nor external feedback on the platform. According to The Common European Framework of Reference for Languages (CEFR), which is increasingly also being used in countries outside Europe, language learning comprises the actions performed by individuals who develop a range of competences, both general and particularly communicative language skills [18]. The categorisation of the language learner and user's linguistic competence is based on real-life language use and grounded in interaction and co-construction of meaning. Activities are presented under four modes of communication: reception, production, interaction and mediation in written and oral contexts. In the CEFR, proficiency is a term encompassing the ability to perform communicative language activities stated as "can do-s", whilst drawing upon communicative language competences (linguistic, sociolinguistic, and pragmatic), and appropriate communicative strategies [ibid.]. When one of these primary competences fails to be represented within the language learning environment, as for instance in the case of the technological inadequacy of MOOC platforms to support solutions that cover oral production and interaction, a question arises concerning the learner's opportunities for fully developing the range of linguistic competences necessary in order to master the target language. Similarly, a concern becomes apparent about the integrity and validity of the language course and the possibility for future assessment and accreditation. These are pressing demands which need to be addressed by MOOC developing institutions and MOOC platform providers for and within HE.

Regarding the allegedly interactive environment present on the platform solutions, there is also a growing consensus that "most of the MOOLC initiatives don't offer a highly interactive environment where the learners are interconnected to a language learning community and collectively build their language skills" [17]. Learners are still studying language in a traditional way, following courses based on a cognitive and behavioral pedagogical model, with extended use of instructional videos and pre-formatted learning sequences. I have to admit to my greatest regret that this was also the case in the Language MOOCs I produced. Both EdX and FutureLearn contain limitations in their platform structure and functionalities. For example, FutureLearn is constricted using a rigid platform setup and few functionality options (video, article, audio, quiz and poll/discussion). The underlying connectivist pedagogy, which I

strongly wished to enhance in the form of supported collaborative learning tasks among student participants, also seemed to be limited too frequently by the technology options available on the platforms and solely bound to discussion forums and cohorts. The inspirational vision of connectivist MOOCs is proving elusive. While it is possible to follow the course participants' interaction on tutored Language MOOCs, it is very difficult to monitor whether the course participants will interact with each other in a self-instructed Language MOOC. Neither is it possible to know for certain whether they will be able to build a learning community outside the platform and beyond the platform resources by utilising external digital services for language learning to instigate collaborative knowledge building. It is important to note that many Language MOOCs are indeed self-instructed and based on the concepts of autonomous learning. In this case, platform technology is not necessarily synonymous with better teaching or learning. For instance, even the use of synchronous tools for written communication on MOOC-platforms can be counterproductive. It is indeed extremely difficult to foster high-level cognitive interactions in long multiple-threaded forum conversations on a MOOC platform; it is even more difficult to keep track of participants' actions when compulsory tasks, based on communicative or collaborative tools, are external to the platform [19 in 16, 20]. When this scenario is transferred to foreign language learning and autonomous learning, it is not difficult to imagine the chaos that could arise: Who is doing what, why and how are crucial questions to ask when in the process of learning a foreign language. It is already a challenging task for the course facilitator/instructor trained in language didactics to create a sense of logic communication flow on the platform for tutored Language MOOCs. It could be a virtually impossible task for the well-intentioned but not necessarily trained volunteer mentors and curators possibly emerging from the learning community of a self-instructed Language MOOC.

### 5. Discussion and conclusion

The need for platforms that can instigate successful Language MOOCs and present learners with quality ad *hoc* technological solutions and appropriate language didactics is high due to multilingualism and multiculturalism being paramount aspects in our modern globalised society. The journey to reach that target is just at the beginning. The MOILLE framework for evaluating the rate of success of a Language MOOC [17] can

offer a useful starting point for reflection upon and consideration of all aspects involved in the design, production and assessment process of the course. So far, most of the evaluated Language MOOCs still do not offer a successful MOILLE [4]. Furthermore, there are still issues that are not being fully addressed nor perhaps fully understood in the MOOC-platform providers community.

Language MOOCs have to deal with the same ontological, conceptual and practical challenges of regular MOOCs, like the evolving nature of teaching and learning in digital networks, the redefinition of the teacher's role as facilitator, time and implementation costs, as well as assessment and accreditation issues. In addition, Language MOOCs necessarily face specific challenges intrinsic to language didactics such as how to enable oral interaction on the platform among the course participants but also within the authentic context of oral communication with native speakers. This is particularly important for self-instructed courses.

Without pretending to have a solution to a complicated matter that involves several levels of theoretical and technological understanding, I conclude this paper by mentioning that it might be possible to utilise existing technology and integrate functionalities on the MOOC platforms to support linguistic oral interaction. This aspect has simply not been a priority for the MOOC providers so far, but it is certainly something that they will need to take into consideration in the future, especially when having to front the pressing demand for course accreditation in the HE sector. MOOC providers could find inspiration in their search for a solution to this problem by looking at developments in non-MOOC language learning environments such as in the case of Language Exchange Apps like *Hello talk*, *Bilingua*, *HiNative*, *DuoLingo* and others. Research in this specific field is not yet available, and an array of research possibilities consequently lie ahead for genuine innovative language didactics in MOOCs.

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### François Mangenot\*, Montiya Phoungsub\*\*

# PARTICIPANT STRATEGIES IN A LANGUAGE-TEACHER TRAINING MOOC

#### Abstract

This paper uses a case study of a 7-week, language-teacher training MOOC to examine the freedom participants feel they have to complete required and optional activities. How do language teachers (or future teachers) deal with this kind of environment? Despite the MOOC's rigidity, do the strategies participants adopt differ according to their goals and expectations?

## 1. Object, methodology, research questions

xMOOCs can be defined as "classes that are taught online to large numbers of students, with minimal involvement by professors" (*The Chronicle of Higher Education*, October 2012). As a counter to this lack of human support, MOOCs tend to be highly structured with respect to the timing of assignments/activities (e.g., weekly modules, courses run over a fixed period of time, etc.) and to the content of these assignments/activities (Hollands and Tirthali [1], Bruillard [2]). In this respect, xMOOCs are generally less flexible than Open Educational Resources (OER) or online teacher communities (e.g. edweb.net), and are sometimes criticised for this rigidity. The present study investigates the ways in which participants in a language-teacher training MOOC adapt to this rigidity by adopting different strategies according to their goals (complete the course, obtain the final certificate, exchange views with peers about teaching practices).

### 1.1 Object of the case study: the MOOC and its audience

The present study focuses on a language-teacher training MOOC called *Enseigner et Former Avec le Numérique en Langues (EFAN-Langues),*<sup>1</sup> whose aim was to encourage the innovative use of digital technology in teaching

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<sup>&</sup>lt;sup>1</sup> Technology enhanced language teaching and training. Authors: Christian Degache, Charlotte Dejean-Thircuir, François Mangenot, Elke Nissen, Thierry Soubrié, all from Université Grenoble Alpes.

and learning languages. EFAN-Langues was designed by a team of five teacher-researchers from the LIDILEM research group at Grenoble-Alpes University and hosted by France Université Numérique (FUN - France Digital University), a platform created by the French Ministry of Higher Education and Research (FUN-MOOC.fr, May-June 2017, 3334 enrolled). The 7week course centered around modules on designing blended language courses (week 2), using social media in language teaching (week 3), planning telecollaborative projects (week 4), and fostering intercomprehension (week 5). The first week of the course covered the broader issue of integrating digital technology into the teaching/learning process, whereas weeks 6 and 7 were dedicated to the final task, which involved designing a technology-enhanced learning scenario. After designing and posting his/her scenario, each participant had to assess three other scenarios, with the help of a detailed assessment grid. Completing the peer assessment task was obligatory for participants wishing to obtain the certificate of completion, as it accounted for 40% of the final grade and participants had to achieve a grade of 70% to be awarded the certificate.

Each of weeks 1 to 5 included three 10-minute videos and a related multiple-choice test. These tests accounted for 60% of the final grade. Each week also included two to five forums corresponding to precise tasks (e.g., a week-2 forum focused on ways of linking distance and face-to-face activities in a blended learning course). Participation in forums did not count towards the final grade.

A participant survey conducted at the end of the MOOC obtained responses from 83 (23.2%) "dedicated participants" (see below). According to this survey, the vast majority of participants were language teachers (83.1%) or Master's students (9.6%) located throughout the world. Hence, participants were homogeneous in terms of profession but very heterogeneous in terms of geographical location. Nearly all the teachers outside France were teachers of French as a foreign language; teachers in France taught another language (e.g., English, German, Spanish, Italian). One peculiarity of the MOOC was that it brought together people from two groups of teachers who do not usually have the opportunity to meet.

A multiple-choice item with nine possible answers asked participants about their goals in taking this course. Table 1 shows the answers that were chosen by more than five respondents (respondents could choose several answers). It is noteworthy that only 16 (19.3%) participants cited online exchange (which mainly occurs in forums) as a reason for following the course.

Find new ideas	75
Professional development	74
Personal curiosity	44
Obtain the certificate of completion	42
Research the field	29
Exchange with people interested in the topic	16

**Table 1 -** Participants' goals (n = 83)

Another item asked participants to assess the MOOC, both overall and in terms of its individual components. Responses were given on a 6-item scale from 0 = very poor to 5 = excellent.

5	4	3	0-2
53%	41%	3.6%	2.4%

Table 2 - Assessment of the MOOC overall

Scores for most of the MOOC's individual components (videos, tests, final task) were also high, but this may be because respondents were likely to have been the most enthusiastic participants. Nevertheless, the scores for forum activities and exchanges were lower than those for the other components.

5	4	3	0-2
17%	31%	41%	11%

Table 3 - Quality and richness of forum activities and exchanges

Are these lower scores due to doubts about the quality of peer content, to the lack of interactivity between participants,<sup>2</sup> to the fact that forum participation did not contribute towards the final grade, or to the time needed to read other participants' contributions, which was exacerbated by the poor ergonomics of EdX forums? Semi-structured interviews (SSIs) with participants suggest that all these factors played a role in reducing participants' enthusiasm for the MOOC's interactive components (see below).

<sup>&</sup>lt;sup>2</sup> In line with a number of authors (e.g. Henri [3]), we consider a situation to be "interactive" when participants respond to each other's messages. A forum lacks interactivity if messages do not respond to previous messages or elicit responses from other participants.

## 1.2 Methodology

As our team included several researchers plus a post-doc (co-author of this paper)<sup>3</sup>, we were able to gather a great quantity and variety of data, which we then had to bring together and analyse. Data included statistics on test completion and grading, forum participation, and final task completion, together with information provided by the post-MOOC survey. These data are summarised in the following table (Table 4).

Data type	Method	Number of responses	Processing
Survey/multiple- choice questions	Statistical analysis	83 (22% of dedicated participants)	Extracting data on pro- fession, goals, satisfac- tion (videos, final task, support, forums), diffi- culties, time spent
Survey/three open questions	Qualitative content analysis	28 (2 to 100 words each)	Identifying strategies (crossed with other data)
Grades (tests and final task)	Excel table provided by FUN	137 obtained 70% or more	Identifying "achievers" (crossed with forum participation)
Forum interaction (only thematic forums)	Statistical analysis (no qualitative analysis)	187 participants, 593 messages	Statistics (crossed with grades and with timing)
Semi-structured interviews (SSI)	Content analysis (non-systematic)	9 interviews (22 to 45 min)	Identifying strategies (crossed with other data)

Table 4 - Data collection and processing

Time constraints prevented us from analysing the contents of forum messages and systematically processing the content of the SSIs by, for example, using discourse analysis. Nevertheless, we read all the SSIs thoroughly and identified comments relating to strategies.

#### 1.3 Research issues

Our objective was to answer the following questions:

- Is it possible to characterise participants on the basis of their degree of participation in the various activities (tests, forum activities, final task with

<sup>&</sup>lt;sup>3</sup> Granted under the French Embassy's "Junior Research Fellowship Program" 2017, Thailand.

peer assessment)? For example, did participants prioritise items that are assessed over items that are not graded?

- Contributing to the MOOC's forums was not obligatory in order to obtain the certificate of completion, but the course included two to five open forum tasks per week as a way of encouraging participants to contribute. As a result, 187 participants contributed more than 593 messages during the course period. Other participants read contributions without contributing any messages themselves (people who use forums in this way are commonly referred to as "lurkers"). Can this variation in forum participation be used to identify different participant strategies with respect to collective activity? And can the MOOC's participants (at least the most active ones) be considered to have built a community?

## 2. A tentative typology of participants

## 2.1 Typology of participants according to their grades

Final grades for the MOOC were calculated by combining grades on the weekly multiple-choice tests (60% of the final grade) and the final, peer assessed task (40% of the final grade). This final task was assessed by three peers and each participant had to assess the tasks submitted by three other participants. Because participants had to achieve a final grade of 70% to obtain a certificate of completion, they had to complete the final task as well as the multiple-choice tests. Certificates were awarded to 137 participants.

We divided the 3334 participants who enrolled in the MOOC into four main categories according to their degree of participation in the course:

- **Non-starters**: According to Cisel [4], participants who enroll but never connect to the MOOC should not be considered dropouts. He suggests calling them "non-starters". In the case of our MOOC, 2824 participants (84.70%) were non-starters.
- Casual participants: One hundred and fifty-two participants did one or two of the tests but achieved low scores and did not do the final task. As a result, they obtained grades of between 0 and 20%. Because their commitment to the MOOC was minimal, we categorised them as "casual participants".
- Non-starters + casual participants amount to 2976 (Table 5).

Enrolled	3334	
Score = 0	2824	Non-starters: did not start the MOOC
Score > 0% and < 20%	152	Casual participants: completed one or two tests
		but achieved low scores
Total non-starters + casual	2976	

Table 5 - Participant typology based on grades (1)

After eliminating the non-starters and casual participants, we were left with those participants who completed enough of the multiple-choice tests to obtain grades of 20% or above. We divided these 358 **dedicated participants** into two categories based on their final grades (see Table 6).

Dedicated participants		
Score >= 20% and < 70%	221	Dedicated-unsuccessful: completed some of the
		multiple-choice tests but did not obtain the certifi-
		cate (only one of them did the final task)
Score >= 70%	137	Achievers: 38.3% of dedicated participants ob-
		tained the certificate (1 participant scored 100%)
Total dedicated	358	

**Table 6 -** Participant typology based on grades (2)

## 2.2 Combining grades and forum participation

Although whether or not a participant contributed to the forums had no effect on that person's final grade, a question arises: Is there a correlation between high grades and participation in forums? One hundred and eighty-seven participants were "active forum users", defined as a participant who posted at least two messages on thematic forums (not including self-presentation and technical forums). These participants posted a total of 593 messages on the 18 thematic forums.

Of these 187 active forum users, 57 (30%) did not obtain the certificate and 10 (5.3%) obtained a final grade of less than 20%. Because these participants appeared to be more interested in exchanging with their peers than in obtaining the certificate (see table 1) we labeled them "social participants". The 57 active forum users who did not obtain the certificate include three of the eleven participants who posted messages on every forum, which indicates that they spent a lot of time on the forums. The other eight participants in this group successfully completed all the activities included within the MOOC.

Seventy-six of the 137 participants who obtained the certificate, including 20 of the 42 participants who obtained a grade of 95%, did not take part in the forums. Although most of these 76 participants said they adopted this strategy because of a lack of time, it can also be assumed that obtaining the certificate was their main (perhaps only) objective and that they adapted their strategy accordingly. We labeled these participants "individualistic or pragmatic participants". The remaining 61 participants who obtained the certificate were all active forum users and can therefore be considered "social achievers". Hence, by combining grades and forum activity it is possible to produce a more detailed typology, as illustrated in Table 7.

Obtained certificate	Active in	Nr.	%	Category
	forums			
No	No	164	46%	Dilettantes, lurkers, dropout
No	Yes	57	16%	Social participants
Yes	No	76	21%	Individualistic or pragmatic partici-
				pants
Yes	Yes	61	17%	Social achievers
Total		358	100%	

Table 7 - Typology of participants, adapted from Mangenot [7] 4

The four categories listed in Table 7 can be considered to represent four different participant strategies: dropping out due to lack of time or delusion about the course content, prioritising exchanges with peers, prioritising certification, trying to do both.

## 3. Time management and collective activity strategies

Our participant typology sheds light onto the overall strategies (selecting content, focusing on obtaining the certificate, exchanging with peers, trying to do as many MOOC activities as possible) our participants adopted in response to personal constraints on their freedom to follow the MOOC. The most serious difficulty for most eLearners is a lack of time (57% of our survey respondents quoted lack of time as the main obstacle to them following the MOOC). This section examines some of the strategies participants adopt-

<sup>&</sup>lt;sup>4</sup> Mangenot ([7]) used data from the first EFAN-Langues MOOC session, in 2014. The proportions of the different types of participant were similar in both sessions, 2014 and 2017, which strengthens our assumptions.

ed with respect to the inter-related issues of time constraints and participation in collective activities, as revealed by the survey (closed and open questions), SSIs, and forum participation measures.

## 3.1 Time management

The following table shows the survey respondents' (n=83) estimates of the number of hours they spent on the MOOC each week. As already pointed out, these data cannot be generalised to all the MOOC's participants, as survey respondents were mostly participants who completed all seven weeks of the MOOC.

Less than 1 hour	4
Between 1 and 2 hours	21
Between 2 and 3 hours	30
Between 3 and 4 hours	16
Between 4 and 6 hours	9
More than 6 hours	3

Table 8 - Time spent on the MOOC

The post-MOOC survey included three open-ended questions, one of which related directly to this issue: "What advice would you give to people wanting to follow this MOOC in the future (tips on time management, make sure they understand the content, complete all the activities)?" Fifteen of the 28 participants who answered this question mentioned the issue of time and provided tactical advice such as "work regularly", "manage your time", or "get into the habit of following the MOOC on a specific weekday". The following comment from a married woman with children illustrates this final example:

The advice I would give to those wanting to follow the MOOC would be to be very well organized. At one point I was struggling to do the MOOC regularly, so I told my husband that one evening a week I would do nothing else but work on the MOOC. That one evening in the week, everybody should forget me, I'm not there. I'd do nothing but work on the MOOC. This is the way I managed. Otherwise, I couldn't have kept up [SSI].

Another participant seemed to appreciate the weekly deadlines, even if they were a potential source of stress: I felt more pressure following this MOOC because we had a deadline for each topic, but with another distance learning course I am following, I often let things drag out because I do not have the time pressure as with the MOOC [SSI].

This is in line with Mangenot's [7] assumption that the chronological rigidity of MOOCs is one of the reasons for their success, as MOOCs require less learner autonomy than more open environments such as OERs.

## 3.2 Work alone or collectively?

Another survey question asked: "Did you work alone, with friends, with colleagues, or with other MOOC participants?" Eighty-three participants answered this question, with 80 (96.4%) of them saying they worked alone. Two participants worked with other MOOC participants and one participant worked with colleagues. One participant explained that she dropped out of another MOOC because the final task had to be done in groups: "The difference was that I could do the final task by myself, whereas the other MOOC asked me to join a group."

Some participants found the prospect of sharing ideas in the forums to be too daunting. One participant said in an SSI that he did not participate in forums because he is a non-native speaker and was frightened of making mistakes. Another participant answered the post-MOOC survey question by saying that "daring to express myself on the web" was one of the benefits of the MOOC: "On the personal level, this MOOC provided an opening to the outside world, as it gave me the opportunity to collaborate with other teachers from other countries".

Another participant also saw the sharing of practices as an advantage: "It is nice to be able to exchange with other participants, to see what others do; this is positive" [SSI]. Interestingly, some participants did not view forum participation as a collective endeavor and criticised the MOOC's lack of interactivity (see footnote 4):

I participated in the forum activities during the first week. We had to describe an experience [with technology] but something bothered me [...]. Many of the participants who did this task did not seem to read or comment on what others had written. If they made comments, they would be very short or positive (like "that's great!"). But I did not see any benefit, so I did not participate in forums [SSI].

This issue requires further investigation based on analyses of the forums' content. It is also worth noting here that the MOOC authors' intention was to foster the sharing of computer-based teaching practices but without making collaborative work obligatory, as collaboration (in the full sense of the

word) is time-consuming (Mangenot and Nissen [5]). Mangenot and Dejean-Thircuir [6] highlighted four different modes of collective distant peer work: sharing, discussing, cooperating, and collaborating, with each mode being more demanding than the previous one. The EFAN-Langues MOOC was designed to encourage sharing and discussing.

## 3.3 Forum participation vs. other activities

As noted above, participants had contrasting opinions of the forums. Some participants appreciated the opportunity to share practices; others felt that the time and effort of participating in the forums outweighed the benefits. The following excerpts from the SSIs show that exchanging through the forums was not a priority for many participants, most frequently because of a lack of time:

- I did not have enough time to participate in the exchanges. [...] This allowed me to finish the MOOC but it did not allow me to build a relationship with other participants and tutors.
- Exchanging with peers was not a goal for me; I was more focused on content absorption.
- I did not participate in all the forums. I tried to contribute to one forum on each topic. [...] As for the forums I didn't contribute to, I read the messages, but superficially, due to lack of time.
- I got lost with the forum messages because the contributions seemed interesting but very abundant. Not easy to follow. So I got lost. I always tried. I saw things that seemed interesting, but, really, I didn't have the time. Maybe I didn't take the time because I didn't see what I could contribute to the exchange. As for comments, I didn't feel qualified to comment on my colleagues' posts.

The last excerpt shows an interesting combination of motivation, lack of time, and lack of self-confidence. Would a more participant-friendly forum system help such people find their way and select the most relevant contributions?

#### 3.4 Contributing to forums even when there are no recipients

Many participants contributed to the forums at inappropriate times. For example, messages relating to activity 1.1, a week-1 forum in which participants were asked to relate their experiences of integrating technology into language classes, continued to be posted until week 6. In total, 78 (42%) of the 187 active forum users posted comments at inappropriate times. Participants also contributed to forums sporadically, without following the progression of the topic (e.g., they contributed to

a forum in weeks 2 and 5, but not in weeks 3 or 4). Only 31 (17%) active forum users contributed to several topics while respecting the proposed progression, and only 11 (6%) participants contributed to the forums for all the topics.

The strategy of contributing to non-consecutive forum topics can be interpreted as participants only contributing to the topics that interested them most because they did not have the time to contribute to all the topics. But why do participants sometimes contribute to topics several weeks after the topic has been closed? Is this a kind of self-directed reflexivity (writing for oneself), a desire to express oneself despite a probable lack of recipients, or a desire to complete every part of the MOOC, even activities that do not affect one's grade?

#### 4. Conclusion

Our quantitative and qualitative analyses revealed the diversity of strategies used by MOOC participants. Despite the apparent rigidity of the learning scenario, participants follow it in different ways and at different tempos, choose whether, how and when to participate in forums, and decide how important it is to obtain the certificate of completion. Many participants are aware that collective activities are time consuming and therefore restrict their participation in forums to superficially reading other participants' posts and a few messages in the topics they are most interested in.

Although the data presented in this paper show that the MOOC in question cannot be considered a "community", the MOOC's "social participants" and "social achievers" may have felt they built a community through their participation in the forums. However, our decision not to analyse the content of forum posts prevented us from checking this hypothesis by crossing an analysis of forum messages with the results of the SSIs.

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#### CHRISTELLE HOPPE

# SOCIAL AND COGNITIVE COLLABORATION IN A LANGUAGE LEARNING MOOC

#### Abstract

In this experimental study of higher order thinking and learning in an existing LMOOC, we analyse the content of online discussions using a Community of Inquiry perspective. A special focus is on the under-explored aspect of the cognitive dimension and influence of the course structure on forum participation.

#### 1. Introduction

As the number of Language Learning Massive Open Online Courses (LMOOCs) is growing in Europe, the need for research in such contexts is also emerging. One of the pressing questions is whether higher-order learning can be achieved in an LMOOC context. In MOOC online discussions, discourse itself is a mediating tool-kit within a community of practice. But it is challenging to measure and explore the interactive and collaborative dynamics of the language learning experience. LMOOCs can be effectively designed to facilitate the development of language learning even in massive and heterogeneous groups. During two sessions of the Paroles de FLE MOOC, participants shared more than 3000 streams of discussion. Through the online discussions, each member of the LMOOC community becomes, at some point, a curator, facilitator, a leader in solving problems, suggesting complementary materials, moderating forums, motivating peers or getting involved in a language learning experience. But online discussions are also particularly influenced by additional factors and technological constraints that result in volatile and voluntary structure. This exploratory study seeks to provide a comprehensive review and deeper understanding of the way language learning MOOCs may potentially foster participants' second language development process and relate it to the design of language learning MOOCs. The research objective is to investigate the language learning experience arising from the use of the online discussion forum that supports higher-order language learning processes.

#### 2. Context

From 2015, the University of Nantes has been offering a distance education course (*Paroles de FLE*) teaching French as a foreign language lasting five

to six weeks on FUN (France Université Numérique). During both courses, approximately 900 participants became engaged in the peer assessment and 40% of the participants regularly posted messages. The level required to participate in the MOOC is B1 according to the CEFRL. The pedagogical design of the course is based on a flexible soft system [8] and on a TBLT (Task-Based Language Teaching) approach to relate institutional language learning to learners' real life language learning. The choice for a soft system for the course design is also based on previous research, [3] which has shown that the implementation of a "soft system" was able to take into account an emerging context of learning and effectively manage heterogeneous groups. Language learning task conception took into account variety in order to cater to the needs of the learners' diverse profiles. The topics covered in the six weeks of Paroles de FLE included five to six macro-tasks, a large number of non-compulsory micro-task activities and a weekly peer assessment for macro-tasks. Each week's topic was different and macro-tasks were based on authentic listening videos/material. There were neither grammar nor vocabulary teaching nor lecture videos. Participants could choose training activities and remedial work amongst a panel of micro tasks in every week's training tasks and in a resource centre by selecting activities that fit their own personal needs. In order to adapt the MOOC learning environment to the learners' characteristics that is to say, language learning conceptions, previous knowledge and motivation, the course design also used the concept of organising circumstances [12] so as to "guide learners in bringing distal object of learning into reach" [13] and foster interaction between participants. As a result, participants followed their own learning path. The flexibility in participation format and the large number of participants contributed to a large amount of textual and non-textual information.

#### 3. Theoretical framework

There are two theoretical thrusts relevant to this study. The first is a framework based on early research in the area of online communities that provides order and guidance into the complexities and dynamics of online learning environments. The second perspective that provides theoretical insight to the particulars of this study is the work on language learning approaches and outcomes related to the impact of the course design and structure. On the MOOC online discussions, content is everything and there is a record of knowledge being constructed. A Community of Inquiry (CoI) is an online learning community that shares communication, collaboration and

critical discourse aimed at constructing meaning [1]. Garrison et al. [2] based the CoI framework on the practical inquiry model suggested by Dewey [1] and extended it to the online learning community defined as a group of people engaged in an educational project of collaborative, open, participatory and flexible learning. Henri [7] first focused on the cognitive dimension in the study of online discussions and his research served as a catalyst for Garrison et al. [2] to develop a comprehensive framework to guide the research and practice of online learning. This approach is also consistent with constructivist approaches to learning and language learning. Swain et Lapkin [13] state that it refers to the construction of meaning through sustained communication. Cognitive presence can be described as "the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry." It provides a description of the phases of practical inquiry leading to a resolution of a problem. They argue that cognitive presence is developed as the result of a four-phase process. These phases are: (1) a triggering event, where a problem is identified for further inquiry; (2) exploration, where students explore the issue both individually and corporately through critical reflection and discourse; (3) integration, where learners construct meaning from the ideas developed through exploration. This phase requires enhanced teaching presence so that learners will move to higher level thinking in developing their ideas; and (4) resolution where learners apply the newly gained knowledge to educational settings. The role of course design and instruction design in cultivating cognitive presence is significant in terms of how they structure the course content and participant interactions. In LMOOCs contexts if mutual engagement, shared repertoire or shared passion are aspects of the second language learning processes, one of the most difficult issues may be the prevalence of "serial monologues" [7], which answer the task assigned by the course but sometimes lack interaction. As a result, it is important to take into account how online discussions are integrated into the course design from a pedagogical point of view [2].

## 4. Project outline

## 4.1 Course design

The course design included a TBLT approach which focuses on the use of authentic language through "sincere" tasks such as writing a summary in French of authentic articles written in different languages to be published on

a European internet website. Like many MOOCs, the platform provides an online discussion forum in which participants are encouraged to exchange views about the various course tasks. Participants can engage in a discussion freely and express interest in any course topic. The conveyance of some sort of meaning is central in the TBLT approach and assessment is primarily based on task outcome. Tasks are open and not prescriptive and participants are free to express their views and opinions. Some communicative or target tasks were added during the second session of the course to include oral training. In addition, some discussion threads were set-up to avoid burdening discussions with irrelevant information and to facilitate participants' assignments. Discussions were also open and not prescriptive. Participants could exchange views about their oral production through the MOOC discussions and were encouraged to use language creatively and spontaneously through tasks and problem solving.

### 4.2 Main research questions

Research questions are as follows: (1) Is cognitive presence associated with second language development process and outcome? (2) Are there differences between the two MOOC sessions in terms of the strength of cognitive presence and (3) Is CoI framework an effective tool to explore higher order learning in LMOOCs and the potential relationship between instructional approach and participants' learning experience? Analyses of learners' exchanges have focused on the instantiation of collaborative dialogue and were categorised based on their focus, outcome and type adapted from the model of content analysis proposed in the practical Inquiry model [2].

#### 5. Methodology

An analysis of the 6 to 7 weeks of interactions of the two MOOC sessions was conducted to examine participants' level of cognitive presence using coding indicators from the four-phase Inquiry model. The data was obtained through participants' postings and active discussion themes collected from two sources: (1) participants' comments in online discussions (2) semantic analysis of online discussions. The discussion board was used as evidence of critical thinking and socialisation. Table 1 illustrates each phase of the model with examples taken from the study. During phase 1, participants identify problems and/or ask questions for further discussion,

in phase 2, they exchange ideas and discuss ambiguities. In phase 3, participants connect ideas to construct new meanings and often incorporate information from other sources and in phase 4, they apply new ideas or critically assess and defend solutions. Most discussion themes emerged from tasks as "environmental determinants." The research question and context influenced our decision to use coding issues based on themes and messages as a unit of analysis.

CoI four phases indicator	Sociocognitive processes	Posts
Off task	<ul> <li>Posts aimed only at socialising;</li> <li>Posts concerning web-forum management and technical difficulties indications.</li> </ul>	Bonjour à tous, je m'appelle Samantha. J'habite à 30 km de Marseille au bord de la mer. Je suis en France depuis 3 ans ()
Phase 1 Triggering event	<ul> <li>Identifying a problem.</li> <li>Sense of puzzlement.</li> </ul>	(a) Salut. Je m'appelle Carla et je suis brésilienne. Je peux comprendre le vidéo, mais quand je dois écrire sur le sujet, je ne suis pas a l'aise. (b) Bonjour Carla, Je suis brésilienne aussi. J'étudie le français ça fait déjà quelques années et ce encore difficile à moi. Mais, juste pour vous aider, je vous conseille à prendre de note des mot-clé, d'expressions plus important. Faites un résume des idées principaux. Après, vous devez essayer de faire la liaison entre les idées. Bon courage!
Phase 2 Exploration Phase	<ul> <li>Divergence within the online community.</li> <li>Suggestions for consideration.</li> <li>Critical reflection.</li> </ul>	Je suis francophone de naissance, mais pas très portée sur les nou- velles technologies. Je viens de rendre mon résumé sur le WWW, et j'en ai bavé.
Phase 3 Integration Phase	<ul> <li>Convergence: connecting ideas.</li> <li>Incorporating ideas from other sources.</li> <li>Assessing the applicability of ideas, repeatedly moving between reflection and discourse.</li> </ul>	Bonjour. J'ai trouvé moi aussi les deux vidéos superbes. J'utilise les technologies tous les jours - elles sont partout - et c'est très intéressent de découvrir que le web a été inventé il y a très peu de temps. C'est vraiment une révolution.

Table 1 - Four-Phase Practical Inquiry Model [2]

	N. of messages per stream/ N. of words	Phase 1	Phase 2	Phase 3	Phase 4	Gap Significance test
Session	(10-120)/25 388	59	97	198	139	0
1	words	(11.87%)	(19.52%)	(39.98%)	(27.97%)	
Session	(10-159)/ 28 501	47	55	125	118	0
2	words	(13.6%)	(15.94%)	(36.23%)	(34.20%)	

Table 2 - Results of the coding process

Session 1	Frequency	Session 2	Frequency	
Language	225	French langage	141	
Words in French language	200	Language	119	
French language	150	Video	102	
Macro-task	60	Macrotask	88	
Activity	60	Written activity	75	
Exercices	50	Recording activity	69	
Useful links	40	Work	59	
Learning	40	Useful links	54	
Video	105	Course	59	

Table 3 - Results of online discussions' frequent words analysis

#### 6. Results and discussion

### 6.1 Pedagogical implications

From the above findings, it could be argued that a number of instructional strategies may have impacted the participants' level of participation and cognitive interactions. The course design effectively supported higher order thinking language learning experience and the findings show that the integration and the resolution phase were achieved in both sessions. Results from session 2 (Phase 4) reveal the adjustment made in the course design, which encouraged participants to share productions in the online discussions. It also provided learners with an opportunity to try out communication strategies and develop confidence that they can achieve communicative goals. The TBLT approach may not provide sufficient interaction opportunities [4], but throughout the course, participants were involved in cognitively challenging activities and the flexible design of the MOOC encouraged them to take more responsibility for their collaborative learning. If the idea of creating authentic virtual communication situations for language learning is not new, it is important to establish authentic communication situations in non-threatening environments and allow participants to critically analyse and discuss the practical aspects of learning a language. The CoI framework contributed to showing deep and meaningful exchanges while participants perform the tasks. They seem to have created tangible linguistic products as they offer constructive feedback. Forum interactions include iterative cycles of constructive activity that reveal the three main categories of tasks [11]: information gap, reasoning and opinion gap. These cycles involve a transfer of given information from one person to another calling for decoding or encoding of information from or into language. Discussions also show attempts to convey information to others, which involves selection of relevant information. The results of the exploration and the integration phases involve deriving new information from given course information through processes of inference, deduction, practical reasoning and a perception of relationships, but the information conveyed is not identical with what is initially comprehended. Results for the integration phase underline participants' decisions regarding what course of action is best for a given purpose. It involves identifying and articulating a personal attitude in response to the given learning situation. When participants take part in the discussion of a social issue they use factual information and formulate arguments to justify one's opinion. The findings also support other research showing that many learners do not move on to synthesis or resolution phases of inquiry without some degree of scaffolding which also activates socialisation dynamics[6].

Further investigations should focus on language learning affordances. The concept of organising circumstances [12] might also be relevant to study the impact of the context on the language learning experience. The analysis of emerging discussion themes seems to support the hypothesis that in the context of the *Paroles de FLE* MOOC, participants act as self-directed learners who tend to derive their learning structure and direction from resources available in the environment according to organising circumstances [12] rather from a preplanned language experience.

#### 6.2 Limitations and conclusion

The findings in this paper are to be taken cautiously due to the MOOC session 1 assessment provision (20% of the course total grade was reserved for participation in online forums) which may have coerced participants to engage in the online discussions, the nature of the data partly based on quite motivated participants with an intermediate to high level of French. But it also underlines some affordances of the LMOOC online discussions providing a challenging and real learning space where participants can develop their critical thinking skills as well as improve their linguistic competence. During session 2, there was no assessment in the online discussions and there are no significant differences between the results of the two sessions. These findings encourage other LMOOC designers to assess their unique context. LMOOCs may provide participants with virtual intercultural interaction and exchange opportunities involving the development of learners' ability to interact with other learners. As immersion is not always available to all language learners, LMOOCs should expose participants to authentic use of language and time for reflection, introspection and deliberate engagement, which are key to critical learning. The process of analysing other participants' language learning experiences as well as performing and reflecting on tasks, produced a rich amount of real use of the target language, which fosters language learning in a cyclical and ongoing manner.

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# LETIZIA CINGANOTTO\*, DANIELA CUCCURULLO\*\*

# LE POTENZIALITÀ DI UN MOOC SULLE TECNOLOGIE PER IL CLIL: COLLABORAZIONI E SINERGIE<sup>1</sup>

#### Abstract

The paper aims to describe an example of LMOOC designed and moderated by the authors, in the framework of a brief literature review on the two main topics of the initiative: CLIL (Content and Language Integrated Learning) and learning technologies. In particular, the collaborative dimension, which is a peculiar feature of CLIL methodology, will be highlighted.

#### 1. Introduzione ai MOOC

I MOOC (Massive Open Online Courses) sono percorsi formativi online, generalmente erogati dalle università, che utilizzano un'ampia gamma di contenuti digitali per la formazione, tra cui video, audio e asset di varia tipologia.

Questa tipologia di percorsi "sposa la dimensione della "massività" con quella dell'"apertura"" [1]: utenti di tutto il mondo possono iscriversi gratuitamente a qualsiasi corso, alimentando in tal modo una vera e propria formazione di massa.

In letteratura si distinguono generalmente due categorie di MOOC [2] [3]: i MOOC originali, detti anche cMOOC, costruiti sui principi del connettivismo [4] [5] [6] [7] e i più trasmissivi xMOOC, di stampo comportamentista, strutturati in maniera più lineare con materiali multimediali e quiz. Mentre negli xMOOC si adotta un approccio top-down, centrato sull'apprendimento individuale, nei cMOOC si privilegia un approccio bottom-up collaborativo, che si fonda sulla negoziazione e co-costruzione dei contenuti e delle conoscenze.

Come dimostrano Yousef et al. [8], lo sviluppo dei MOOC è ancora in fieri ed è pertanto interessante seguire la sua evoluzione *in itinere*. Un esempio particolare di MOOC è quello che viene definito LMOOC o "Language MOOC", incentrato sui processi di *second language acquisition* e quindi sullo sviluppo delle competenze linguistiche nelle lingue seconde o straniere.

"Engagement, community, membership, communication and creativity are highlighted as key features of effective LMOOCs" ([9], p. 5).

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<sup>&</sup>lt;sup>1</sup> Il contributo è stato sviluppato in collaborazione dalle due autrici. Letizia Cinganotto è autrice dei paragrafi 2.1, 3, 4, 5, Conclusioni. Daniela Cuccurullo è autrice dei paragrafi 1, 2, 2.2, Abstract.

Sono proprio queste le caratteristiche che si possono identificare nel LMOOC oggetto di questo contributo: il senso di appartenenza a un'ampia e attiva comunità di pratiche, la creatività dei partecipanti, espressa attraverso gli strumenti digitali, il grande impegno e desiderio di sperimentare metodologie e strumenti innovativi in collaborazione con i colleghi.

#### 2. Il LMOOC Techno-CLIL

Il LMOOC Techno-CLIL moderato dalle autrici nel 2014, 2016, 2017 [10] [11] in contesto internazionale all'interno della community Electronic Village Online (EVO) di Tesol International, ha rappresentato un'ottima opportunità di confronto e scambio di idee, materiali e pratiche didattiche tra insegnanti e formatori di tutto il mondo in relazione alla tematica dell'insegnamento di contenuti disciplinari in lingua straniera secondo la metodologia CLIL (Content and Language Integrated Learning) con l'uso della rete e delle tecnologie. Si trattava della terza edizione dell'iniziativa, che al suo esordio, nel 2014 aveva registrato circa 200 partecipanti, divenuti poi 5000 nelle edizioni del 2016 e del 2017, con una punta di 6000 partecipanti, giunti attualmente a 7000 nel gruppo Facebook aperto come ambiente di formazione informale a supporto del corso istituzionale. La sessione ha attratto in particolar modo docenti e formatori italiani ed ha prodotto una vasta gamma di materiali di grande spessore e creatività: lesson plan, video, infografiche, schede di riflessione.

L'elevata partecipazione all'iniziativa da parte di docenti di ogni ordine e grado di scuola testimonia l'interesse e l'entusiasmo per le tematiche oggetto del corso, nonché il desiderio di sperimentare tecniche innovative, considerando anche il notevole impegno richiesto sia per la partecipazione ai webinar con gli esperti internazionali (circa trenta), sia per la realizzazione dei task previsti nella piattaforma Moodle ai fini del riconoscimento del badge settimanale e dell'attestato finale. I risultati sono stati davvero sorprendenti e il feedback dei partecipanti è stato complessivamente molto positivo, soprattutto in termini di ricadute sullo sviluppo professionale.

#### 2.1 Il tema del CLIL nel LMOOC

Techno-CLIL supera le caratteristiche di un tradizionale LMOOC, in quanto, oltre a focalizzare l'attenzione sullo sviluppo delle competenze linguistiche in lingua inglese (lingua veicolare di tutto il percorso formativo), mira a sensibilizzare i docenti sull'applicazione della metodologia CLIL con l'uso delle tecnologie multimediali e multimodali.

La metodologia CLIL rappresenta una delle innovazioni della Riforma della scuola secondaria di secondo grado [12], ormai entrata pienamente a far parte degli ordinamenti scolastici italiani (DPR 88/89 del 2010), anche grazie alla Legge della "Buona Scuola" (L.107/2015), che ne raccomanda la diffusione a partire dal primo ciclo. Il CLIL rappresenta, infatti, una delle priorità del nuovo Piano Nazionale per la Formazione dei Docenti per il trienno 2016-19.

Fondata sul binomio lingua straniera veicolare e contenuti disciplinari, la metodologia CLIL è riconosciuta come un approccio innovativo e interattivo [13] [14] che può racchiudere un'ampia gamma di strategie didattiche finalizzate a porre lo studente al centro del percorso formativo (Task-Based Learning; Project Based Learning ecc.).

La ricerca scientifica nazionale e internazionale in questi ultimi decenni ha ampiamente approfondito le innumerevoli implicazioni di tipo linguistico, didattico, cognitivo, emotivo che la metodologia CLIL può comportare mettendone in luce il potenziale in termini di rinnovamento delle pratiche didattiche e miglioramento dei risultati di apprendimento degli studenti.

Studi recenti [15] [16] hanno introdotto il concetto di "pluriliteracy" come attenzione alle specifiche *literacy* disciplinari che rendono visibili le abilità cognitive e le *Cognitive Discourse Functions* [17] [18], cioè le funzioni e le intenzioni comunicative che trovano espressione attraverso la lingua, in particolare la lingua dello studio (CALP, *Cognitive Academic Language Proficiency*), che integra e supera la lingua degli scambi interazionali informali quotidiani (BICS, *Basic Interpersonal Communication Skills*) [19].

# 2.2. Il tema delle tecnologie per la didattica in un LMOOC

Nelle più recenti Raccomandazioni europee la metodologia CLIL è spesso associata all'uso delle "learning technologies", le tecnologie multimediali e multimodali, che possono rappresentare un valore aggiunto per lo sviluppo di competenze linguistiche, disciplinari, metodologiche, trasversali [20].

Il connubio tra CLIL e tecnologie, ampiamente supportato dalla ricerca scientifica, emerge chiaramente anche nel Piano Nazionale per la Formazione dei Docenti del MIUR: tra le linee strategiche vengono menzionati "percorsi formativi basati sulla pratica di abilità audio-orali e lo scambio culturale, anche attivando contatti con classi a distanza con scuole, docenti e classi di altri Paesi"; "percorsi che combinino diverse modalità formative (es. lin-

gua e cultura, tecniche innovative, misurazione e valutazione delle competenze linguistiche, corsi in presenza, online, stage all'estero, ecc.)".

Infatti le tecnologie, le comunità di pratiche virtuali, gli ambienti di apprendimento digitali, aumentati, immersivi possono potenziare in modo molto efficace la didattica CLIL [21].

# 3. Sinergie nel CLIL

Le "Norme Transitorie" della DG per gli Ordinamenti scolastici del MIUR del 2014 aupicano la collaborazione all'interno del team CLIL, formato dal docente di DNL (Disciplina Non Linguistica), dal docente di LS (Lingua Straniera) e da altre eventuali figure professionali con competenze linguistiche presenti nel Consiglio di Classe. Le modalità di collaborazione possono essere variegate e sono generalmente affidate all'autonomia scolastica, ferma restando la titolarità dell'insegnamento CLIL da parte del docente di DNL.

La collaborazione all'interno del team CLIL implica specifiche competenze pedagogiche e metodologiche, di tipo teorico, tecnico, organizzativo e relazionale.

Per organizzare esperienze di uso veicolare della lingua è necessario infatti tenere presente che non tutte le attività in lingua straniera relative a una disciplina si possono definire CLIL: per questo motivo definire i ruoli e pianificare le attività dei docenti coinvolti è fondamentale [22].

Integrare lingua e contenuto è molto di più che semplicemente insegnare contenuti non-linguistici in un'altra lingua: occorre infatti partire da alcuni principi di base, sintetizzati nel quadro di riferimento proposto da Do Coyle, noto come il Framework delle "4C": contenuto, cultura, comunicazione e processi cognitivi.

È sulla integrazione delle varie dimensioni che si basa la metodologia CLIL.

I principali modelli identificati in letteratura in relazione alle modalità di collaborazione delle varie figure professionali impegnate nella didattica CLIL si possono sintetizzare come segue [23]:

- a) classico: due docenti veicolano entrambi contenuti disciplinari con modalità frontali opure partecipate;
- b) collaborativo: i due docenti interagiscono frequentemente tra di loro e con la classe, favorendo la partecipazione attiva;
- c) di supporto: il docente di DNL veicola i contenuti disciplinari, mentre il docente di LS propone attività di tipo linguistico-comunicativo;
- d) parallelo: la classe è divisa in due gruppi in momenti alternati; il docente di DNL presenta i contenuti disciplinari, mentre il docente di LS propone la riflessione linguistica;

- e) a gruppi differenziati: i docenti lavorano con gruppi di livello, opportunamente selezionati in base alle competenze linguistiche o disciplinari;
- f) di supervisione: un docente svolge l'intervento didattico mentre l'altro docente ha il ruolo di "amico critico" e di osservatore.

# 4. Sinergie in "Techno-CLIL"

Un aspetto significativo emerso dalle attività nella piattaforma Techno-CLIL e dai questionari somministrati ai partecipanti, è l'importanza del lavoro collaborativo e delle sinergie attivate e stimolate all'interno del percorso formativo, come si evince dal grafico sottostante:

# How did you find the collaborative work with the other Techno-CLIL colleagues?

(1183 risposte)

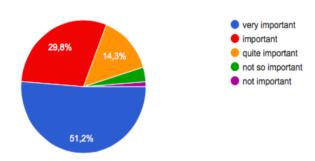


Figura 1 - La collaborazione in Techno-CLIL

Il 51,2% dei partecipanti ritiene che il lavoro collaborativo sia stato molto utile per poter completare il percorso formativo. Nello specifico, l'esperienza di Techno-CLIL ha messo in luce il forte desiderio di collaborazione da parte dei docenti di LS e la loro voglia di mettersi in gioco e di assumere un ruolo sempre più attivo nel processo di implementazione del CLIL, offrendo la loro expertise e il loro background linguistico e glottodidattico specifico, componente essenziale a completamento delle conoscenze disciplinari e epistemologiche specifiche del docente di DNL.

I seguenti commenti raccolti attraverso un questionario confermano queste considerazioni e illustrano le varie modalità proposte per accompagnare e sostenere i docenti di DNL nell'implementazione delle attività CLIL:

"I will help them with language implementing activities useful not only for the content but even for the specific terms and academic language".

"I would give them advice on how to actively involve the students in speaking activities the lesson, as they are used to just sit and listen to the teacher".

"Identifying cross-planned subjects; elaborating cross-cultural glossary where possible; practising and improving L2 for teaching; evaluating results; planning".

"We would work in team, planning vocabulary, word boxes, structures, metacognitive skills, content, what students need to know already, cross-curricular activities, extension activities as ICT, assessment".

I docenti di LS dunque, si esprimono molto favorevolmente alla collaborazione con il docente di DNL e offrono la loro expertise in un'ampia gamma di aspetti: oltre alla dimensione propriamente linguistica e interazionale, è significativo come si sentano di poter aiutare i colleghi di DNL nella scelta delle tecniche didattiche, dei materiali e delle specifiche azioni legate alle varie fasi del processo formativo, dalla progettazione alla valutazione.

Anche i docenti di DNL dal canto loro, sembrano accogliere di buon grado il sostegno e la collaborazione dei docenti di lingua straniera, riconoscendo le specificità del loro background accademico e professionale, soprattutto in riferimento al lavoro di riflessione sulla lingua, sia per quanto riguarda "general academic language", che "subject-specific language" [24].

"I would need somebody that helps me anticipate the language problems i.e. grammar possible problems, lexis".

"I would like the language teacher support me in material selection and planning of the CLIL path in relation to the linguistic competence of the class and in communicative interaction with students".

L'esperienza di Techno-CLIL ha dunque offerto uno spaccato della scuola italiana, consentendo di cogliere le reazioni e i bisogni dei docenti impegnati nella didattica CLIL, soprattutto in relazione al ruolo del docente di LS e del docente di DNL in prospettiva sinergica e collaborativa.

# 5. Peer learning

Un esempio di sinergia e di collaborazione stimolata all'interno del percorso formativo è rappresentato dal task della *peer assessment* assegnato ai partecipanti, cui veniva richiesto di progettare un percorso CLIL con l'uso delle tecnologie e di valutare la progettazione di un collega attraverso l'uso di una *peer review grid* (Figura 2) come guida alla riflessione sui singoli aspetti del *lesson plan*.

CATEGORY	Code 1	Code 2	Code 3	Code 4 or 5	Assign a code from 1 to 5
a) Is the Lesson Plan complete?	The lesson plan is incomplete with little information provided. Peer reviewer is unable to proceed.	The lesson plan is complete. Description of learning activities is very basic and/or at times difficult to follow.	The lesson plan is complete and presents a good variety of learning activities. <u>Descriptions are clear and easy to follow</u> .	The lesson plan is accurate and engaging. It presents a detailed/rich description of learning activities.	3
b) Is the lesson plan well aligned with its learning outcomes?	Learning outcomes are not specified.	Learning outcomes are partially mentioned. Learning activities are only partially aligned with the learning outcomes.	Learning activities link with the defined learning outcomes.	Learning activities explicitly link with the defined learning outcomes. The rationale for the link between activity and outcome is clearly mentioned.	4
c) is the Lesson Plan well balanced?	Learning activities are not well balanced. Just one type of the Teaching Learning Activities (TLAs in the Learning Designer) is used (see the pie chart for this).	Learning activities are not well balanced, because some of the Learning activities planned take up most of the time. (see the pie chart for this).	There is an OK mix of activities with at least three different TLAs, even some of the activities take up more than 35% of the time (see the pie chart for this).	There is a good mix of activities with at least four different TLAs and none of the Activities, except in the case of collaboration, taking up more than 35% of the time (see the pile chart for this).	4
d) Does the lesson plan include learning activities specifically	Students are NOT required to work together in pairs or groups.	Students DO work together BUT they DO NOT have shared responsibility.	Students DO have shared responsibility BUT they ARE NOT required to make substantive decisions together.	Students DO have shared responsibility AND they DO make substantive decisions together about the content, process, or product of	5

Parts of this rubric are taken from the 21st Century Learning Design Rubric developed by ITL research under a Creative Commons license. For more information, see her

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Figura 2 - Estratto della griglia peer review<sup>2</sup>

È interessante rilevare come non vi sia alcuna remora da parte dei docenti nel sottoporre i propri lavori al giudizio e alla valutazione dei colleghi, accettando ogni commento e suggerimento migliorativo, come si evince dall'esempio seguente: "Dear Colleague, I think your plan is generally well balanced, I think you could explore webtools to enhance your students' learning skills and digital competence through the final reinterpretation of their beloved storybooks by using webtools for storytelling".

Nel commento di seguito l'analisi è più rigorosa e severa e, partendo dalla valorizzazione di un punto di forza (le attività finalizzate a sviluppare la collaborazione), mette in evidenza alcuni elementi che sarebbe opportuno inserire nel *lesson plan*, in particolare in riferimento alla valutazione, che appare piuttosto debole: "Dear Colleague, I like your lesson plan because there is a good mix of activities and include learning activities specifically designed to develop your students' collaborative learning skills. I suggest you should revise the part of the evaluation that in your plan is missing and add materials in the different steps".

Nonostante il taglio critico che la valutazione tra pari può aver preso in taluni casi, le discussioni sviluppate nei *thread* del forum si sono sempre rivelate costruttive e propositive, lasciando trasparire il desiderio autentico e sincero di apprendere dai colleghi, senza mai sfiorare neanche velatamente toni polemici o sgradevoli.

<sup>&</sup>lt;sup>2</sup> L'autrice è Pasqua Aida Pappalepore.

Techno-CLIL ha dunque contribuito a creare una vera e propria comunità di pratiche CLIL, ispirata alla collaborazione, all'ascolto e al miglioramento continuo in prospettiva di *life-long learning*.

#### 6. Conclusioni

Il contributo ha inteso mettere in evidenza alcuni aspetti della formazione online progettata e implementata dalle autrici sotto forma di un LMOOC denominato "Techno-CLIL", dopo aver richiamato brevemente i principali riferimenti in letteratura sulla natura e sull'evoluzione dei MOOC.

Nello specifico, si è inteso tratteggiare l'aspetto collaborativo della formazione, all'interno di quella che è diventata una vera e propria comunità di pratiche CLIL, dove i docenti si riconoscono come membri attivi, desiderosi di collaborare con i colleghi e di mettere a disposizione la propria expertise e le proprie conoscenze in ambiente CLIL.

In senso più ampio, il LMOOC ha offerto la possibilità di esaminare le dinamiche sottese ad un processo innovativo dalla portata rivoluzionaria come quello che ha comportato l'introduzione della metodologia CLIL negli ordinamenti italiani. La rivelazione che emerge dai commenti e dalle reazioni dei docenti raccolte attraverso i questionari è il forte desiderio di attivare sinergie e collaborazioni tra diverse figure professionali, come del resto insito nella metodologia CLIL. In particolare, i docenti di LS sembrano rivendicare un ruolo più attivo, anche offrendo il loro supporto ai docenti di DNL, soprattutto in riferimento agli aspetti propriamente linguistici e glottodidattici che i docenti disciplinaristi stanno faticosamente costruendo a posteriori rispetto alla loro formazione accademica.

Nella parte finale del contributo si è inteso descrivere un esempio di task assegnato nell'ambito del LMOOC, a testimonianza dello spirito collaborativo e delle sinergie positive attivate dallo specifico percorso formativo e, più in generale dalla metodologia CLIL.

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## ALICE BARANA\*, MARINA MARCHISIO\*\*

# TEACHER TRAINING TO THE USE OF CLIL METHODOLOGY IN PROBLEM BASED ACTIVITIES

#### Abstract

This paper presents and discusses a model of teacher training to the use of CLIL methodology in problem based activities involving different subjects. The model was developed by the Department of Mathematics of the University of Turin and tested during two CLIL training courses with secondary school teachers. The training model includes: the design of the training program, the proper training phase, monitoring teachers' activities and collection of materials, and an evaluation of the course. In particular, the training phase involves problem solving, problem posing and the use of a Virtual Learning Environment both as a student and as a teacher.

#### 1. Introduction

Consider the following situation: there are some workers, living in different countries and employed in several branches of a company, who are all involved in the same project. They have to collaborate, analyse problems and share solutions from all corners of the world, interacting online through a vehicular language. Computer based collaborative working situations are not so unusual in modern workplaces; nevertheless, the communication between workers with different cultures, languages and backgrounds is pointed out as a major difficulty [1].

Communication and problem solving (PS) competences, required by companies and tested in job interviews, can be developed at school through the Content and Language Integrated Learning (CLIL) methodology, which is expressly conceived to educate students to be citizens of the world and to prepare them to get better job opportunities in an international society [2]. Italy is one of the few European countries where CLIL is provided for by the educational system: all students attending the last year of upper secondary school have to learn one non-language subject through a foreign language.

One major obstacle to the implementation of meaningful CLIL activities at school is the shortage of appropriately qualified teachers, who are expected to be expert on their subject, on a foreign language and on CLIL methodologies. On the other hand, teachers complain that there are not many initial and inservice programmes devoted to CLIL, and that suitable teaching materials are not easy to find [3]. The Department of Mathematics of the University of Turin

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proposes an innovative model for teacher training aimed at making teachers independent in designing effective CLIL activities, based on problem solving with innovative technologies. In the following paragraphs the model of teacher training is detailed, the methodology used and the results obtained in two experiences are shown and discussed.

#### 2. State of the art

## 2.1 Problem based CLIL activities

Modern theories on problem solving claim that the activities of modelling and thinking are conveyed through a variety of media, among which language sticks out, it being involved in group discussions, in the presentation of data and solutions [4]. It is supposed to be a tool for thinking, not just the format we think in. According to recent linguistic theories, language acquisition is facilitated by activities focused on the production and negotiation of comprehensible meanings, which allow learners to raise awareness of the meaning-carrying potential of linguistic structures. Thus, a teaching approach focused on meaning and language should be more effective than one that focuses on the structural aspects of the target language [5].

Teaching approaches based on the integration of language and problem solving fit sociocultural models, mainly because sociocultural theories see language as the primary media for knowledge building, and because of the fundamental role recognised to social interaction in learning [6].

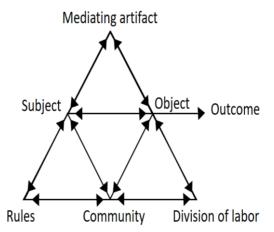
Supported by these theories, the Department of Mathematics of the University of Turin has developed a learning model for CLIL problem solving activities. The model consists of a real-world problematic situation to be discussed in a vehicular language by small groups of students, who are asked to discuss the solution in written form. The disciplinary content emerges from the generalisation of the solving process or the identification of the key points. Technologies for solving the problem and for sharing solutions are recommended during the activity [7].

# 2.2 Teacher training

Among all the teacher training models discussed in literature - coaching, metacognitive reflection, team working, co-working and many others [8] - there is evidence that the participation in professional learning communities (PLC) helps to improve teaching practice and student achievement. In particu-

lar, it helps to develop a student centred approach and increase teaching culture through collaboration, focus on student learning and continuous learning; these factors have positive effects on student results [9].

The Cultural Historical Activity Theory (CHAT) offers a suitable theoretical framework for analysing teacher activity, given the importance ascribed to the interaction of human activity within the environment as promoter of learning. According to CHAT, the learning outcomes are the results of the action by at least two activity systems, the smallest units of analysis, represented in Figure 1. When the interactions between the elements face some contradictions, the systems modify themselves through expansion and this results in learning [10].



**Figure 1 -** One activity system, the unit of analysis of action in activity theory.

The Department of Mathematics of the University of Turin has developed a teacher training model for designing activities aimed at the development of mathematical competences [11], deeply rooted in the participation in PCL. The model has been adapted and experimented to train teachers to design problem based CLIL activities.

## 3. The model of teacher training

The model is intended to provide secondary school teachers with competences on CLIL, problem posing and problem solving and digital methodologies for learning. In particular, teachers learn how to collaborate online and to work in a community in a vehicular language, to build innovative, even interdisciplinary, problem based activities.

The teacher training model includes the following features:

- 1. face-to-face training modules, organised in:
  - a. collaborative problem solving,
  - b. multidisciplinary problem posing,
  - c. use of a Virtual Learning Environment (VLE);
- 2. synchronous and asynchronous online training in a Virtual Learning Environment, through:
  - forums of discussion for the asynchronous tutoring, monitored by tutors, which foster teachers' collaboration and exchange of materials and experiences,
  - online synchronous tutoring held via a web conference tool integrated in the platform, which allows for interaction between tutor and participants through the voice, a chat and the screen-sharing,
  - c. multimedial didactic materials,
  - d. databases for sharing didactic materials created and used by teachers;
- 3. implementation of an online professional learning community, which learns and works collaboratively, focused on the enhancement of teaching and learning;
- preparation of materials autonomously and collaboratively and testing on students;
- 5. evaluation of appreciation and usefulness of the training.

# 4. Methodology and implementation of the model

The model shown in the previous paragraph was designed and detailed after a preliminary experience, where the main activity of Problem Solving was tested. Data was collected from observation during the training meeting and from a questionnaire filled after the lesson. The analysis was conducted both qualitatively through the CHAT analysis, with the aim of identifying key strengths and issues of the training activity, and quantitatively to assess the validity of the training process and of the methodologies proposed. Results were used to design a full experience of teacher training based on the findings of the preliminary analysis.

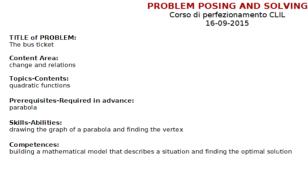
# 4.1 Preliminary experience

The preliminary experience was conducted within a CLIL training course for teachers of scientific disciplines, organised by the *Centro Linguistico di Ateneo* of the University of Turin in Autumn 2015. The experience took place in a laboratory lesson of 4 hours, held by the authors, with 54 participants. After a presentation of the Problem Posing and Solving methodology [12] with some examples, participants were split into small groups of 3-4, each of them with a re-

al-world problem involving scientific subjects (Mathematics, Physics, Chemistry, Computer Science) to solve. Two main tasks were assigned to teachers:

- to solve the problem as if they were students, discussing in a target language (English in that case) and to discuss the solution in written form, in English again.
- to analyse the problem-solving process from the teacher's point of view and identify the content involved, skills and competences acquired by students while solving this problem.

Figure 2 shows an example of problem assigned to one group of teachers.



#### THE BUS TICKET

#### ▼ Problem

A transport company has an average of 5,000 passengers a day if the ticket costs 1 €. For each increment of the ticket of 0.10 € there is a loss of 200 passengers a day. There are ticket machines that accept only coins of 2, 1, 0.50, 0.20, 0.10 €.

a) Determine the price of the ticket that optimizes daily income.

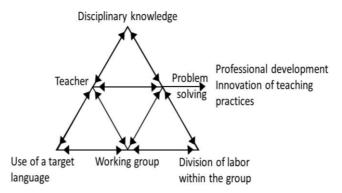
b) If the loss was instead of p passengers a day, for which values of the parameter p would still be advantageous to increase the cost of the ticket? Once fixed such a value of p, which would be the optimal increase?

Figure 2 - Example of problem assigned to the teachers.

All the works handed in by the teachers were assessed by the trainers. At the end of the lesson, the authors also showed a rubric table for the assessment of the problem solving competence, specifically elaborated for CLIL activities. Unfortunately, there was no time left to practise with the rubric table in a peer assessment activity.

The researchers observed the teachers' activity and studied it though CHAT analysis. The subject of the activity can be identified with the teachers and the object is the resolution of the problem as for their first task, and the analysis of the resolution as for the second one. Further aim of the activity is the professional development and innovation of their teaching practices. The tool through which the tasks was fulfilled can be identified as their disciplinary and linguistic knowledge and their teaching reflection capabilities. For logistical problems the use of technologies could not be introduced in the activity, teach-

ers could use the instruments that they preferred. Rules of the activity system are the use of English language and that work be autonomously divided among groups components, who formed the community. Figure 3 shows the activity systems of teachers during the training.



**Figure 3 -** Activity System of teachers during problem solving.

While intended for fulfilling the activity, the systems faced three kinds of tensions:

- the role of the teachers was changed to that of students,
- teachers experienced group working, which is quite unusual in a profession that is mainly individual,
- teachers were forced to speak in English.

These tensions created difficulties in the teachers' work, but at the same time they were a useful occasion for learning. This was testified by the data analysis of the questionnaire that teachers were asked to fill in after the lesson.

Besides the aspects related to the management of the training lesson, the questionnaire inquired about the teachers' impressions of the methodology, through a Likert scale ranging from 1 to 5. Results were particularly encouraging, as teachers responded that this methodology would be useful for their students to develop disciplinary, linguistic, problem solving and team working competences. Details are shown in Table 1.

Moreover, in an open question, teachers were asked to identify the key strengths of the activities and the difficulties they faced. The features that hindered the teachers were also acknowledged as the most formative ones, and as valid reasons to try the new methodology with students. Confirming the qualitative observations, these features were:

- experiencing team work and collaborating with colleagues,
- being forced to speak in English,
- changing their role in the solving task.

They also appreciated gaining some useful tips for their classes.

Do you think that the problem posing and solving activity in English could be useful to students to:	1	2	3	4	5	MEAN
improve language skills	2%	0%	27%	42%	29%	3,96
improve the ability of working in a group	0%	2%	10%	42%	46%	4,31
strengthen the specific disciplinary competences	0%	6%	15%	48%	31%	4,04
enhance self-confidence	0%	4%	29%	44%	23%	3,85

**Table 1 -** Results of the questionnaire at the end of the preliminary experience.

# 4.2 Second experience

On the basis of this feedback, a wider training course was designed and implemented some months later, in Spring 2016, within another CLIL course in the province of Biella. The course saw the participation of 35 secondary school teachers expert in several subjects, both humanistic and scientific. The design of the activities was based on the key strengths identified in the previous experience: using the same methodologies that teachers were supposed to learn, swapping the roles (teacher-student) to support the shift to a student-centred approach, building a professional learning community for sharing experiences and materials. The training model presented in paragraph 3 was fully implemented. It started with two face-to-face meetings one on problem solving (which included the same activity of the preliminary experience) and one on problem posing (where teachers were asked to create new problems working in groups). The two meetings were held in a computer laboratory, teachers could use learning technologies to solve the problems and a Virtual Learning Environment, VLE, (an integrated Moodle platform) to share their work. In the same occasion the potentialities of the VLE were presented to the teachers-in-training.

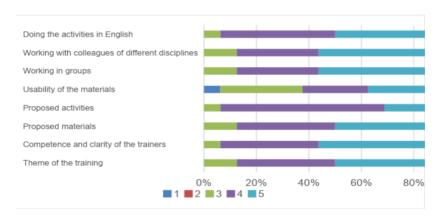
An online community came to life in the VLE; teachers could get professional development through asynchronous tutoring, forums, databases of materials, and synchronous meetings in web-conferencing about the didactic use

of the platform, so that they were able to adopt it with their students. They were asked to produce original material, to test it with students, and to share it with colleagues along with an analysis of how the activity works.

At the end of the training teachers were asked to fill a questionnaire where they could discuss key strengths and weaknesses of these methodologies.

#### 5. Results and discussion

The results of the second experience confirmed the teachers' appreciation of the methodologies proposed and the effectiveness of the training course Figure 4 shows the appreciation for the training organisation and methodologies. There are no negative answers (labelled with 1 and 2 in a scale to 5), except for a teacher of Physical Education who complained that there were no problems for her subject (her participation was not expected by the trainers). The best appreciation went to the group work, to the group activity and to the use of English.



**Figure 4 -** Appreciation of the training course.

The problem based methodology for CLIL activity was appreciated even more than in the first experience, maybe because it stretched over a longer time span. Details of the teachers' answers are shown in Table 2.

	1	2	3	4	5	AVERAGE
Stimulate students' interest toward the subject	8%	0%	12%	36%	44%	4,08
Help students to better understand the disciplinary contents	8%	8%	20%	32%	32%	3,72

Develop their capability of reason- ing and abstraction	0%	8%	16%	40%	36%	4,04
Develop their critical thinking	0%	8%	20%	44%	28%	3,92
Develop competences of cooperation and team working	0%	4%	8%	32%	56%	4,4
Strengthen language competences	4%	8%	12%	40%	36%	3,96
Provide competences useful for the working future of students.	0%	8%	12%	40%	40%	4,12

Table 2 - Teachers' opinion of effectiveness of problem based CLIL activities.

The questionnaire also inquired about the difficulties in the implementation of this kind of activities, both from students' and teachers' point of view. Students' expected difficulties are the use of English in real world situations, problem solving and group working. They are exactly the features that distinguish the new methodology from the traditional teaching approach and they are clearly acknowledged by teachers as useful to develop competences, as shown above: these results are evidence of the resistance of the Italian school system to go beyond the transmissive teaching model and to embrace innovation.

As expected, teachers' main difficulties are the use of a foreign language, the need of changing one's method and the lack of time to design meaningful activities. As teachers acknowledged, the training worked just to contrast these problems, increasing self-confidence in their language skills, making them experience the usefulness of the new methodologies and facilitating the sharing of materials.

#### 6. Conclusions

The Department of Mathematics of the University of Turin proposed a model of teachers training that could be utilised to fill a gap in the professional development that Italian school teachers strongly need. As the problematics of European teachers do not differ from Italian ones, the model could be enlarged at international level. The evidence gained by the experiences presented in this paper, deducted by qualitative and quantitative analysis, support the usefulness of this model, training teachers to design meaningful problem based CLIL activities. The final goal is to develop students' disciplinary, linguistic and transversal competences that will allow them to become competitive in their future working experiences.

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#### IVANA FRATTER\*

# BENEFICI DELLA GAMIFICATION NELL'APPRENDIMENTO DELLE LINGUE STRANIERE

#### Abstract

We analyse the results of the experience of "grammar-gamification" with university students in Italian classes. We used online games in order to review grammatical structures and some communicative functions. Among the benefits, we noted that the use of the online game can increase the level of engagement of the learners.

## 1. Introduzione

Le lezioni di grammatica spesso possono risultare noiose per gli studenti ma grazie alla *gamification* è possibile rendere la grammatica, e più in generale l'apprendimento delle lingue, divertente e coinvolgente, in accordo con le più recenti ricerche secondo le quali gli studenti sono particolarmente motivati se ricevono dei premi e delle ricompense durante le attività didattiche [1][2].

Grazie al costante sviluppo di nuovi applicativi per il web e per il *mobile learning*, attualmente, sotto il profilo tecnologico, risulta essere piuttosto agevole l'introduzione delle Tecnologie dell'Informazione e della Comunicazione (TIC) nella pratica didattica sia per la facilità di gestione dei software sia per l'accessibilità di dispositivi mobili (*m-device*) da parte degli utenti i quali, per la stragrande maggioranza, sono in possesso di uno *smartphone* o di altri dispositivi mobili [3].

Che cosa si intende per *gamification*? La gamification viene definita come "the use of game mechanics in a no-game context to engage users" [4]. In particolare si differenzia dal *game* per il fatto che "the target objectives won't be focused solely in having fun or enjoyment" [5]. La *gamification* può essere utilizzata in diversi contesti (p.es. lavoro, istruzione), tra i quali anche nell'apprendimento di una L2 nel quale viene utilizzata spesso come strategia di coinvolgimento nelle attività didattiche.

Il presente contributo desidera condurre una riflessione sull'introduzione della *gamification* nella didattica delle lingue e nello specifico nell'apprendimento di elementi grammaticali dell'italiano L2. Nella prima parte si analizzeranno le specificità della *gamification*, si osserveranno le differenze con il *game*, individuando un modello operativo di riferimento, si discuterà dei benefici che la *gamification* può portare nella pratica didattica grazie al raffor-

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zamento della motivazione. Mentre nella seconda parte dell'articolo verrà illustrata una sperimentazione che ha visto applicare alcuni principi della *gamification* in un corso di italiano L2 per studenti universitari nello sviluppo della competenza grammaticale.

# 2. Gamification nella didattica delle lingue

Negli studi sul processo di apprendimento/insegnamento largo spazio è dedicato alla riflessione sulle strategie più efficaci per stimolare la motivazione allo studio, per facilitare il coinvolgimento emotivo degli apprendenti in quanto componente essenziale per un apprendimento efficace [6].

L'utilizzo della *gamification* nella pratica didattica viene visto come una metodologia capace di supportare motivazione e al contempo apprendimento, tuttavia, affinché ciò sia realizzabile, si richiede nella progettazione del percorso formativo la scelta di un modello teorico a cui fare riferimento e in grado di fornire un valido supporto alle diverse azioni didattiche da intraprendere. Il modello a cui il presente lavoro fa riferimento è quello proposto da Wendy, Huang e Soman [1] che è costituito dalle seguenti cinque tappe (Figura 1):



Figura1 - The five steps of applying gamification in education

La prima tappa "Understanding the target audience and the context" richiede una ricognizione del target di utenti a cui è rivolto il percorso formativo, si tratta di procedere nello specifico nell'analisi del profilo degli apprendenti [7] nonché dei loro bisogni. Attraverso questa analisi è possibile individuare gli elementi necessari per una progettazione consapevole di un percorso mirato in relazione agli obiettivi prefissati. In particolare, nella prima fase della progettazione sono da prendere in esame le variabili che determineranno le scelte di fondo del percorso, si dovrà tenere conto: a. del contesto di insegnamento, ovvero del setting, in cui ha luogo l'azione didattica, b. della numerosità del gruppo, c. delle abilità su cui il percorso focalizza l'attenzione, d. del tempo a disposizione per la formazione, ovvero della durata del corso, non da ultimo e. dell'età degli utenti e f. della loro formazione pregressa.

Questa prima ricognizione permette di individuare i cosiddetti "pan points" ovvero i punti critici su cui focalizzare il programma di apprendimento.

La seconda tappa "Defining learning objectives" richiede vengano definiti sia gli obiettivi generali del percorso - come per esempio si prevede il superamento di una prova finale, un test - sia gli obiettivi specifici, come per esempio il possesso di specifiche abilità (per esempio lo studente deve essere in grado di applicare in modo automatico determinate regole grammaticali); infine attraverso la gamification si richiede anche il raggiungimento di specifici comportamenti come per esempio si richiede la massima concentrazione.

Con la terza tappa "Structuring the experience" si entra nel vivo della progettazione didattica. Durante questa terza tappa si sequenziano le azioni didattiche, e si pongono dei micro obiettivi che devono essere raggiunti al termine di ogni azione (di ogni microtappa). La sequenziazione permette la parcellizzazione di obiettivi e al contempo permette l'osservazione più puntuale rendendo misurabile il raggiungimento degli obiettivi prefissati.

La quarta tappa "*Identifying resources*" prevede la ricognizione delle risorse che sono effettivamente disponibili. Si tratta di microtappe che devono soddisfare le seguenti caratteristiche:

- a. devono avere un sistema di tracciamento dei risultati all'interno delle diverse microtappe;
- b. devono avere delle unità di misura come per esempio: punti, tempo, badge;
- c. ogni microtappa deve essere propedeutica a quella successiva e solo con il completamento della prima è possibile passare alla successiva;
- d. devono essere definite regole chiare, per esempio è previsto un punteggio minimo per il superamento della tappa;
- e. si deve prevedere un feedback per ogni microfase in grado di mostrare allo studente sia il progresso fatto sia i punti critici da superare.

La quinta tappa riguarda l'applicazione delle caratteristiche della gamification (Applying gamification elements), in questa fase vengono inseriti nella progettazione didattica elementi specifici del gioco, come per esempio i punti, i badge, i livelli, le limitazioni di tempo, ma anche elementi che riguardano aspetti sociali del gioco quali la cooperazione vs la competizione, per esempio attraverso il sistema delle classifiche individuali e di gruppo e che permettono di condividere i risultati del proprio apprendimento con la comunità di studenti a cui appartengono.

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# 3. Grammar gamification in italiano L2: una sperimentazione

Nel presente paragrafo si illustra un esempio di applicazione della *gamification* in un contesto di formazione universitaria. In questo paragrafo verranno illustrati gli obiettivi, i metodi e gli strumenti selezionati, si illustreranno le fasi di somministrazione della sperimentazione.

La sperimentazione di *gamification* è stata effettuata nel secondo semestre dell'anno accademico 2016/2017 presso il Centro Linguistico di Ateneo dell'Università di Padova e ha visto coinvolti 20 studenti con diverse L1 (inglese, tedesco, cinese, arabo, russo, polacco) (Tabella 1).

Anno accademico	Livello It L2	Numero di studenti	Età media
2016/2017 II semestre	A1	20	23 anni

Tabella 1 - Dati della sperimentazione.

Osservando il profilo degli apprendenti e i loro bisogni si tratta di studenti stranieri con un elevato livello di scolarizzazione IZI che frequentano i corsi di lingua italiana e che, alla fine del corso, devono sostenere un esame finale nel quale è prevista anche la verifica della competenza grammaticale del livello del corso frequentato (A1-C2). Spesso accade che la parte grammaticale del test risulti essere la parte più complessa, in quanto richiede uno studio sistematico e una pratica costante, per tale ragione nella prassi didattica si rende necessario trovare delle strategie di facilitazione per la memorizzazione e l'applicazione delle regole grammaticali. Tuttavia a causa della brevità del corso di italiano (40 ore in aula) e dei numerosi impegni accademici degli stessi studenti, spesso manca loro il tempo a casa per esercitarsi sugli aspetti della lingua attraverso esercizi di fissazione; pertanto uno degli obiettivi della sperimentazione riguarda la messa a punto di attività di fissazione e automatizzazione di alcuni punti critici della lingua italiana attraverso esercizi in grado di stimolare la motivazione. Tra gli aspetti critici legati al contesto di apprendimento si segnala il numero elevato di studenti frequentanti i corsi di lingua italiana (tra i 30/40 studenti in ogni corso) la qual cosa non facilita un apprendimento/insegnamento mirato a specifici bisogni.

Alla luce delle presenti considerazioni la sperimentazione effettuata ha avuto l'obiettivo di facilitare la motivazione, per mezzo di sistemi di *gamification* e al contempo di stimolare la partecipazione collettiva alle attività di

discussione in classe. Mentre, per quanto riguarda gli obiettivi specifici (fase 3 "La strutturazione dell'esperienza"), sono stati individuati gli elementi grammaticali del livello A1 che risultavano essere più ostici per gli apprendenti: gli aggettivi possessivi, l'accordo del soggetto con il verbo, i verbi modali e alcune funzioni comunicative. Su questi indici linguistici sono state preparate delle attività di ripasso e di rinforzo.

Relativamente alla selezione del software da utilizzare è stato scelto *Kahoot*: si tratta un applicativo gratuito disponibile online e piuttosto facile da usare. *Kahoot* offre più di una tipologia di esercizio e prevede un sistema *game* basato sul tempo e sulla classifica dei "vincitori" con un'efficace visualizzazione dei primi tre classificati. L'applicativo fornisce anche in tempo reale un *report* dettagliato sulle risposte degli utenti. Il *timer* e la musica incalzante creano un ambiente stimolante e di sfida dell'attività presentata. Per utilizzare il software è necessario che gli studenti dispongano di un *mobile device*, come per esempio uno *smartphone* dal quale possono inviare le loro risposte. Inoltre è necessario che l'aula sia dotata di LIM o di videoproiettore su cui vengono proiettate le domande e i risultati, permettendo a tutta la classe di seguire in tempo reale lo svolgimento delle attività.

Nella presente sperimentazione sono state proposte quattro sessioni di *gaming* (Tabella 2), a distanza di alcuni giorni le une dalle altre nell'arco dei tre mesi di corso, con l'obiettivo di aiutare gli studenti a fissare e a rivedere alcuni degli indici linguistici trattati a lezione.

Sessione 1	Sessione 2	Sessione 3	Sessione 4
5 item:	10 item:	6 item:	4 item:
funzioni comunicative	possessivi	accordo S-V	verbi modali

Tabella 2 - Attività della gamification.

In ogni somministrazione (S1-S4) è stata proposta una batteria di esercizi ciascuna delle quali aveva una quantità di tempo calcolata in base alla complessità degli item. Poiché il software permette la regolazione dell'avvio di ciascun item, tra l'esecuzione di un item e dell'altro della batteria è stato scelto di dedicare del tempo all'analisi, al commento dei risultati e all'esame delle risposte sbagliate. Quest'ultima fase di analisi è risultata particolarmente significativa ed efficace in quanto ha visto la partecipazione di tutti gli studenti, e in particolar modo ha evidenziato una reale e attiva collaborazione tra i membri. Con *Kahoot* gli errori, infatti, sono visibili a tutti ma non è visibile chi ha commesso l'errore, mentre all'insegnante, in qualità di creatore delle attività, è di-

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sponibile un report finale che permette un'analisi dettagliata delle performance della classe e l'eventuale recupero del singolo studente.

Tuttavia il *feedback* immediato e indistinto sugli "errori del gruppo" si è rivelato particolarmente utile e efficace nell'analisi delle criticità: ha permesso di procedere in ulteriori spiegazioni dei punti critici e di attivare la strategia tipica del gioco "try again" che stimola in modo costante la sfida, anche con se stessi. Il poter riprovare con gli esercizi successivi senza dover attendere la conclusione di tutta batteria delle attività ha permesso ai singoli studenti e all'insegnante di verificare in tempo reale se le criticità venivano via via superate. Grazie a questo modo di procedere, per l'insegnante è stato possibile intervenire non solo sul prodotto dell'apprendimento ma anche e soprattutto nelle fasi di processo attraverso una discussione e un'analisi di gruppo di tipo metacognitivo.

Durante le attività proposte è stato rilevato un elevato grado di coinvolgimento degli studenti sostenuto dal desiderio di vincere la sfida. La partecipazione attiva e l'elevato coinvolgimento, incoraggiato dalla sfida, sono risultati essere degli elementi portanti nello sviluppo sulla motivazione nell'apprendimento linguistico. La sfida insita nel gioco, infatti, tiene alta la motivazione degli studenti. In particolare, in un recente studio di Zarzycka-Piskorz [8], condotto su 112 studenti a cui sono state sottoposte delle attività di gamification con l'utilizzo di Kahoot è emerso che proprio il desiderio di vincere è stato l'elemento trainante nello svolgimento di tutte le attività condotte: "in the online game context intrinsic motivation is enhanced by the perspective of winning and/or getting a reward. The win as drive to play a language game cannot be underestimated" [8].

Infine, a conclusione del corso gli studenti hanno sostenuto il test finale e, dall'analisi della sezione grammaticale, è emerso che tutti hanno ottenuto un buon punteggio in quegli aspetti grammaticali sottoposti alle attività di *gamification*.

Anche se, secondo quanto affermato da Wendy et al. [1], la gamification "is indipendent of knowledge or skills [but] gamification directly affects engagement and motivation and it indirectly leads to acquiring more knowledge and skill. Gamification encourages students to perform an action", questa prima sperimentazione suggerisce di avviare uno studio di caso sistematico sulla gamification della grammatica confrontando il risultato con un gruppo di controllo sottoposto ad un insegnamento tradizionale per verificarne l'efficacia sotto il profilo quantitativo e attraverso la somministrazione di questionari di gradimento delle attività per testarne anche il coinvolgimento sul piano emotivo.

#### 4. Conclusioni

Dall'esperienza illustrata è emerso che la *gamification* presenta numerose potenzialità nella didattica delle lingue, infatti, è in grado di favorire non solo l'apprendimento *tout court* ma anche il coinvolgimento degli apprendenti sia nella loro sfera sociale, attraverso la sfida (lavoro individuale nello svolgimento degli esercizi online) e al contempo la cooperazione (aiuto reciproco nell'analisi dei risultati), sia nella loro sfera emotiva, attraverso una partecipazione intensa alle attività in grado di suscitare un ampio ventaglio di emozioni quali felicità, gioia, insoddisfazione e rabbia in un ambiente protetto, quale è la classe, emozioni che vengono condivise con il gruppo.

Nel complesso, dalla sperimentazione è emerso che la *gamification* ha reso lo svolgimento delle attività grammaticali in classe più stimolante per tutti, in particolare uno dei maggior benefici evidenziati è stata la fase di correzione che è risultata essere più efficace grazie alla visualizzazione in tempo reale, e al tempo stesso collettiva, dell'andamento delle risposte degli studenti, ha permesso, infatti, a tutti insieme di tenere sotto controllo gli errori, di mettere in risalto le difficoltà (attraverso la visualizzazione delle risposte corrette e sbagliate) senza però stigmatizzare colui o coloro che sbagliavano.

La sperimentazione ha evidenziato l'efficacia di una didattica in grado di favorire momenti di attività individuale o di coppia in cui gli studenti si misurano con le proprie competenze/conoscenze attraverso lo svolgimento individuale degli esercizi, e momenti di collaborazione e di reciproco aiuto (fase di analisi dei singoli risultati e spiegazione mirata dei *feedback* di ciascun item).

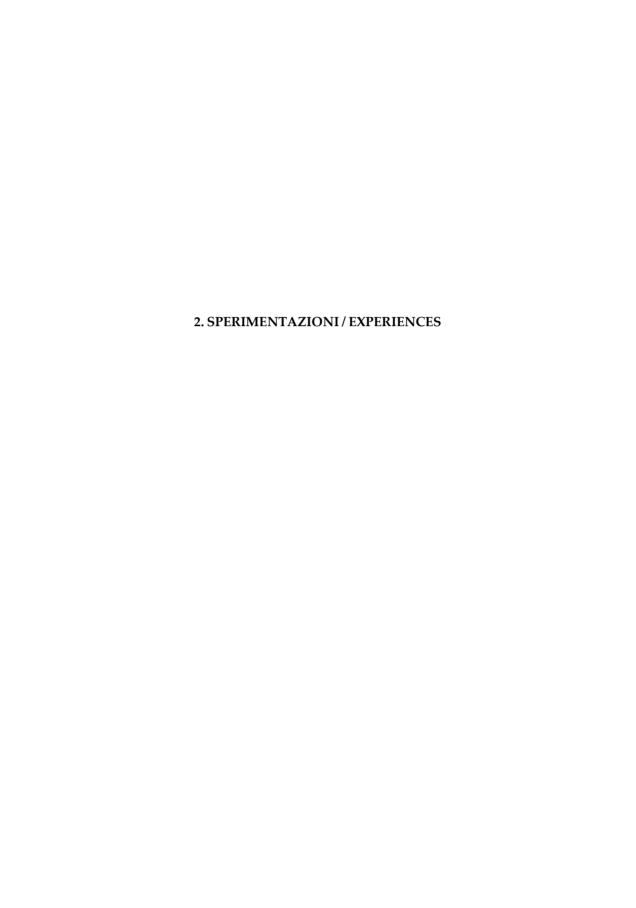
La collaborazione di tutti gli studenti nel cercare di risolvere le difficoltà di coloro che avevano evidenziato degli errori ha permesso loro di superare l'impasse raggiungendo l'obiettivo dato (conoscenza e applicazione delle regola) alla fine della batteria delle attività somministrare; infine durante l'uso della gamification si è osservato che l'atteggiamento degli studenti impegnati nelle attività era chiaramente un atteggiamento di interesse e partecipazione attiva, la concentrazione degli studenti era massima, l'interesse a capire gli errori durante il *feedback* era reale in quanto ha portato tutti gli studenti a migliorare le proprie performace.

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## FRANCESCA MAGNONI\*, ALESSIA PLUTINO\*\*

# ENGLISH FOR ACADEMIC PURPOSES: A STRATEGIC MOOC FOR THE MOVE-ME PROJECT ON THE FUTURELEARN PLATFORM. SOME CONSIDERATIONS AFTER THE FIRST PILOT

#### Abstract

This paper presents the English for Academic Purposes (EAP) Move-Me MOOC, part of the Move-Me project, financed by the European Commission under the Erasmus+ programme and delivered on the FutureLearn platform. The paper begins with an overview of FutureLearn learning design principles and focuses on how these have been integrated by the MOOC designers into their pedagogical approach. The paper then discusses the theoretical approach used as the main pedagogical framework for the EAP Move-Me MOOC as well as its implementation. This is followed by an overview of how the Cognitive Academic Language Learning Approach (CALLA) was applied, and finally by reflections on the provisional results of the first pilot of the EAP MOOC, which took place in June 2017.

#### 1. Introduction

Student mobility in European third level education has been recently characterised by an exponential growth. Students on mobility programmes usually have a B1/B2 CEFR¹ language entry level that, while allowing them to cope well with everyday communicative situations, leaves them with a competence gap when it comes to interacting meaningfully in academic contexts. The Move-Me project (acronym for MOoc for uniVErsity students on the MovE in Europe) was designed to compensate this disparity: the project aims to develop and enhance students' skills in academic and specific discipline contexts, with a focus on negotiation in the target language (TL) and on the development of learning to learn strategies and skills. More specifically, learners are supported in understanding how academic texts are structured and in acquiring the necessary skills for both reception and production of written and oral academic texts, relating to specific disciplines. Skills and abilities are developed and reinforced through sets of activities that help learners to become aware of the learning strategies they activate when working on a certain type of input.

Project outputs include several specifically designed MOOCs (Massive Open Online Courses), one in English and four in Italian. They are available

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 $<sup>^{\</sup>rm 1}$  Common European Framework of Reference for Languages, Council of Europe, 2001.

on the online educational platform FutureLearn and were developed by a pool of experts belonging to a number of European institutions: University of Siena (project management) in collaboration with The Open University (UK), the National University of Ireland, Galway (IRL), the Computer Technology Institute (GR), the Federazione Nazionale Insegnanti Centro di Iniziativa per l'Europa, , (IT), and the Institutul de Stiinte Ale Educatiei, Bucarest (RO). The use of MOOCs guarantees a self-paced learning experience for students on the move who will be able to complete six self-study units in either English or Italian, focusing on communication, functional academic skills and language structures. Although each unit is mainly based on independent study, there is also a strong emphasis on interactive, collaborative and peer learning activities.

This article will focus mainly on the English for Academic Purposes (EAP) Move-Me MOOC describing the platform on which the course is delivered and the main methodological framework on which the EAP course design is based.

# 1.2 FutureLearn platform

All the Move-Me MOOCs are hosted on the educational platform FutureLearn. This is a private company owned by the Open University, one of the Move-Me project partners. It offers online courses delivered by leading universities and cultural institutions from around the world. As we write, there are over 135 partners who collaborate with FutureLearn and amongst these are many of the best UK and international universities, as well as institutions such as the British Council, the British Library and the British Museum [1].

FutureLearn launched its first course in September 2013 and since then the platform has attracted over six million learners which have embraced and made good use of its pedagogical approach, who is based on a social constructivist pedagogy with a specific focus on Conversational Framework [1].

An important contribution to Conversation Theory applied to the design of learning technology was provided by Diana Laurillard who states "[...] There is no escape from the need for dialogue, no room for mere telling, nor for practice without description, nor for experimentation without reflection, nor for student action without feedback". [2]. Accordingly, effective teaching comes from conversation. But what is conversation in teaching and learning? In order to create a 'conversation', the learner must be able to:

- formulate a description of him/herself and his/her actions;
- explore and extend that description;
- carry forward the understanding to a future activity.

In order to learn, a person or system must be able to converse with itself and others about what it knows [3].

FutureLearn approach to learning is based around a three-step process of mediating knowledge and meaning: it begins by telling stories as an invite for learners to think and reflect about specific questions, which are asked to instigate and facilitate the learning process: "what is the story here?" "how does this one artefact further the story?" [4].

Each question on FutureLearn courses is a preamble to a very specific syntactic shape of teaching and learning: each told story (course) has a clear beginning, a middle and an end, constituting the framework of the course. Most importantly though, stories are used not merely to describe, but rather to "capture the complexity, specificity, and interconnectedness of the phenomenon". [5].

By doing so, the teaching framework moves away from the earlier traditional atomistic and positivistic teaching approaches [5] to implement a more holistic one. Learners take an active part into the learning process, and the syntactic structure adopted by FutureLearn, in conjunction with the subject matter, "allows for or encourages the projection of human values upon this material". [6].

However, the above-mentioned principles rely on a rather rigid structure in terms of practical activities. To overcome the structural rigidity of the Future-Learn platform, the course designers of the EAP Move-Me MOOC decided to introduce external tools and develop activities based on an inductive approach. This would allow learners - using exclusively the TL - to interact with their colearners on specific inputs in order to reflect on their own learning strategies and build a more dynamic and open collaboration with their co-learners.

The EAP Move-Me MOOC can be considered a "hybrid" for this very reason: by adapting inductive approach activities to the rigorous structure of the FL platform (Weeks, Activities, Steps), the EAP Move-Me MOOC represents the first Language MOOC (LMOOC) to reflect some typical features of xMOOCs combined to a constructivist and connectivist approach for its content delivery.

It cannot be considered a proper cMOOC – as the main course runs on the FutureLearn platform and the use of external websites or blogs is not a basic requirement for the completion of the course. [7] Instead, the EAP Move-Me MOOC, thanks to highly interactive activities, increases learners' chances to become a source of knowledge and further explanation for their peers.

# 3. Methodological framework

The main pedagogical objective of the EAP Move-Me MOOC, which can be defined as an LMOOC, is the negotiation of academic discourse in the TL and the development of awareness of learners' metacognitive and learning skills. The course designers (NUI Galway and The OU, UK) devised activities that aim not only to inform learners about the peculiarities of written and oral academic texts, but also, thanks to the organisation of visual, audio and written inputs, to make them aware of their own learning strategies when fulfilling listening, reading, writing or speaking tasks. We refer to learning strategies as cognitive tools as they represent an essential cognitive apparatus for digital learners, in particular for MOOC participants. By getting to know their own learning style and becoming aware of their response to a specific task, they are more likely to increase their autonomy as learners, enhancing the opportunities for meaningful negotiation, while optimising their study pace.

All Move-Me MOOCs are based on a six-week structure. Week 1: Introduction to the MOOC; Week 2: focus on listening skills; Week 3: focus on reading skills; Week 4: focus on writing skills; Week 5: focus on speaking skills; Week 6: Conclusion.

Cognitive Academic Language Learning Approach (CALLA), devised by Chamot and O'Malley in the late 1980s is the main methodological framework of reference for the creation of the EAP Move-Me MOOC [8]. The two authors define learning strategies as "complex cognitive processes", claiming that: "Mentally active learners are better learners. Students who organise new information and consciously relate it to existing knowledge should have more cognitive linkages to assist comprehension and recall [...]. Strategies can be taught. [...] Learning strategies transfer to new tasks. [...] Academic language learning is more effective with learning strategies." [8].

The CALLA theoretical principles suit perfectly the pedagogical aims of the EAP Move-Me MOOC, especially since "the purpose of CALLA is to provide a broad framework for using language to learn through the integration of language and content. [...] A CALLA curriculum includes a sample of high-priority content topics that develop academic language skills appropriate to the subject area at the student's grade level." [8].

The "integration of language and content" for our MOOC is evident in the different activities suggested in the six Weeks (units) which aim to challenge and motivate leaners using the TL. In addition, four of the most relevant principles of Ellis' Task Based Language Teaching approach (TBLT) were applied by course content designers to the creation of inputs in the various Steps (exercises):

- "1. The primary focus should be on 'meaning' (by which is meant that learners should be mainly concerned with processing the semantic and pragmatic meaning of utterances).
- 2. There should be some kind of 'gap' (i.e. a need to convey information, to express an opinion or to infer meaning).
- 3. Learners should largely have to rely on their own resources (linguistic and non-linguistic) in order to complete the activity.
- 4. There is a clearly defined outcome other than the use of language (i.e. the language serves as the means for achieving the outcome, not as an end in its own right)." [9].

As previously mentioned, in order to compensate for the limited availability within the platform of more flexible and interesting opportunites for learners to interact, the EAP Move-Me MOOC course designers used external tools like Mentimeter (www.mentimeter.com) and Typeform (www.typeform.com), providing additional options for learners to collaborate. For example, in Week 1 Mentimeter was used to engage learners in the definition of the term "academic" after an acivity that involved watching a video. Learners were asked to select three words that they connected with the idea of "academic" and enter them on Mentimeter. All answers were collected to create a word cloud, hence providing a guick and visual representation of learners' inputs as well as a different type of activity from traditional FutureLearn ones. Tyform was instead used for a self-assessment activity: once again, learners were asked to reflect on some statements and decide how well they felt they performed in a particular task (very well, quite well, satisfactorily, poorly, not at all), this helped them to activate metacognitive skills and share thoughts with their peers. Once again, this added variety to the more structured activities, improving selfreflection and auto-evaluation.

# 4. Methodological framework implementation (on the FutureLearn platform)

The implementation of the theoretical approach described above is visible in the structure of the weekly Steps, designed in such a way that learners' prior knowledge was always the main starting point of an activity: new knowledge was achieved through initial formulation of hypotheses and their subsequent verification (inductive approach and pragmatic use of English), which gradually led learners to a more analytic approach to new information.

For instance, in the Activity section of Week 2 "Practicing Listening Strategies with Scientific Texts" the Steps 2.1 and 2.2 have these very explicit titles: "Prediction" and "Confirming Predictions".

Learners are asked to focus on the first few minutes of a scientific lecture video and guess what the lecture is about. They are asked to activate consciously their predicting skills and guess the main content from images, words, gestures, setting. Subsequently they are provided with answers to check their predictions. The Activity, in the same Week, introduced by the title: "Practicing Listening Strategies with Literary Texts" contains Steps 2.14 and 2.15, which go by these titles: "Inferring" and "Listening for the main idea"; Steps 2.16, 2.17 and 2.18 read: "Extracting Specific Information", "Sentence-level understanding", "Word-level understanding". This shows how the content of each Step is sequential, following a Teaching Unit (Unità Didattica) [10] structure which invites learners to recall their background knowledge about a topic and gradually move towards a more analytic cognitive process. Therefore, the input content in the EAP Move-Me MOOC not only refers to the peculiarity of academic discourse but challenges the learners to get personally involved in the learning process reflecting on their own listening, reading, writing and speaking strategies whilst approaching an academic text in a specific discipline, its structure and features.

Questions to be answered in the "Comments" section at the end of most Steps, mainly ask learners to reflect on which strategy they used to complete the task, if they can could describe it in their own words and if it was their first time using it – and if it was useful – or if they were already used to working in that way for that type of task.

Learners are also invited to reflect on the input, provide their interpretation and discuss it with their peers using the TL, so that they become part of the content and multipliers of knowledge. In this way the important role of conversation as input for significative teaching and learning is preserved and promoted as a collaborative peer-to-peer learning tool.

#### 5. Data

The data analysis following the first pilot course (June 2017) has shown results in line with other MOOCs completion rate and retention, "massive open

online courses have gained renown among academics for their impressive enrolment figures and, conversely, their unimpressive completion rates." [11].

A report dated July 2017 showed that the EAP Move-Me pilot course attracted 4,245 learners (users of any role who viewed at least one step at any time in any course week) but only 276 learners marked at least 50% of steps complete and 108 marked at least 90% of steps complete. To provide more info about the typology of learners, 2,714 were active learners, i.e. those (of any role) who completed at least one step at any time in any course week and 1,224 were social learners, i.e. those (of any role) who posted at least one comment on any step [12].

An analysis of enrolment by country shows a predominance of learners from the UK (9%), followed by Egypt and China (6%) which seems to confirm that learners interested in this MOOC where mainly UK based, either attending Higher Education institutions or planning to [12].

The vast majority of learners completed the EAP Move-Me MOOC activities "from home", followed by "at work" and "public place" modality. For what concerns learners' motivation, there is evidence of a strong emphasis on developing practical skills that they can eventually use in academic studies. This is in line with course designers' expectations for such a sector-based MOOC and the type of learners.

A comparison between the pre-course and post-course questionnaires highlighted an extremely positive and encouraging learners' response, confirming that the methodological and pedagogical approaches adopted did indeed meet learners' need and expectations. Comments were appreciative about course outcomes in terms of knowledge and practical skills acquired. 44.12% of post-course survey respondents rated the overall experience of the course as excellent and 44.12% as good, so much so that 34.29% of the respondents felt extremely likely to recommend this course to a friend or family member and 37% felt extremely likely to recommend it to a colleague [12].

### 6. Conclusion

In this article we discussed the design and implementation of the EAP Move-Me MOOC, which -we feel- can be regarded as a novelty in the LMOOC landscape as it offers sets of activities based on an inductive approach, placing the learner at the centre of the learning process. Authors have provided examples of additional external tools used in order to overcome FutureLearn limited range of activities and add more

varied opportunites for learners' own and peer engagement. Lessons learnt from the pilot will inform future course runs and will be used to formulate guidelines applicable to different languages and in different contexts. The Move-Me project also includes the creation of an online repository of Open Educational Resources (OERs) and templates. The EAP Move-Me MOOC will remain available for future deliveries by the partner organisations and has the potential to become a milestone in students' preparation in view of mobility exchanges. The number of MOOCs is constantly expanding and LMOOCs need special attention in terms of content design. Learners should be helped to develop a holistic approach to learning in order to increase the chances of significative cognitive activity in their learning process: being aware of their own skills and abilities optimises the chances of meaningful deep language acquisition.

The EAP Move-Me MOOC can be considered as an initiator of a hybrid type of LMOOC, where the formal structure of xMOOCs platforms provides a series of activities and inputs following an inductive approach; the choice of integrating language and content, inviting learners to work on the TL using the TL – in specific academic contexts – increases the chances of improving their language proficiency while working on specific inputs and negotiating the meaning with their peers. More studies are needed in the LMOOCs field and the EAP Move-Me MOOC provides relevant data for case-studies and quantitative and qualitative research thanks to the data collected following the first two runs of the courses.

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# DIVERSITY OF LEARNING RESOURCES AND THEIR IMPACT ON THE LEARNER EXPERIENCE: DESIGN AND EVALUATION OF A CZECH LANGUAGE MOOC

#### Abstract

We present an insight into the design and evaluation of a Czech language MOOC published by Inalco in 2017 on France Université Numérique with almost 3,000 subscribers and 400 certificates delivered. The learning scenario and the four different types of instructional videos used in the course are discussed in the light of the learners' feedback.

#### 1. Introduction

In this paper we present our experience of developing and evaluating a language MOOC at Inalco (National Institute for Oriental Languages and Cultures) in Paris, France, a higher education institution offering courses and providing research on more than one hundred languages. In 2013, Inalco launched a project called *Kit de contact en langues* with the support of the Université Sorbonne Paris Cité and the French MOOC platform France Université Numérique (FUN, http://www.fun-mooc.fr). The goal of this project was the development of language MOOCs intended for the French-speaking public wishing to discover a country or an area as tourists and acquire some very basic notions of its language and culture. There are eight languages involved in this project, three of them – Arabic, Chinese and Czech – have already been published since the start of the project in November 2016.

# 2. Czech as foreign language and student mobility

Czech is a Slavic language with a rich nominal inflection and a verbal system governed by the lexico-grammatical category of aspect. It is spoken by almost 11 million people, mainly in the Czech Republic, which has been a member of the European Union since 2004.

In this regard, it is important to remember that mobility within the EU also concerns those countries whose languages fall into the category of

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less widely used or less taught languages. To give some data concerning Czech, according to UNESCO (http://data.uis.unesco.org), in 2013, the Czech Republic ranked ninth among EU countries in regards to the number of foreign students enrolled at Czech universities. The inbound mobility rate – the percentage of foreign students – is 10.5%, which is higher than the European average.

Besides the fact that in the Czech Republic there is a large number of courses delivered in English, it seems that there exists a real demand for Czech as a foreign language, not only at universities but literally in all other socio-professional domains. We believe that language MOOCs have a great potential to provide an efficient entry point especially into the so-called 'small' languages and cultures. For those languages, MOOCs may even represent the most accessible way to learn the basics in comparison with face-to-face training – either for reasons of availability, financial reasons or because of the geographical dispersion of the persons interested in such learning.

#### 3. First session and learner motivation

The Czech MOOC was delivered from 20th February to 9th April 2017, attracting 2,953 learners. Compared with the other MOOCs in the project, which achieved 12,700 learners for Arabic and 9,800 for Chinese, this is a very good result, and it would be even better if the language of instruction were not French but English, because of the larger number of English-speaking learners.

The participation curve in the course represents a typical figure with attrition over time. Learners who obtained their certificate of participation, requiring a score greater than 50% in all rated exercises, represented 13% of the total (374 learners), which compares favourably with other MOOCs (cf. [1] [2]).

As for the learner profile and reception of various aspects of the course, we will now discuss data from two questionnaires: (1) the initial survey – filled by the 1,012 learners who actually started the course; and (2) the final survey – filled by 274 learners who completed the entire course.

The data from the initial survey shows us that the majority of learners registered for pleasure, simple curiosity or a desire to discover the Czech language or culture (54%); followed by those who did it for family reasons (18%). Those who registered with an explicitly stated motivation such as tourism were not as many as expected during the development of the

course (13%) and only 12% enrolled for professional reasons, for a study trip or because they wished to integrate into the life of the country. We can see therefore that learner motivations were more varied and less focused than the initial model-learner (the potential tourist).

# 4. Pedagogical scenario

Different learning resources used in the course are structured in a pedagogical scenario whose detailed definition was the very first step in our work. Two major factors determined its architecture: (a) the communication goals and (b) the required learner workload.

As for the communication goals, there are five themes, in common with all the MOOCs in the Inalco project, that cover the basic situations for someone who visits a country as a tourist: (1) presenting oneself, (2) booking accommodation, (3) buying tickets and travelling, (4) purchasing gifts, souvenirs and food, (5) placing an order at a restaurant.

For the definition of a learning scenario based on these themes, we started by considering the theoretical workload which is typically required in MOOCs: around 5 or 6 hours per week (e.g. [3]). However, this is a considerable amount of time, given that the average MOOC learner either works or studies full-time, as in our case (57% of participants held a full-time job and 18% were learners). Data concerning the learners' real workload as they expressed it in the final survey will be shown later.

While building the scenario, the five themes were spread over five weeks, each requiring five hours of workload (approximately one hour per day except weekends). The specific programme for different weeks and different sections was filled by more specific sub-themes, which are authentic communication situations (e.g. *Hello, I don't understand, How can I get to ...* etc.)

As for the introduction of different grammar points, by and large we followed the recommendations of the European Framework as defined for the very first stages of A1 level of Czech [4]. Regarding the length of the course and the required workload, we restricted the vocabulary to some 250 words (corresponding therefore to about 10 new words per day).

In order to help the learners to organise their learning over time, we suggested dividing the course into days. Naturally, the different sections can be accessed at the learner's own pace and speed. However, we consider that regular work (approximately one hour of learning per day) can have a positive effect, especially in language learning.

Concerning a programme for a specific day, we established that there would be a maximum of twenty minutes of videos per day and forty minutes left for other individual work, like doing exercises, participating in the forum, reviewing the videos and so on. Finally, we segmented the programme of a section/day in a number of slots no longer than 5 minutes and provided a detailed description of each unit. Only then did we start shooting the various videos.

As for the learning progression, learners are supposed to follow the programme established by the scenario, so the different resources are accessed in a linear order because of the intrinsic cumulative nature of language learning, especially in its first stages. In this respect we are actually in the case of the classical, instructivist pedagogical approach as defined in opposition to the connectivist approach (e.g. [5], [6]), so influent in MOOC pedagogy. By the way, the xMOOC oriented architecture of the edX engine used on the French MOOC platform is well adapted for this. We argue that in a language MOOC for beginners, this strategy may be the optimal choice as there is a cumulative knowledge that must be learned progressively and the learner has to be guided in order to be exposed to different points in an appropriate way, based on research in Czech as foreign language, e.g. [7].

# 5. Instructional videos

There are four different types of instructional videos in the Czech MOOC, which we will discuss in this chapter.

#### 5.1 Sketches

The first video consists of sketches (Figure 1) with very short dialogues, mostly no longer than three or four sentences, which represent some common communication situations in order to expose the learner to the oral language and to introduce the different points of grammar and vocabulary.

Sketches are played out using puppets, and this reflects a rich tradition of puppetry in the Czech Republic. Moreover, by using an unusual and sometimes even humorous representation of a common communication situation, we wanted to reinforce the memorisation of different phrases and expressions. In this respect, each dialogue is also replayed several times, at different speeds and with or without Czech or French subtitles, which are hard-coded in the videos.



Figure 1 - Some situations represented in sketches.

#### 5.2 Screencast with theoretical courses

The second type of videos are screencasts with theoretical information concerning the grammar, vocabulary and culture encountered in the sketches (Figure 2). We decided not to film the speaker, so there is no talking head in our course, which makes it different from many other MOOCs. Instead, we use animations and other graphic features in order to make the presentation of grammar livelier.



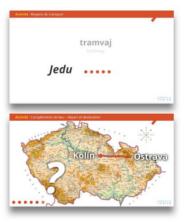
Figure 2 - Examples of theoretical videos.

#### 5.3 Screencast with activities

The third type of videos are screencasts with self-evaluated activities for oral production and comprehension (Figure 3). Those videos are based on theoretical presentations and give learners the opportunity to acquire basic communicative skills: they have to repeat, answer questions, solve some easy communication tasks, etc.

Each topic developed in the videos is accompanied by written exercises. These exercises are rather rudimentary, most of them are simple fill-in-the-blanks or multiple-choice exercises. For future runs, we intend to propose more varied exercises, especially for oral comprehension, even if the edX platform seems very poorly optimised for language exercises in general. For example, the default setting doesn't allow creators to properly set fill-in-the-blank exercises (the field to fill is by default on a new line) or to create a simple drag-and-drop exercise.





**Figure 3 -** Examples of screencasts.

# 5.4 Complementary linguistic seminar

Finally, we provided a complementary linguistic and cultural seminar (Figure 4). These courses – called Mookeries – take place on Saturdays. They are optional and are not included in the learner assessment. These presentations place the content of the basic course in a wider theoretical context by bringing a more explicit linguistic point of view and also take into account other Slavic languages and the comparative perspective.

Introducing such a specialised seminar in a course for beginners is justified by the fact that, according to our survey, the learners have a very rich experience with language learning: one third of them say they have already learned two languages, and more than half of them have learned three or more.

This is an interesting fact for the appreciation of the pedagogical approach we have adopted and which is based on explicit presentation of grammar rules and language system. We believe that such an approach is truly required because of the intrinsic complexity of Czech as a foreign language.

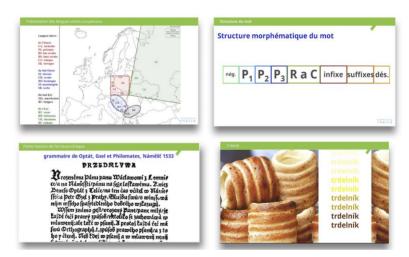


Figure 4 - Examples of complementary seminar.

# 6. Learners' experience

The learners' appreciation of different types of videos was one of our main interests in the final survey because we consider this information as necessary feedback in order to refine the course for future runs. The overall evaluation obtained from learners' comments concerning each type of video is represented in Table 1.

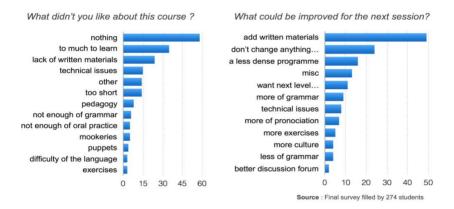
Appreciation	Sketches	Theoretical presentations	Activities	Complementary seminar
positive	78%	84%	81%	54%
rather positive	5%	9%	4%	13%

neutral	2%	4%	1%	17%
negative	14%	4%	14%	16%

Table 1 - Learners' appreciation of instructional videos.

There is evidence that the evaluation is quite positive, mainly for the basic theoretical courses, but even the optional linguistic seminar is rated positively or rather positively by almost 70%.

More details about learners' opinions can be read in the answers to the two open questions in the final survey represented in Figure 5.



**Figure 5 -** Data from final survey reflecting learners' feedback.

Among others, we can see that two major problems are pointed out: (1) the lack of written materials and (2) the amount of information or density of the course.

# 6.1 Lack of written materials

The demand for written materials based on theoretical videos appears repeatedly. Actually, during the development of the course, we made the choice to not provide this resource. The main reason was that we consider taking notes as an important means of learning and memorising and feel that this is easier during a MOOC than in a classroom because a video can be easily stopped or rewound. However, in the questionnaire and in the forum, many learners asked for it, which reflects, in fact, a desire to have even more traditional, pedagogical materials.

# 6.2 Density of the course

As for the density of the course, we realised unfortunately that the rhythm imposed, with 20 minutes of videos per day, was quite demanding for a significant number of learners. Spreading the existing programme over an extra week or two could possibly have a positive effect.

We explicitly asked in the final survey about the workload which was theoretically established at 5 hours per week. More than half of the learners (51%) spent more time, between 5 and 10 hours per week and 11% of them even more. It seems that despite all the efforts we made in choosing only the very essential grammar and really basic vocabulary, we still rather underestimated the workload. At the same time, 87% of learners indicated that their effort was completely or fairly consistent with what had been announced and 97% reported being completely or fairly satisfied with what they had learned given the time invested.

These answers obtained in the final survey are, of course, very satisfactory. However, the above, including the overall positive learners' statements about the quality of instructional videos, should be placed in context: we must stress that positive feedback was given by learners who completed the entire course and therefore represent the most motivated population, which is perhaps more capable or more willing than others to overcome certain difficulties. Unfortunately, we don't have the opinions of those who left the course before it ended.

# 6.3 Use of the forum

Finally, a few words about the forum. Learners used it in quite a traditional way, mainly to introduce themselves and their motivation and to ask questions about the content of the course. Except for the presentation, we hadn't asked explicitly to participate in the forum and it wasn't part of the assessment.

Meanwhile, in future runs, we would like to make better use of the social, collaborative dimension of the forum, which has remained under-exploited during this first run. For example, we would like to encourage learners to express themselves in Czech directly in the forum. At the beginners' level, it is quite a difficult task and the proposed activities must be simple and well controlled as for the grammar and vocabulary to be used. We are also considering offering the possibility of posting audio files recorded by learners, and in this way, introduce some form of peer-to-peer evaluation of oral production.

#### 7. Conclusion

In conclusion, we would like to argue for the pertinence of the choices we made while building our MOOC. We consider that the use of a large spectrum of pedagogical means, ranging from a practical communicative approach to the theoretical presentation of the broader linguistic system, is required because of the intrinsic complexity of Czech as foreign language. The diversity of approaches is also justified by the effective heterogeneity of the audience and our desire to satisfy as many learners as possible.

Finally, we would like to repeat that MOOCs represent a great opportunity for those who want to learn the basics of a language. As teachers, we found that MOOC learners can be really motivated, hard-working and very grateful.

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## ANTONIO RAMOS\*, BEATRIZ SEDANO \*\*

# SPANISH IN A DAY NANOMOOC, A SOCIAL MEDIA PRACTICE FOSTERING SOCIAL INCLUSION, MOBILITY AND MULTILINGUALISM

#### Abstract

Spanish in a day is a NanoMOOC intended for those participants who competed in an online video contest open to Spanish students worldwide. Its instructional design followed a flexible and modular structure that catered to the needs of students from different backgrounds and fostered mobility and social inclusion of refugee students living in Spain.

#### 1. Introduction

Spanish in a day (www.spanishinaday.com) is a web project organised by Con C de Cine (www.concedecine.com) in collaboration with and sponsored by Cursos Internacionales-Universidad de Salamanca, Cursos Internacionales-Universidad de Santiago de Compostela, Centro Superior de Idiomas-Universidad de Alicante, among other Spanish higher education institutions and publishers. The project was inspired by Life in a day, a documentary film produced by Ridley Scott and directed by British filmmaker Kevin MacDonald, which captured for future generations what life was like on Earth on 24th July, 2010. In an attempt to shape that audiovisual concept into a foreign language pedagogy framework, we set forward an online film festival that would encourage students to shoot a video as they carried out their daily-life activities and talked about them in Spanish. In this regard, Spanish in a day (SID) became the first online video contest ever intended for Spanish language students worldwide. Our initiative arose from the need to engage students of Spanish using a humanistic approach, which included the use of ICT and social networks in order to expand the physical limits of the language classroom.

As a result of two consecutive calls for videos in two annual editions so far (2016 and 2017), we received over 75 video submissions produced by 225 participants from 40 countries. In order to evaluate these productions in a more harmonised way, we created 3 different categories in alignment with the CEFR [1] levels: *A de Acción* (A1-A2 levels, 3-minutelong video recordings), *B de Butaca* (B1-B2 levels, 4-minute-long video recordings) and *C de Cineclub* (C1-C2 levels, 5-minute-long video record-

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ings). Prior to the video production, all students had to take an online test so that they were placed in the right category. Parallel to the contest official section, there were 2 special awards: *I de Intercultura* (a prize for the best intercultural production) and *P de Producción* (a prize for the best collaborative production). In the second edition, these special awards were subsumed under the three main categories, so that all students were required to produce an intercultural and collaborative video in accordance with the new contest rules.

The video assessment criteria were made explicit to the students through 5 descriptor scales – communicative, linguistic and interactive competencies, originality and creativity – divided into 4 bands each. As for the 2 special awards, we specifically designed 2 rubrics: one was based on an intercultural communicative competence scale [2] and the other one on a set of features describing role performance, positive interdependence and autonomous/collaborative learning, adapted from the Cervantes Institute's Curricular Plan [3].

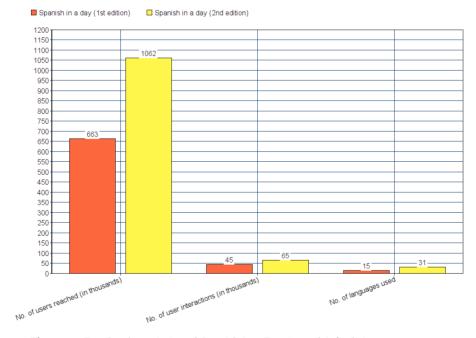
# 2. Bridging the gap between social and virtual practices

In this increasingly global world we live in, language learners must adapt to a complex reality that requires more and more mobility, in both physical and virtual spaces [4]. At the same time, contact between the target culture and the culture of origin should happen within social practices that are motivating for and familiar to the learner (Szende, 2014). To this end, our video competition was conceived within a highly motivating framework that would encourage students of Spanish to participate in the contest from all over the world, by virtue of a series of prizes that included full-board scholarships and tuition waivers to learn Spanish in Spain, course certificates, instructional materials, T-shirts, etc.

In an attempt to democratise the selection process, we published the shortlisted video entries on Facebook and set up a popular vote stage that took place from 1-10 June, 2017. All finalist videos were shortlisted by a jury made up of 3 members from each of the collaborating partners. As for the second edition, 18 videos were published on Facebook so that Internet users could vote for them. The winners for each category were those who got a higher score as a result of the jury's evaluation (60%) in addition to the total number of "Likes" recorded on Facebook (40%). In doing so, our social media practice tried to cater to the language learners' preferred ways of communicating and interacting with their peers in a more familiar and meaningful way. In this regard, Facebook was selected among other social media be-

cause, according to a recent report published by the Cervantes Institute [5], it is the most widely-used network. The data in this report show that almost 19% of Facebook users publish and share content in Spanish, thus becoming the second most used language in this social network, only surpassed by English users (46%)

All in all, the social media interaction revolving around Spanish in a day played a key role not just in terms of the contest outcome – Internet users voted for their favourite productions among 3 finalists shortlisted for each category – but, importantly, the engagement and interaction that took place on Facebook in both editions -over 1.5 million users reached and more than 100,000 of them interacting in 40 languages altogether prove that Spanish in a day transcended the physical limits of the language classroom, setting a discursive virtual space open to anyone who felt free to like and comment on a series of videos produced by Spanish language students and eventually shared them with other users (see Figure 1). These interactions can be tracked by using the hashtag #SpanishInADay or by browsing through the Facebook page of the organising partner Con C de Cine: https://www.facebook.com/concedecine.



**Figure 1 -** Facebook statistics of *Spanish in a Day* 1<sup>st</sup> and 2<sup>nd</sup> editions.

# 3. Methodology

# 3.1 Needs analysis and course description

Due to the aforementioned inconsistent degree of compliance with the contest rules, it was agreed that the *Spanish in a day* learner corpus needed to become more harmonised, by providing contestants in the second edition with the specific communicative and linguistic content in alignment with the Cervantes Institute's Curricular Plan [3]. Furthermore, it was desirable that they should also improve the skills required to enhance their video productions, that is, by developing more effective learning strategies (in terms of collaborative work, oral expression and interaction, etc.), by increasing the quantity and quality of creative and original samples in their videos and by reflecting in a more explicit way on intercultural phenomena.

Consequently, *Spanish NanoMOOC* was designed as a massive course intended for an unlimited number of participants, taking into account their diverse backgrounds, learning styles and assessment criteria. It also adhered to the concept of openness with respect to financial limitations, and therefore enrolment, access to the course, as well as the participation certificate were totally free of charge. Moreover, once the course was finished, the materials were made available on the contest website so that participants could access them until the end of the competition. Additionally, the course was administered in its entirety in a self-paced modality, and so it provided a complete online learning experience following a flexible structure and programme that included a series of evaluation and interactive activities, along with the guidance and pedagogical support of an online tutor.

The objectives of the course were set from the learner's perspective and were made explicit in the course guide as follows:

- Become familiar with the basics and rules of the *Spanish in a day* contest.
- Acquire the skills, techniques and strategies to enter the competition in any given category, according to the CEFR levels.
- Prepare a sketch or script to submit your video to the contest in any of the main categories.

The content was based on input and videos from *Spanish in a day* 1st edition and was structured in skills, strategies and competencies on the following topics:

- Linguistic and communicative contents (A1-C2)
- Oral expression and interaction (A1-C2)
- Creativity and originality
- Collaborative work
- Intercultural competence

Further details of the course content and instructional design are described subsequently.

# 3.2. Instructional Design

The instructional design was carried out bearing in mind the key elements that characterise a MOOC, specifically so a NanoMOOC, since it was considered the most appropriate format for a course aimed at learning audiovisual production strategies. As per the definition of Alsagoff [6], a Nano-MOOC or NOOC responds to a massive, open and online course with an estimated workload of 20 hours or less, focusing on a specific competence, skill or area of knowledge. Therefore, the Spanish in a day NanoMOOC was designed for an estimated workload of 10 hours.

The course structure [Table 1] was designed following a modular pattern in alignment with the philosophy of MOOCs, whereby participants learn according to their needs and interests and are provided with a flexible learning environment [7]. For this reason, the course was structured in 7 modules in total, the itinerary of which was made up of 4 modules common to all categories and 3 modules exclusive for each CEFR language level and its corresponding category (A de Acción: A1-A2; B de Butaca: B1-B2; C de Cineclub: C1-C2).

The first module was devoted to the introduction of the course, in which the objectives, contents and methodology were thoroughly explained. Modules 2 and 3 corresponded to two of the modules exclusively designed for each category, since they covered skills and content that required a specific approach according to language level. Thus, module 2 dealt with communicative and linguistic content for each CEFR level; and module 3 focused on oral expression and interaction strategies both on and off camera. The core modules 4, 5 and 6, were common to all three categories and were intended for practising transversal skills such as creativity and originality, collaborative work and intercultural awareness in video productions. Finally, module 7 was devoted to assessing the course through a final task, in which participants had to create a script (either oral or in written form) based on video or text models from the first edition. (Table 1).

All modules consisted of two or three topics, the last of which was devoted to familiarising participants with the evaluation criteria used by the contest jury. The main content of the materials and activities designed for the *Spanish in a day NanoMOOC* was based on 25 edited videos of 2-4 minutes each (out of which 15 were interactive). It was determined that it would be highly motivating if students from the first edition were the leading actors of the videos of the course. In addition, downloadable material was provided for each of these topics based on 20 computer infographics.

Evaluation activities were designed following a double typology. On the one hand, depending on the possibilities of the platform where the course was implemented, LearnDash, automatic correction activities based on the videos were included. On the other hand interactive activities were used with PlayPosit's external tool, which follows a flipped classroom model, by which students would answer questions while watching a video and, as is the case of the last module, perform written or oral expression activities in a more productive way.

Written interaction activities were based on the forum tool that enabled 3 main discussion threads: one intended for introductions at the beginning of the course (Introduction forum), one for questions arising along the learning process (FAQ forum) and one for the final reflection on the course overall learning experience (Final task forum). In total, there were 9 forums, 3 per course. The tutoring and facilitation was provided by 3 online tutors and 3 course guides. The tutors were Ms Beatriz Sedano, from UNED, Spain (*A de Acción*); Ms Alisa Linarejos, from Cornell University, USA (*B de Butaca*) and Mr Yeray González, from Salamanca University, Spain (*C de Cineclub*).

Lesson	Itinerary	Name & content	Activities
	Common to all courses	Course introduction:	Reading information and
1		Course objectives	infographics.
		General assessment criteria	Introduction forum
2	Exclusive for each course	Linguistic & Communicative content	Videos, quizzes and PlayPosit
	Exclusive for each	Oral expression &	Videos, quizzes and
3	course	interaction strategies	PlayPosit
4	Common to all courses	Creative/original pro- duction techniques	Videos, quizzes and PlayPosit
5	Common to all courses	Collective teamwork strategies	Videos, quizzes and Play- Posit

6	Common to all courses	Intercultural compe- tence skills	Videos, quizzes and PlayPosit
7	Exclusive for each course	Final task	Videos, quizzes and PlayPosit
	course		Final task forum

**Table 1 -** The *Spanish in a day NanoMOOC* course structure.

#### 4. Results

The first edition of the Spanish in a Day NanoMOOC was held from 31 March to 23 April 2017. The original course calendar envisaged that the course should be available for two weeks, taking into account an estimated workload of 10 hours. However, it was eventually extended for another week, as participants requested more time to complete the course activities and, therefore, we agreed to comply with their request, thus remaining faithful to the flexible philosophy of this educational modality.

According to the data gathered from the platform where the course was offered, the website shared by the video competition and the course itself received over 700 registrations in the 5 weeks during which the course was advertised. Out of this initial number of participants, 140 started the course and 60 of them passed it, which is 45% of the total number of course participants. Considering that completion rates in MOOCs are generally below 13% [8], the quantitative results of this course were highly satisfactory. It should be noted that these figures only include students of Spanish and not their language teachers, who also registered for the course in order to become familiar with the competition rules. Altogether, the forums recorded over 170 interactions in Spanish, including those posted by the online tutors for each category.

All in all, the second edition of the *Spanish in a Day* contest had outstanding quantitative results: 170 contestants from 30 nationalities - spanning 4 continents – submitted a total of 45 video entries, 15 of them from language immersion contexts and 30 of them from non-immersion ones. These videos cover all CEFR levels: A1-A2 (21 videos), B1-B2 (20 videos) and C1-C2 (4 videos).

As far as social media interaction is concerned, we must point out a very significant increase in terms of quantitative data compared to the first edition: over 1 million users reached and 65,000 interactions recorded on the Facebook page of Con C de Cine – including comments, reactions and times shared – written in more than 30 languages, all of which shows the importance of multilingualism and plurilingualism in the outcome of the contest finale.

With regards to the qualitative data and improvement achieved in comparison with the first edition, all videos included real-time interactions and an appropriate use of effective communication strategies. In addition, there were some truly collaborative works, boasting original and creative traits as well as much better examples of intercultural reflections.

As for the *SID Welcome* parallel section, it was aimed at refugee students with the intention of fostering social inclusion in Spain. 14 videos entries competed in this section, sent by students from Palestine, Cameroon, Kenya, Russia, Ukraine, Iran, Egypt, Somalia, Gambia, Eritrea, Central African Republic, Republic of the Congo and Guinea. 50 students and 10 teachers participating in this section registered for the *Spanish in a day NanoMOOC*. The prizes for these students consisted of scholarships and full-board homestay grants in a home school located in the countryside of Madrid, further contributing to their mobility in a new host country.

#### 5. Conclusions

To sum up, the *Spanish in a day NanoMOOC* succeeded in raising interest in the video contest in comparison with the first edition, as we increased the number of videos received by 50 per cent and the total number of participants by 300 per cent. Likewise, the quality of the video productions improved significantly thanks to a more comprehensive and integrated development of the students' communicative and intercultural competencies, which were specifically addressed in modules 2, 3 and 6, respectively. Additionally, the skills and learning strategies acquired in modules 4 and 5 - that is teamwork, creativity and originality - helped contestants to increase their chances to win in one or more categories.

Further to the MOOC's positive effect in the contest outcome, the strategic pedagogical use of social media enabled the digital conversation to go beyond the contest itself, by reaching out not only to students and teachers of Spanish worldwide but also to other Internet users who commented on the videos posted on the contest's official site as well as on its Facebook page. In this particular social network, multilingualism and plurilingualism were fostered by the significant number of languages used and by their specific use depending on the different purposes they served: Spanish was used as the lingua franca of the contest among all contestants commenting on each others' videos; the contestants' L1s were used in order to ask their countrymen to vote for their videos, English served this very purpose but on a more global request for votes, etc.

Last but not least, the special SID Welcome award fostered mobility of refugees across Europe, first by raising awareness of their situation through their video testimonials and eventually by achieving their social inclusion in a new host environment in Spain.

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# XARXAMOOC, THE FIRST LMOOC FOR STUDENTS OF XARXA VIVES. A MODEL PROPOSAL FOR FUTURE MOOCS FOR LANGUAGES FOR SPECIFIC PURPOSES

#### Abstract

This article presents the course entitled "XarxaMOOC: Introducció al llenguatge d'especialitat en les universitats de llengua catalana", a project by the Xarxa Vives d'Universitats coordinated by the University of Alicante providing an open-access language learning model for LSP (Languages for Specific Purposes) in academic environments.

#### 1. Introduction

Connectivist theorist Dave Cormier coined the term "MOOC" (Massive Open Online Course) in 2008 to refer to online courses where contents are accessible to all users and there are no limits on the number of people who can sign up. In 2011 Sebastian Thrun, from Stanford University, launched a MOOC in artificial intelligence with over 120,000 students enrolled. Prior to these e-learning landmarks, a major methodological trend with a focus on open access had already been developed: Open Course Ware (OCW). OCW is an international program devoted to publishing academic materials for further education and supported by flagship universities from around the world.

The University of Alicante was one of the ten founding universities of this program, which was launched in Spain and Latin America in 2007 [http://ocw.ua.es/]. So far, over two hundred courses with open-access material available to all users have been published. The UA's active participation, number of courses, language offer and content relevance were recognised with the Open Course Ware Consortium's first Reference Site Award in 2011 (Figure 1).

OCW is the institutional repository of a university consortium. The courses offered range from short courses to enhance student interaction to full courses with open-access teaching materials.

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Figure 1 - University of Alicante-OCW.

In some respects, the purpose of the University of Alicante's OCW program and platform is common to all MOOCs: increased access to high-quality courses and online learning for free; exchange and reciprocity between standardised and non-standardised education; free access to learning and courses in a number of languages; self-assessment and peer assessment.

The methodological tsunami caused by MOOCs led some to question the academic teaching model and even the learning models for the Twenty-first century. This paved the way for various platforms which hosted MOOCs to varying degrees of success [2]. Coursera, from the United States, clearly remains one of the best-known platforms, a pioneering initiative with over 1,000 courses on offer in 2016. Particularly remarkable in Spain is *Miríada X*, a well-established platform launched by *Universia* in 2013. Universia is the largest network of Spanish and Portuguese-speaking universities, comprising 1,200 universities from 23 countries and more than 15 million university lecturers and students. The platform currently offers over 200 MOOCs and two accreditation pathways.

The new approach to learning and knowledge-building initially proposed by MOOCs focused on new content creation by students with an underlying principle based on interactive-collaborative teaching. In this sense, MOOCs respected two basic principles: an open-access training offer and interactive collaboration in courses based on participants' proposals (scalability).

MOOCs, however, opened up multiple and diverse possibilities. Today, commercial or semi-commercial platforms allow them to reach a greater audience [3].

In the field of language teaching, there are already many different proposals which, in one way or another, try to adapt to this new course methodology. The growing interest in this area made us think of how the MOOC methodological revolution and the self-paced (autonomous and self-managed study), open and constructive learning they proposed could benefit language teaching and learning with a focus on effective and inter-

cultural communication skills. In other words, this kind of learning pays particular attention to skills which should also be constructive, collaborative and responsible, allowing learners to "do things" with languages in everyday life as well as in their future professional career. And yet, despite the many studies on MOOCs available nowadays, it is difficult to effectively design LMOOCs with a process and skill-based language learning approach in an online, open-access space. This is due to the fact that experiments involving LMOOCs are still in their early stages [4], which also explains the marked differences among the over 1,000 European LMOOCs in foreign language teaching/learning available on the Open Education Europa portal between 2012 and 2015. Spain, if compared with other European countries, has a remarkable LMOOC offer in Spanish for foreign language learning, with a total of 286 courses ranging from the humanities to language studies. Many of these LMOOCs are based on conventional and traditional audio-visual and written material, as it is a suitable format to test this new e-learning methodology. Furthermore, this format is easily recognised by users [5].

With the emergence of MOOCs, it would appear that other pedagogical formats for online language teaching are now outdated. Nevertheless, it is worthy to note that some digital language learning environments (namely Spanish [http://ave.cervantes.es/] and Catalan [http://www.parla.cat/]) can provide a wealth of top-quality methodological and technological resources that can be employed to design more interactive LMOOCs [6]. The reason for this is that their pedagogical approach focuses on autonomous user learning, peer assessment and the importance of tools to improve the learning process for both teachers and students.

In November 2013, the *Xarxa Vives d'Universitats*, with the University of Alicante as coordinator, launched the first MOOC in languages for specific purposes run in Catalan. The primary objective was to make language training in Catalan easier for future exchange and new students enrolled in any of the 22 universities within the *Xarxa*, located in 4 countries of the Mediterranean basin: Andorra, France, Italy and Spain. The second edition of *XarxaMOOC: Introducció al llenguatge d'especialitat en les universitats de llengua catalana* [http://xarxamooc.uaedf.ua.es/preview] (2014-2015 academic year), like the previous one, offered learning tools to give students an introduction to Catalan specialised languages and terminology of the main university disciplines, and also provided a representative cultural overview (educational system, geography, tourism, language, media, etc.) of the territories where *Xarxa Vives* universities are located.

# 2. Theoretical framework for creating Open-Access materials aimed at Second Languages and Languages for Specific Purposes

The pedagogical structure of XarxaMOOC was based on the notion that a language should be learned as the means whereby social relations are established, developed and maintained [7]. Therefore, language offers a system of options which are updated according to speakers' needs and the social context in which statements are produced, thus reinforcing the axiom that all speech acts take place on a social and cultural basis and that effective intercultural communication skills in personal, academic and professional environments are essential to language learning. New technologies and the potential methodology of MOOCs enable knowledge-building based on collaborative interaction, which could certainly enrich learning in a plurilingual social environment and improve language skills in university studies.

Within the theoretical framework underlying XarxaMOOC's language pedagogy, the metacognitive and metalinguistic dimensions are viewed as a bridge between specific language and its abstraction process. Studies on language interdependence developed by Cummins [8] and on language transfer, interlanguage and contrastive analysis for Iberian languages [9] have been employed, as they make it possible to develop cognitive strategies helping learners comprehend contents with a focus on their academic or professional activity, starting from a basic proficiency in the second language, their previous world knowledge and their first language.

Significant studies include those on multilingualism [10] and plurilingualism which point to a single skill allowing learners to develop better and suitable communication, language and discourse strategies [11], bearing in mind that plurilingual profiles do not necessarily entail rich pluricultural profiles [12]. There is frequent evidence that people learning a second language at basic levels can have a good command of a language system and, at the same time, ignore relevant details about the related culture.

The intercultural approach [13] to language as a process structuring and building a certain way of seeing, understanding and re-proposing reality [14] by means of a range of discourse-related possibilities enables effective discourse strategies. In our MOOC, intercultural skills focused on university and exchange students who needed to approach academic Catalan. For this reason, XarxaMOOC reconsidered the major role intercultural skills should play within communication skills applied to second language teaching or learning and, above all, with a view to related Languages for

Specific Purposes [15] from social and discourse-related language analysis to improve actional competence in academic or professional environments.

The new possibilities and formats offered by the Internet, with interconnected textual and audio-visual material, is an intercultural process in itself, regardless of the tools employed or the contents shared. For XarxaMOOC it was vital to go back to landmark studies on MOOCs [16] and LMOOCs [17], as well as studies examining new methodologies and technologies applied to elearning and Second Languages [18].

# 3. XarxaMOOC: the first MOOC in Catalan language

Educación Digital del Futuro, a platform run by the University of Alicante, provides XarxaMOOC [http://xarxamooc.uaedf.ua.es/preview] with a space for ongoing teaching and technological experimentation (Figure 2).



**Figure 2 -** Main page of XarxaMOOC - second edition.

This MOOC, launched in 2013 under the University of Alicante's presidency of Xarxa Vives, was the product of a complex process. XarxaMOOC, which was originally intended to offer a course in Catalan for academic purposes, developed into a multi-module course targeted at all university students wishing to take any subject in Catalan.

Since its first edition, leading Spanish and international institutions and associations have taken part: Institut d'Estudis Catalans, Direcció General de Política Lingüística de la Generalitat de Catalunya, TERMCAT, Acadèmia

Valenciana de la Llengua, Research Chair for Science Dissemination (University of Valencia), University of Naples "L'Orientale", Federació Escola Valenciana, Softcatalà, Un Entre Tants and El Tempir, among others.

XarxaMOOC comprises 12 specific units or courses. As shown in Table 1, the first five are common to all students and the remaining seven are specific, according to the area of knowledge users wish to focus on.

- 1. Presentation
- 2. Education
- 3. Language
- 4. Media
- 5. IT
- 6. Law
- 7. Geography and Tourism
- 8. Economics
- 9. Architecture
- 10. Biology and Natural Sciences
- 11. Medicine and Health Sciences
- 12. Literature

Table 1 - XarxaMOOC units.

Completing all 12 units is not required, as each has its own certification badge on Mozilla/badges. Each of these certifications lists the contents and skills covered in the unit. The Google Course Builder platform was employed because it was best suited to the objectives and structure of the course. Furthermore, to reach a greater audience and given that massive audiences are not specific, many of the videos, which are still accessible for free on a YouTube channel, were subtitled in English, French, Italian and Spanish.

Each unit aimed to provide a relevant sample of language for specific purposes and tap into the new ICT learning potential. Table 2 outlines the standard didactic structure of each unit. All sections of each unit included comprehension activities. The 12 units feature over 100 teaching videos specifically made for the course, with interviews with specialists and leading figures in Catalan culture, recorded lessons, lecture models and specific sessions with the contents of each unit.

- -Unit presentation
- -Teacher's lecture
- -Interview with a specialist
- -Language for Specific Purposes
- -Terminology activities
- -Specialized discourse
- -Example of class or lecture
- -Magazines and blogs
- -ICT/LKT tools
- -Catalan learning assessment test

Table 2 - Contents of XarxaMOOC units.

XarxaMOOC was one of fourteen MOOCs selected for funding by Catalonia's Office for Universities. This selection of projects made up a research group to share an experience whereby a MOOC, called #14MOOCs14, would be created. According to the final report and the annexes [19], it was one of the most productive courses in the Catalan language and received a number of awards recognising its quality and the interest of the teaching material. At present, it is still available to anyone who wants to complete it, as part of the UA's OCW.

This model has served as a basis for various projects run by the University of Alicante at different stages of development, focused on literary contents [20]. In addition, it was even taken as a model for projects on Spanish for specific purposes on open virtual platforms targeted at native Italian university students and medical doctors [21].

#### 4. Conclusions

Ever since Cormier coined the term MOOC in 2008 and Thrun proved actual massive potential of this type of courses in 2011, many universities have taken MOOCs as a model for teaching innovation. In this regard, the University of Alicante became a reference in MOOC design throughout the 2012-2013 and 2013-2014 academic years. This was possible thanks to UniMOOC, focused on the digital economy and a pioneering model which has enjoyed worldwide success, and *XarxaMOOC*, developed in cooperation with the *Xarxa Vives d'Universitats* and an educational flagship in the Catalan language.

The concept of connectivism has been mentioned in this work as a new pedagogical approach or a new learning theory. In our view, even if it is not easy to apply this concept to language learning, it is the best principle seeking to explain – and above all integrate – the many changes technology has brought about in education in the Twenty-first century.

The theoretical framework of this article highlights that *XarxaMOOC* is a new LMOOC model which can advance towards more interactive proposals. It also points out that MOOCs can still make major contributions to language learning courses.

Obviously, interuniversity cooperation existed long before the Internet, MOOCs or connectivism appeared. Those who took part in their development, however, have indeed witnessed how knowledge generation and exchange have evolved in less than twenty years. This cooperation also sets the foundations for all connected learning where LMOOCs represent a key space for development to improve communication between users of different languages and enhance plurilingualism.

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# VALUTAZIONE E RECUPERO DELLA PREPARAZIONE INIZIALE DI STUDENTI UNIVERSITARI ATTRAVERSO TEST E MOOC

#### Abstract

The paper reports on the development of the digital version of the Initial Proficiency Assessment Test, originally designed as a paper test. The paper focusses on the linguistic, pedagogical and technical issues arising in this adaptation process.

# 1. Introduzione. Valutazione iniziale e lingua per lo studio

La valutazione della preparazione iniziale è diventata obbligatoria per i corsi universitari non a numero programmato con il DM 270/2004; l'art 6 del decreto recita, infatti:

I regolamenti didattici di ateneo, ferme restando le attività di orientamento, (...) richiedono altresì il possesso o l'acquisizione di un'adeguata preparazione iniziale. A tal fine gli stessi regolamenti didattici definiscono le conoscenze richieste per l'accesso e ne determinano le modalità di verifica, anche a conclusione di attività formative propedeutiche, svolte eventualmente in collaborazione con istituti di istruzione secondaria superiore. Se la verifica non è positiva vengono indicati specifici obblighi formativi aggiuntivi da soddisfare nel primo anno di corso. (...)

Come si può notare, il decreto si limita a fissare l'obbligo di effettuare la valutazione, lasciando agli atenei la facoltà di scegliere le forme di tale valutazione, che quindi variano da ateneo ad ateneo. Nel 2015 le Università di Parma, Urbino e Genova hanno costituito un gruppo di ricerca sull'italiano come lingua per l'apprendimento di contenuti disciplinari. All'interno di tale ambito, il gruppo ha individuato nella realizzazione di un test unificato un primo obiettivo di lavoro.

Il test è basato su Italstudio, un test dell'Università di Parma che verifica la competenza di un candidato nella lingua italiana per lo studio [1]. Italstudio si concentra sulla competenza linguistica necessaria all'elaborazione di contenuti

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disciplinari. Altro riferimento per Italstudio e per il test VPI è, naturalmente, il Quadro Comune Europeo di Riferimento per le lingue [2], i cui descrittori contengono elementi importanti per la definizione dei costrutti relativi alla competenza linguistica necessaria per lo studio, v. per es. il seguente estratto dal descrittore "Leggere per informarsi e argomentare" del livello B2:

È in grado di comprendere relazioni, articoli e altre tipologie testuali disciplinari relativi a problemi del mondo contemporaneo e ad argomenti disciplinari che si collegano a conoscenze già acquisite, in cui gli autori esprimano prese di posizione e punti di vista particolari.

Il percorso di ricerca che ha condotto alla creazione del test Italstudio ha riletto i descrittori del Quadro in funzione delle competenze necessarie per la comunicazione in ambito scolastico-accademico [3].

Il test VPI riprende, dunque, tali riferimenti e li adatta alla verifica della preparazione iniziale con i seguenti obiettivi:

- valutare le competenze linguistiche e comunicative per lo studio disciplinare/accademico;
- 2. raccogliere dati per progettare e realizzare azioni di recupero e, quindi, prevenire la dispersione degli studenti in difficoltà;
- 3. dare il giusto rilievo alle abilità linguistiche nell'ambito della verifica della preparazione iniziale.

Il test è somministrato sia in presenza, sia a distanza tramite la piattaforma didattica Moodle [4]. Il test nella versione digitale è presente sulla piattaforma del Dipartimento di Lingue e Culture Moderne dell'Università di Genova nella versione *mock test*, utilizzata per la preparazione alla verifica di tutto il contingente di studenti; e nella versione digitale, somministrata agli studenti dei corsi di laurea online dei tre atenei. La versione cartacea viene invece prodotta a beneficio degli studenti dell'Università di Parma e Urbino – iscritti a corsi con didattica in presenza.

Il presente contributo si concentra sul processo di adattamento del test alla versione digitale.

#### 2. Struttura del test VPI

Il test VPI è composto da tre parti, comprensione orale, comprensione scritta e uso della lingua.

La parte di comprensione orale consta di un brano di contenuto accademico. L'ascolto del brano è preceduto da alcune immagini il cui scopo è attivare le preconoscenze del candidato fornendo un primo elemento di decodifica necessario per una corretta comprensione del brano. L'ascolto è seguito da tre prove: comprensione generale (ordinare le parti del brano o domande vero/falso sul senso generale del testo); comprensione dettagliata (domande vero/falso); postascolto (mappa concettuale con domande vero/falso in modo da realizzare un riassunto del testo). La natura dei quesiti è, in tutte e tre le attività, sia di tipo inferenziale sia non inferenziale.

La comprensione scritta è verificata su due brani. Il primo è un testo tratto da un manuale disciplinare. La comprensione parte dalla lettura dei titoli delle sezioni del testo e dalle ipotesi sul contenuto suggerite dalle immagini integrate nel testo. Il primo esercizio consiste nell'associare a ogni sezione il giusto titolo (comprensione globale attraverso tecniche di lettura di tipo orientativo); il secondo nel riempire una mappa concettuale chiusa (comprensione di informazioni più dettagliate); il terzo, infine, è composto da domande inferenziali. Il secondo brano è presentato sottoforma di *cloze procedure* (v. Figura 1): tutte le parole tolte dal testo sono presentate in calce in modo che il candidato possa scegliere dove ricollocarle per ricostruirne il significato.



**Figura 1 -** Comprensione scritta con tecnica cloze.

La parte dedicata all'uso della lingua si articola in cinque esercizi. Il primo, che utilizza la parte finale del testo precedente, è costituito da un'attività di completamento mirato, in cui il candidato deve scegliere,

per ogni item mancante, tra tre opzioni. L'esercizio verifica la competenza semantica del candidato, in quanto gli item mancanti sono di tipo lessicale. La seconda è un'attività che verifica la competenza morfosintattica (una prova di completamento nella quale il candidato deve, tra gli altri compiti possibili, ad esempio coniugare un verbo scegliendone il tempo e modo corretto). Il terzo esercizio (connettori) è analogo al primo, ma in questo caso occorre scegliere il connettore giusto in quanto l'obiettivo è la verifica delle competenze di tipo testuale che nell'uso dei connettori un'efficace realizzazione. I1quarto esercizio nell'individuare e correggere in un testo errori di punteggiatura. In questo caso lo scopo è la verifica delle competenze nell'uso della punteggiatura per fini di organizzazione logica del testo. La quinta, infine, è anch'essa un'attività di completamento con scelta, questa volta relativa ai registri della comunicazione accademica (per es. un messaggio di posta elettronica a un professore).

Questi sono, in breve, gli esercizi del test nella versione cartacea che è presentata in dettaglio in una precedente pubblicazione [5], a cui si rimanda per approfondimenti. Come illustrato nel prossimo paragrafo, tali attività sono state adattate per la versione digitale del test.

#### 3. La versione digitale del test VPI

La versione digitale del test è somministrata tramite la piattaforma Moodle e, per la precisione, tramite la funzione quiz. Il ciclo della realizzazione del quiz nella piattaforma è noto (si veda comunque [6] per maggiori dettagli): prima si preparano le domande, poi le si importa nel quiz e, infine, si assegna a ogni domanda un valore.

Il modulo quiz offre diverse opzioni importanti all'erogazione del test; tra queste, la durata e una password per restringere l'accesso. Trasportare un test dalla forma cartacea/in presenza al formato digitale presenta questioni di ordine logistico, tecnico e linguistico che influiscono sull'organizzazione del test e sulla preparazione delle domande. Tali problematiche non sono indipendenti ma devono essere affrontate contestualmente.

## 3.1. L'adattamento delle prove

L'organizzazione del test implica problemi canonici, tipici dell'erogazione di test a distanza e non legati alle specificità del test VPI. Pertanto ci si limiterà qui a nominarne i più importanti, quali la necessità di ren-

dere il test inaccessibile al di fuori delle finestre temporali deputate alla sua erogazione (per esempio, tramite l'uso di password), la necessità di creare i profili degli utenti e distribuire le credenziali agli studenti e, infine, la necessità di fornire agli studenti un supporto logistico/tecnico anche a distanza.

Più importanti, in questa sede, sono invece le questioni legate alla preparazione delle prove e che si concentrano per lo più intorno al formato delle prove stesse. Ogni prova del test, infatti, ha caratteristiche che devono essere mantenute nel passaggio alla versione digitale evitando, al contempo, di rendere l'esecuzione più difficoltosa.

La maggior parte delle prove è facilmente adattabile tramite il tipo di domanda *embedded answers*. Tale formato è molto flessibile e permette di integrare nel corpo della domanda elementi multimediali, la formattazione HTML e, attraverso una sintassi particolare, domande a scelta multipla (con una sola risposta giusta) e testo a buchi.

Per esempio, la mappa binaria (ascolto) è realizzabile tramite una tabella HTML che riprende la struttura dell'esercizio cartaceo (v. Figura 2).

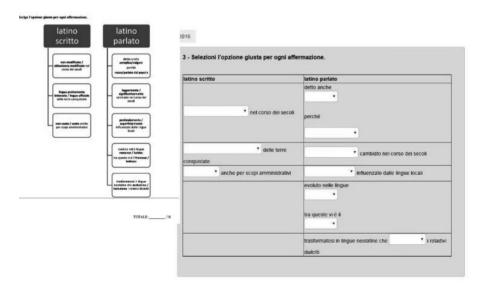


Figura 2 - Adattamento del riassunto a albero.

Un tipo di prova più complesso da realizzare è la mappa concettuale (comprensione scritta) che nella versione cartacea richiede al candidato di scrivere al suo interno: questo non è possibile nella versione digitale.

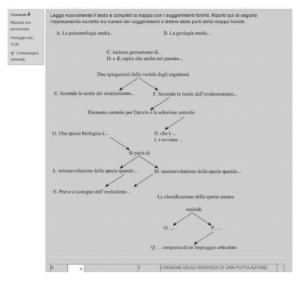


Figura 3 - La mappa.

Per ovviare a questo problema la mappa è stata trasformata in immagine e le scelte da associare a ogni ramo sono state inserite in calce (v. Figure 3 e 4). Le risposte sono contenute in un menu a tendina all'interno di una tabella: il candidato deve scegliere dal menu la risposta corrispondente alla definizione, che è ripresa dall'immagine.

A		1	L'INSIEME DEGLI INDIVIDUI DI UNA POPOLAZIONE POTENZIALMENTE IN GRADO DI ACCOPPIARSI E DARE ORIGINE A PROLE FERTILE
В	•	2	C'ERA UN'ENORME VARIETÀ
С	•	3	LE SPECIE ERANO IMMUTABILI
D		4	PERCHÉ GLI ORGANISMI HANNO UN SUCCESSO RIPRODUTTIVO DIFFERENZIATO
E	•	5	LA COMPOSIZIONE E LA STORIA DELLA TERRA
F	•	6	LE SPECIE SI SONO ORIGINATE ATTRAVERSO LA COMPARSA GRADUALE DI CARATTERI AFFERMATISI PER OPERA DELLA SELEZIONE NATURALE.
G		7	LA DOCUMENTAZIONE FOSSILE, E VENGONO STUDIATE DALL'ANATOMIA COMPARATA, LA BIOGEOGRAFIA, L'EMBRIOLOGIA E LA BIOLOGIA MOLECOLARE
Н		8	LE SCIMMIE ANTROPOMORFE COME SCIMPANZÉ E BONOBO
	0		

Figura 4 - Le domande della mappa spostate in calce

Un altro tipo problematico è, sempre nella sezione comprensione scritta, il cloze sul secondo brano. In questo esercizio il candidato deve scegliere, per ogni spazio, una parola tra tutte quelle tolte dal testo. Si noti che nella versione cartacea il candidato può barrare le parole già inserite nel testo: questo aiuto è importante dal momento che gli spazi sono 30 e quindi ci sono 30 parole tra cui scegliere. Questa struttura pone un problema con il formato embedded answers perché, per quanto tecnicamente fattibile, ogni menu a tendina conterrebbe trenta parole rendendo poco agevole l'operazione di scelta; inoltre, verrebbe così a mancare il meccanismo di eliminazione progressiva delle risposte. Non potendo realizzare in maniera efficace la prova con i tipi di esercizio della piattaforma è stato installato un modulo aggiuntivo che permette di realizzare esercizi cloze con trascinamento nei quali gli elementi tolti dal testo sono posti in calce e devono essere trascinati negli spazi. Questa modalità è più efficace rispetto al formato standard, ma l'opzione trascinamento diventa complessa se il testo è troppo lungo (o lo schermo troppo piccolo come quello di un tablet): in questo caso gli elementi da trascinare possono finire fuori dalla pagina rendendo impossibile l'esecuzione della prova. Va inoltre tenuto presente che l'installazione di un modulo è possibile solo all'amministratore della piattaforma; quindi, nel caso si fruisca della piattaforma come di un servizio erogato e gestito da altri, non è detto che sia possibile installare nuovi moduli. Per esempio, il tecnico che ha in carico la gestione del portale potrebbe ritenere un modulo troppo poco sicuro e decidere di non installarlo. Questo caso è emblematico della complessità cui si accennava prima: il problema è linguistico/didattico perché il formato embedded answers non garantisce le stesse funzioni della versione cartacea; ma è anche un problema tecnico perché occorre scegliere (e installare) un tipo di attività più adatto alla prova; è, infine, un problema logistico perché non è detto che sia possibile installare un modulo.

Il terzo esercizio sul quale è utile soffermarsi è la correzione della punteggiatura (es. 3 della sezione "uso della lingua"). Qui il candidato deve leggere un testo e individuare gli errori: nella versione cartacea in calce al testo vi è una griglia nella quale inserire l'errore e la sua correzione: tale soluzione, però, è impraticabile nella versione digitale. Replicare il formato della versione cartacea, infatti, significherebbe utilizzare campi di testo nei quali inserire la risposta corretta, ma questo implica che le risposte inserite dal candidato corrispondano esattamente a quanto memorizzato dal programma. Per quanto tale procedura sia tecnicamente possibile, bisogna ricordare che uno spazio in più o una lettera sbagliata verrebbero contrassegnati come errori dal sistema. Questo è un esempio di problema sia tecnico sia logistico perché la scelta di

rendere l'esercizio tramite testo a buchi implicherebbe la correzione manuale di ogni compito, un lavoro molto impegnativo visto il grande numero di somministrazioni (cfr. [5]). Perciò si è preferito adattare l'esercizio mettendo vicino a ogni errore uno spazio nel quale inserire la forma corretta; inoltre, sono stati aggiunti, per mantenere la stessa difficoltà dell'esercizio originale, due spazi vuoti nei quali non è prevista alcuna correzione. In questo caso, quindi, un adattamento completo non è stato possibile.

I quattro casi illustrati sono rappresentativi dei diversi problemi che sono emersi nell'adattamento del test alla versione digitale. Come anticipato, le scelte sono ponderate prendendo in considerazione tutti i diversi fattori coinvolti.

#### 3.2. Pro e contro della versione elettronica

La somministrazione di un test tramite piattaforma presenta numerosi vantaggi di tipo logistico ed economico, ma anche diversi punti deboli e difficoltà, che vanno tenuti in conto nelle fasi di progettazione, realizzazione ederogazione.

Il primo vantaggio è relativo ai costi. Se un'istituzione dispone dell'infrastruttura tecnica (la piattaforma) e del personale, il costo di realizzazione del test può essere nullo, escludendo, naturalmente, costi legati alla presenza di eventuali tutor. Il secondo vantaggio è che un test informatizzato si corregge - in teoria - da solo facendo risparmiare molto tempo. Il terzo vantaggio è che un test informatizzato è 'robusto', cioè la correzione automatica azzera eventuali errori umani, possibili su grandi numeri; va comunque ricordato che gli esercizi di completamento (es. correzione della punteggiatura) vanno comunque controllati per sicurezza perché, come detto, basta poco perché una risposta giusta sia considerata sbagliata dal sistema. Un quarto vantaggio, infine, è che il test è sempre disponibile e può essere svolto in qualunque momento, per esempio per recuperi individuali, sempre senza costi e tempi aggiuntivi.

Tra gli svantaggi, c'è la necessità, alla quale si è già accennato, di proteggere il test. Sebbene la piattaforma Moodle (come gran parte dei sistemi per la didattica in rete) offra diversi strumenti in questo senso, un errore può compromettere mesi di lavoro; per esempio, se un candidato riesce ad accedere accidentalmente alla prova il test non è più utilizzabile. Le misure di sicurezza includono precauzioni come accertarsi che il test sia protetto da password, controllare la forza della password o simulare l'accesso al test come studente per verificare la non accessibilità del test. Un secondo pro-

blema, noto a chi si occupi di tecnologie per la didattica, è costituito dai requisiti tecnici. Per esempio, nelle versioni precedenti (ma ancora diffuse) della piattaforma Moodle è necessario che sia installato e attivo nel browser il plugin Flash® per la riproduzione di brani audio. Vi sono, infine, diversi problemi organizzativi, come la realizzazione di turni in aule specializzate (e controllate), gli inconvenienti legati allo svolgimento di attività su piattaforma (per es. il candidato perde la password) o, infine, inconvenienti relativi alla fruizione su determinati dispositive (v. *infra* l'esempio dell'attività di trascinamento troppo complessa su schermo piccolo).

Questa panoramica sui vantaggi e sugli svantaggi nell'erogazione informatizzata del test VPI non vuole essere esauriente di un ambito complesso e ampio come l'apporto della tecnologia alla valutazione linguistica [7], ma fornire al lettore uno spaccato che illustri in maniera concreta cosa avviene quando si adatta un test dalla versione cartacea a quella digitale.

#### 4. Conclusioni

La valutazione della preparazione iniziale può e dovrebbe essere un momento importante all'interno di un percorso accademico. Il minimo comune denominatore, spesso negletto, tra le diverse aree scientifico-disciplinari è costituito dalle competenze comunicative in ambito accademico, l'oggetto precipuo del test sopra descritto. Una valutazione iniziale permette di effettuare una ricognizione delle possibili difficoltà degli studenti e, quindi, di progettare interventi mirati al recupero e alla facilitazione del percorso di studi.

Tali interventi, che, come previsto dalla normativa, mirano a soddisfare quegli obblighi formativi aggiuntivi (OFA) evidenziati dal test di VPI, dovranno sviluppare le stesse competenze linguistico comunicative oggetto della prova. A questo scopo si sta predisponendo un corso di potenziamento dell'italiano accademico da erogare in modalità online che consenta agli studenti, inizialmente non idonei, di esercitarsi tramite attività di comprensione e produzione scritta ed orale.

Il corso avrà la struttura di un MOOC costituito da moduli diversi per contenuti e livelli di difficoltà. Ogni modulo conterrà singole unità di apprendimento introdotte da brevi video-lezioni nelle quali verranno illustrate le strategie di comprensione e produzione linguistica oggetto delle successive esemplificazioni ed esercitazioni. Il corso sarà arricchito da materiali per l'approfondimento costituiti da dispense create ad hoc, testi forniti in versione digitale oltre che da una lista di links che orienteranno gli apprendenti

nell'enorme biblioteca di Internet. Le attività che seguiranno questa prima fase di studio asincrona saranno costituite da esercizi e test di autovalutazione, sul modello di quelli presentati nel test di VPI, svolti individualmente o in gruppo (wiki) a preparazione della prova di verifica finale. Al termine del corso, previo superamento di un nuovo test di VPI, sarà assegnato un badge che attesterà il recupero dell'OFA.

L'erogazione di un test e del successivo corso di recupero informatizzati comporta, come detto, diversi vantaggi dal punto di vista organizzativo. Il presente contributo si è concentrato sul processo di adattamento della versione cartacea al formato digitale allo scopo di fornire indicazioni utili a chi intenda intraprendere lo stesso percorso.

Per quanto riguarda lo sviluppo del MOOC l'Università di Parma lo ha incluso tra le azioni presenti nel Piano di programmazione triennale dell'Ateneo giungendo, tra l'altro, all'istituzione di due borse di ricerca dedicate; l'Università di Urbino ha istituito su questo progetto un percorso di ricerca coperto con assegno.

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#### RAFFAELLA FIORINI\*

#### CAN ICT FOSTER THE TEACHING AND LEARNING OF LITERATURE?

La letteratura si dimostra capace non solo di conservare inalterata, nel corso dei secoli, la sua fisionomia, ma addirittura di offrire indispensabili supporti concettuali proprio a quei media che sembrerebbero ispirati dal più irriducibile antagonismo nei confronti della tradizione.

(Mazzarella, 2008, p.52<sup>1</sup>) [1]

#### **Abstract**

This article provides a pragmatic perspective on e-learning solutions for the teaching and learning of English as a foreign language. It discusses a European project carried out in 2013 with high school students with the aim of fostering the learning and teaching of literature with ICT. The article focuses on the various steps of the projects.

#### 1. Introduction

The iTEC project [2] is a European project promoted by European Schoolnet (Brussels) with the aim to provide a sustainable model for fundamentally redesigning 21st century teaching and learning and evaluating the impact of iTEC Learning Activities in schools.

Delivered from 2010 to 2014, it was divided into five 4-month cycles, each aiming at designing and testing the various Learning Scenarios and Learning Activities developed throughout the project.

The Learning Scenarios were based on an analysis of various trends and were designed by teachers, policy makers, technology providers, and pedagogical experts.

The Learning activities were based on the learning scenarios and were tested in class by the teachers. They were then provided to teachers from 17 European countries in order to be tested in a much larger number of

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<sup>&</sup>lt;sup>1</sup> Literature demonstrates the ability not only to maintain its structures across the centuries, but even to provide key concepts that respond precisely to those media which appear to be shaped by the most implacable antagonism towards tradition.

classrooms and evaluate their potential value and impact on the future classroom. Training and support were provided to the teachers involved, who became members of the iTEC community of practice.

In order to assess the potential of the iTEC learning activities, and identify supporting factors and barriers, teachers were asked to provide feedback on the potential of the learning activities to bring innovation to the classroom. This evaluation process involved a combination of methods including data collection, observations, case studies and multimedia journals produced by the teachers involved. Over the four years, the evaluators gathered the views of teachers and students (some 1,488 were surveyed), national coordinators and policy-makers through surveys, interviews, focus groups, case studies and observations. The results were published in a final evaluation report.

## 2. iTEC cycle 3: Observe and design

ITEC cycle 3 [3] was developed between September and December 2012. Pilot teachers were asked to choose one of the following Learning Activity packages:

- 1. Observe and design
- 2. Benchmark and design

As a pilot teacher I decided on the first one. It included six learning activities:

- **Design Brief:** Short presentation of the design task required, open to refinement by the students.
- Contextual Inquiry Observation: Identification of what to observe in order to improve the design task. Modification of design brief on the basis of the results and analysis.
- **Product Design**: Creation of students' first prototype design.
- Participatory Design Workshop: Identification of 3-4 possible future users of the designed product and exchange of ideas to test the functioning and effectiveness of the product.
- Final Product Design: Creation of the final design prototype.
- Reflection: Recording and sharing of periodic audio updates about project progression, perceived challenges, changes to the design brief and future plans.

For each Learning activity, ideas for using technologies, expected results and pedagogical tips were provided.

# 3. The project: Designing an online library

The teacher's main goals while teaching literature is to arouse students' interest in reading (especially classics), encourage students to become autonomous readers and find a link between past and present and therefore find a meaning in what they are reading. Achievement of these goals may be hard in the digital age. Today's student, because of his/her autonomous use of the web, often has a certain amount of self-taught knowledge, a different communicative style, new methods to know and interpret reality, new learning strategies. Whilst all this is well known [4], it is not always simple for the teacher to find new teaching strategies to motivate students' learning and appreciation of literary contents. iTEC cycle 3 provided a good opportunity for a different approach to the teaching of literature. As the focus was on design, it was possible to shift from content-based to process-based teaching. As a consequence, the objectives were both related to the subject (literary contents) and to the process (designing an online library) and the assessment included the knowledge of subject contents and transversal competences such as social and communicative skills, problem solving, etc.

In particular, the objectives were the following:

content-related objectives

Reading and understanding of literary texts

process-related objectives

- Creating a self-study space with digital tools
- Enhancing motivation to the study of literature

# 4. The process

# 4.1. Learning Activity 1: Design brief

Students were given a Design Brief [5] containing details of what was expected from them and how the work was going to be organised. In particular, they were asked to:

- 1. Design an online library with the digital version of the books analysed during the English class.
- 2. Create digital tools like booktrailers and mind maps to help other students understand the uploaded texts.

In order to be able to observe, register and assess the learning process, students were divided into teams and invited to interact in their team's blog and upload all the materials and necessary resources for the development of their project. It was established that any exchange should be in English as the aim of the project was also to improve language skills in English as foreign language (EFL). A teacher's blog with links to the students' blog was also created [6]. Each team was assigned a different task and named after a colour, as follows:

Group 1 (yellow): booktrailer Group 2 (blue): booktrailer

Group 3 (red): questionnaire + grid for the workshop

Group 4 (green): materials for the library Group 5 (purple): design of online library

As mentioned earlier, the design brief was open to changes by the students. Thus this phase required:

- Organizational skills
- Problem solving skills
- Time management skills
- Support and collaboration skills

# 4.2. Contextual inquiry: Observation

An inquiry is an act of asking for information, so during this phase, students were asked to do some research on the web in order to look for models for their design work. Collecting data and ideas is an essential part of any research work. In this context, It helped develop organisational skills and to assume a more active and professional role in the learning process. Based on their design brief, students identified their object of observation and the challenges they had to face. They used observation to collect information about similar projects, the situation and factors of their design. The results of their research work were uploaded on each team's blog so that

all the groups could follow and share the progression of the work. They learnt to:

- Collaborate online
- Identify real world design challenges
- Question and improve tasks given to them

# 4.3 Product design

Based on the initial design brief, the students started to design their projects.

The Yellow and Blue groups designed their booktrailers. To make the booktrailers they used Windows Movie Maker.

The Green group made a list of the characters of the books in the library. They thought it could help other students to understand the books better. They also made a booktrailer with Windows Movie Maker.

The Red group made a questionnaire and a grid to be used in the Participatory Design Workshop. They used Google docs.

The Purple group created the site for the online library using Google Sites. When all the products were ready it was decided to upload everything on the online library for the Participatory Design Workshop. This time it was decided to work with 1 or 2 representatives from each group. Together the students created their online library. They decided not to use the website created by the Purple group and created a new one using Altervista. Since little time was left, only a part of the materials was uploaded.

At the end of this phase the students learnt to:

- Transform their ideas into concrete prototypes
- Find creative ways of addressing problems

## 4.4 Participatory design workshop

Four students from another class were invited to test the project. For this phase the Interactive Whiteboard (IWB) was used. At first the students were left free to use and analyse the online library without being given much information. The aim was to make sure the website was easy to use also for those who hadn't designed it. Then the Red group students asked them the questions they had previously prepared and filled in an observation grid.

The feedback the Red group got from the students was stimulating and it was used to refine the original design.

This phase aimed at:

- Empathising and working with different people
- Presenting ideas in understandable ways
- Receiving criticism
- Considering alternative points of view
- Doing paper prototyping

## 4.5 Final product design

As the project was meant to be completed within four months, little time was left for this phase, so the product  $_{[7]}$  remained unfinished. Nevertheless, as mentioned before, the focus was not on the product itself but on the process which led to its creation. The students' engagement in the work and their progress on the use of the language were in themselves satisfactory achievements.

#### 5. Conclusion

At the end of cycle 3, the National coordinator of the project (Indire) gathered the views of the teacher and the students involved through interviews carried out separately.

In general, both the teacher and the students agreed that the project had a positive impact on learning and teaching practises.

In particular, as regards the students, it enhanced:

- Critical thinking, creativity, problem-solving, reflection and digital literacy
- Motivation the students felt more engaged in their learning process
- Achievement of subject objectives the students used the language in a 'less academic' context

As regards the teacher, it enhanced:

- Pegagogical use of ICT
- Effective integration of ICT in subject teaching
- Change in the student/teacher role: The teacher became a tutor more than a transmitter of knowledge and students became peer tutors

• Collaboration within and beyond the school: Teachers became part of a wider community and had a forum to exchange practices.

A detailed overview of the different phases is available on the teacher's logbook [8] for the project.

In conclusion, as Giusti [9] points out, the connection between teaching, technology and literature needs a plurality of approaches and the willingness to accept unexpected and provisional solutions to be experimented in class and to be discussed at university level with the aim of fostering academic debate on this issue.

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## JACQUELINE AIELLO\*, ANNA MONGIBELLO\*\*

# VOICE RECOGNITION TECHNOLOGY AND EFL STUDENTS: A VIRTUAL ENVIRONMENT EXPERIMENT

#### Abstract

Voice recognition (or speech recognition) technologies are being increasingly used as language learning tools to provide learners with opportunities to practise their target language autonomously. This paper reports on a pilot project on a virtual environment that included voice recognition software program targeting English pronunciation on the eLearning platform Moodle.

#### 1. Introduction

Voice recognition (or speech recognition) technologies have shown remarkable advancements in recent years<sup>1</sup>. The term broadly refers to the use of speech to control a hardware or software device. Initially, the technology was employed as an assistive device for individuals with physical or language disabilities. More recently, applications of these technologies to language learning software programs have opened to computer-based interactive spoken language education systems, a brand-new path in educational environments. Different speech recognition engines can now be used to offer various language learning activities [1], including face-to-face dialogues with virtual characters and simulated 'real-life' situations. The activities are meant to help English as a Foreign Language (EFL) students who perform poorly and have limited opportunities to practice their target language and develop pronunciation and reading skills.

The advantages of implementing language courses with voice recognition technologies in virtual environments as part of blended learning programmes are numerous. For instance, speech recognition software programs provide additional opportunities to practise oral skills without feeling exposed to the judgement of other classmates; also, students can decide for themselves when to exercise and the frequency of their attempts.

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Given the high number of students enrolled in undergraduate programme at the University of Naples "L'Orientale", offering constant, individualised feedback on oral production in overcrowded classes is not always possible nor easy. However, Italian learners of English struggle with certain aspects of English pronunciation, such as the production of vowels (eg: [2]). For this reason, in 2016 a group of 150 EFL students in their third year of the undergraduate programme in Linguistic and Cultural Mediation was offered the opportunity to join a project funded by the Ministry of Education, University and Research (MIUR) as part of the blended learning project coordinated by Professor Giorgio Banti. The project team was composed by Professors of English Oriana Palusci and Katherine E. Russo who designed and coordinated the project, and e-tutors Jacqueline Aiello and Anna Mongibello who generated the online course on Moodle and monitored students' activities. The general aim of the project was to provide students with an opportunity to improve their oral English communication skills in a lowanxiety, virtual environment where they could practice the language and receive automatic prompt feedback. The online course was an optional part of the English exam for third year students.

# 2. Methodology

# 2.1 Voice recognition technology

While experiences of general language learning within eLearning programmes have been widely documented ([3] [4]), very few experiments have dealt with the use of voice recognition technologies [5]. Even fewer involved EFL students at a university level. Based on our research, none embedded a voice recognition software program on Moodle, the most used Learning Management System at higher education levels.

A thorough investigation of the available technology for Moodle led to SpeechAce, a speech recognition system that can be added to any LTI compliant learning management system. SpeechAce provides syllable and phoneme level feedback to students' performances as the students simply have to record audio samples following pronunciation exercises that the system automatically processes, showing where the mistake is. The program was set on Standard American English.

Pronunciation exercises were created in accordance with each unit main focus. In Unit 1, for example, students were asked to practise with particularly challenging sounds such as syllabic consonants, consonant clusters and the

difference between voiced and unvoiced consonant sounds. Figure 1 shows an example of exercise testing the correct pronunciation of the voiced consonant sound /d3/: the students had to record their voice while pronouncing the word "ingenuity" and then verify their spoken output. An "expert audio" file could also be played as a guide track. After processing the results, the system provided a "checked response chart" that allowed the students to see how they performed in pronouncing each syllable. The chart also provided feedback on the position of lexical stress. The students received an average quality percentage for each attempt and a short automatic message clarifying the level achieved. Exercises could be repeated more than once.



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in	n	100			п	
	<u>d</u> 3	100			<u>d</u> 3	
ge	<u>e</u>	99	ок	ge	<u>0</u>	
2563	n	100		nu	n	
nu	п	100	Stress More		ш	Primary
1	<u>e</u>	99	Stress Less	1	<u>0</u>	
ŢΫ	<u>t</u>	100		ty	ţ	
	1	100	ОК		į	
Average	Quality	100%				

**Figure 1 -** An exercise created with SpeechAce.

# 2.2 Participants

One hundred and fifty students initially signed up for the course but only 122 completed all the activities. The group was composed of 104 females and 18 males, whose ages ranged from 20 to 29 and averaged at 20.10, as the pre-course questionnaire showed. The third-year students were all enrolled in the Linguistic and Cultural Mediation programme, a bachelor degree programme, where English language knowledge is assessed through three written and oral English language exams, one per year. Students are generally granted 144 hours of English teaching classroom each academic year in order to prepare for their annual English Language exam. The online pronunciation project was meant to present the students with additional nonmandatory hours of practice and a specific path to improve their oral skills. The online course overlapped with in-class teaching hours, which may explain why a relatively small percentage of students (18.6%) dropped out.

# 2.3 Course design

The course was divided into six units, each leading through the exploration of some main features of English pronunciation (consonant and vowel sounds, rhythm, intonation and stress). One of the objectives was also to make the participants more aware of the different varieties of English used around the globe and show how cultural appropriations of such global language can affect pronunciation.

Every unit consisted of two parts: a theoretical one which included videos, explanations and examples, and a practical one, made of exercises designed by the e-tutors, exercises using SpeechAce and forums that prompted students to reflect on the course content and to share their experiences and opinions. In addition to the units, an introductory section and a welcome message were also offered in order to explain the general objectives of the course. Students could expect to discover which features of English pronunciation they needed to work on the most in order to communicate more clearly; improve their ability to understand conversations in English; and learn strategies for practicing pronunciation on their own. At the beginning and at the end of the course, students were asked to complete a pre- and post-programme questionnaire that will be discussed in detail in the next section.

The length of the course was three months: it began in March and ended in May. Units were available for twelve days each, then the practical sections were closed. This was decided in order to make sure that the students follo-

wed a progressive path, focusing on one unit and one aspect of English pronunciation per time. The intent was also to create a community of English language learners who grew together and could compare their improvements. In order to make the improvements more visible and encouraging, we asked the students to complete a time capsule task, for which they recorded and stored samples of their own voice for later comparison and self-evaluation.

A total of 75 word-level and sentence-level pronunciation exercises were created using speech recognition technology, each including a native speaker audio file model and a phonetic transcription; an additional 20 exercises were designed using the Moodle timed quiz tool and were meant to assess students' acquired knowledge about English pronunciation features. Seven forum discussions – one for each unit and an initial one where students were asked to introduce themselves - were opened to students' inputs and were monitored by the e-tutors.

Students completed 84% of the exercises, spending on average 18 minutes on each and generating 8100 speech recognition requests.

# 3. Pre- and post-programme questionnaires

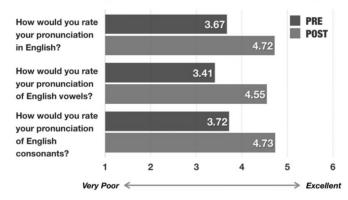
An additional required component of the course, briefly mentioned earlier, was a pre- and post-programme questionnaire. Students took the preprogramme questionnaire at the start of the project in March 2016, and the post-programme questionnaire at the end of the project in May 2016. The questionnaires aimed to collect participants' background information, to glean insights into attitudes towards pronunciation, to measure differences in foreign language anxiety levels (for which items were adapted from the questionnaire in [6]), to gauge whether self-perceived assessments of pronunciation skills improved from the start to the end of the project, and to gather participants' opinions on the project (in post-programme questionnaires only).

Data collected from 108 participants who submitted both pre- and postprogramme questionnaires were analysed. Quantitative data were analysed using descriptive statistics and paired-samples t-tests for pre-post programme comparison using SPSS version 23. Thematic and content analysis were used to code open-ended responses and identify common themes and patterns.

#### 3.1 Closed-ended responses

Pre-programme questionnaires asked participants how much they agreed with a series of statements concerning (English) pronunciation. On average, participants strongly agreed that pronunciation was important for communication and that they wanted to improve their English accent, and they agreed that sounding as close as possible to native speakers was important, that having a good pronunciation would increase their L2 confidence, and that more emphasis should be given to proper English pronunciation in class. Questionnaires also delved into the foreign language anxiety of participants and, when pre- and post-programme questionnaire anxiety data were compared, statistically significant differences emerged in only one of the five items, which suggests that this programme did not have a great impact on participants' foreign language anxiety levels.

### Pre- and post-program self-perceived pronunciation ratings



**Figure 2 -** Self-perceived pronunciation ability ratings in pre- and post-programme questionnaires.

Questionnaires also delved into participants' self-perceived ability in English pronunciation skills. Figure 2 displays the juxtaposition of the pre- and post-programme means. Paired samples t-tests revealed a statistically significant change in the pre- and post-programme mean responses for participants' overall English pronunciation (t(106) = -11.983, p<.001, two-tailed), English vowel pronunciation (t(105) = -12.534, p<.001, two-tailed), and English consonant pronunciation (t(106) = -11.332, p<.001, two-tailed). These findings suggest that participants assessed their English pronunciation skills more favourably after the course.

#### 3.2 Open-ended responses

Participants were also prompted to write open-ended responses about their favourite aspect of the course and whether they would recommend the experience to a peer. The greatest proportion of students listed SpeechAce as their favourite part, based on their appreciation of the native speaker model and accompanying phonetic transcription, and they most preferred the unit dedicated to vowels, followed by the unit on World Englishes. Participants also noted that they improved and experienced increased awareness of their pronunciation, and they enjoyed the fact that the project – and particularly the voice recognition – provided them with immediate feedback on their pronunciation. For example, one participant wrote "I liked the fact that it shows my mistakes and corrects them immediately," and another responded: "Thanks to this project, I'm less worried about my pronunciation, because I've understood the mistakes that I did previously." As displayed in Figure 3, of the 106 participants who provided a response, all but one indicated that they would recommended the project to their peers (99%).

### Would you recommend this project to a friend?



Figure 3 - Post-programme questionnaire responses (frequencies): Would you recommend this project to a friend?

We also asked students for suggestions on how to improve the project. In response, roughly 40 percent of participants said nothing should be changed, and roughly 40 percent referred to problems with SpeechAce, such as repetitive exercises, audio glitches, and lagging speed. They hoped these issues could be addressed in future iterations. Participants also expressed a preference for sentence-level (over word-level) pronunciation activities, and a small proportion hoped that the project could cover a wider range of English varieties.

#### 4. Discussion and conclusion

Providing immediate, individualised feedback on oral language production remains an arduous task in many language learning settings. For EFL learning at many universities, this goal is virtually unattainable because the demand for the language and its use in myriad domains results in a disproportionately high enrolment rate and large class sizes. Still, as exhibited by the participants in this study, language learners value dedicated instruction in oral production, and particularly pronunciation. The eLearning project presented in this paper was designed with this issue in mind.

As part of the eLearning project, participants were guided to review, practice and reflect on different features of English language pronunciation through the use of unit overviews, videos, practice quizzes, games, voice-recognition exercises, and forum interactions. The content ranged from English vowels, to stress, rhythm, and discourse in different English varieties. As a whole, the virtual environment was designed to hone in on and sharpen the oral English production skills of English majors in their last year of undergraduate studies.

The nature of the project and, specifically, the fact that students were allowed and even encouraged to practice by repeating their voice recognition exercises over and over again invalidated the use of these data to measure 'actual' improvement in pronunciation. In lieu of a pronunciation measure, we elicited self-perceived pronunciation proficiency because prior research has suggested that subjective self-perceptions of language competence correlate to objective measures (e.g. [7]), and the construct itself holds great explanatory value. Clément, Baker and MacIntyre posit that, while actual competence might influence communication, "it is the perception of competence that will ultimately determine the choice of whether to communicate" ([8]; see also [9]). An overall average improvement emerged from the comparison of pre- and postprogramme self-perceived proficiencies, which is linked to higher selfconfidence and willingness to communicate in English. This finding was corroborated by open-ended questionnaire responses. Participants stated that their pronunciation improved and their awareness of their pronunciation increased. They also enjoyed the project and found various foci and aspects useful for their pronunciation development. In particular, although some participants noted that the novel software program had room for improvement, SpeechAce was deemed useful because it provided models of proper pronunciation alongside phonetic transcriptions of the key terms and phrases.

In conclusion, in 2016 and 2017, third year undergraduate EFL students at "L'Orientale" were offered the opportunity to participate in an online community that aimed to develop the oral English production and pronunciation of participants who could work independently and autonomously yet receive immediate feedback. We found that overall this project was easy to imple-

ment, generated a wide array of student data, and was well received by students who felt more competent after having participated in the project. Our experience and findings suggest that voice recognition technology can be an asset in language learning environments and it can help in providing each student in large classes timely, targeted feedback. Future research should pursue ways of improving existing technology and it should explore the outcomes of the implementation of voice recognition within online environments with different populations of language learners.

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#### DANIEL BOSMANS\*

# AN EXPLORATION OF FRENCH PRONUNCIATION LEARNING STRATEGIES OF DISTANCE LEARNERS

#### Abstract

This study explores the learning of pronunciation in a distance setting, in solo mode via CALL and in group learning via CMC. Through a questionnaire, thinkaloud protocols (TAPs) and semi-structured interviews, the paper explores learning strategies when learners (n = 590) practise French pronunciation in a distance setting.

#### 1. Introduction

The introduction of online courses and MOOCs on the Internet and their growing presence have altered the way people learn in general and foreign languages in particular. The present study discusses an online Beginners French language course designed and offered by the Open University (OU) and explores the learning of pronunciation, a sub-skill of speaking, in a distance setting. A number of studies have recently explored pronunciation learning [1] [2] [3] [4] but the present paper builds on this body of work by exploring strategies used by learners in a new context. Indeed, distance learners have various tools at their disposal as, on this course, they can either study in solo mode via Computer-assisted Language Learning (CALL) or through group learning via Computer-mediated Communication (CMC) during online tutored sessions. The research question is thus 'What strategies do distance learners use to acquire pronunciation during online tutorials and when practising on their own?'

This topic needs exploring, not only because successful pronunciation learning may be due to the skilful use of strategies, but also because these might be different in solo mode and during online sessions. This has clear implications for practitioners and course designers in terms of deciding what learning strategies should be included in their materials [5] or can be taught as part of the session, as well as the sequencing of these strategies.

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#### 2. Literature review

There are various views in the literature on what learning strategies actually are. Cohen defines them as "learning processes which are consciously selected by the learner" [6] p. 4. He divides strategies into two categories, "language learning and second language use strategies" and they include "four subsets of strategies: retrieval strategies, rehearsal strategies, cover strategies and communication strategies" [7] p5. If we want to apply his four subsets of strategies specifically to pronunciation learning, these could include:

**Retrieval**: A language learning strategy may involve visualising the sound from a Phonemic Chart. A language use strategy would be using the corresponding approximate English phoneme to pronounce the French phoneme.

**Rehearsal Strategy:** A learner could practise the sound (drilling) in preparation for a communicative event.

**Cover Strategy**: A learner would pronounce a simplified sound, for example a nasal realised as a straight vowel sound (e.g. 'lundi', Monday, pronounced as 'lunedi').

**Communication Strategy:** According to Cohen "communication strategies have been seen to include intralingual strategies such as that of overgeneralising a grammar rule or negative transfer" [6] p. 7. In pronunciation learning, students could overgeneralise the rule of final silent consonants (e.g. not pronounce the 'p' in 'le cap') and apply negative transfers of suprasegmental patterns (e.g. applying word stress to the second syllable in the French 'attention', as it is done in English).

Oxford on the other hand describes learning strategies as "specific actions, behaviours, steps, or techniques that students use to improve their progress in developing L2 skills" [7] p. 124. Oxford's Strategy Inventory for Language Learning (SILL) identifies six major groups of L2 learning and all of these groups can be seen in the data yielded in the present study (see also [8] p. 317; [9] p. 264):

Cognitive strategies enable the learner to manipulate the language material in direct ways;

Metacognitive strategies to manage the learning process overall; Memory-related strategies to help to link one L2 item to another; Compensatory strategies to make up for missing knowledge; Affective strategies to manage emotions and motivation level; Social strategies to enable the learner to learn via interaction with others [10], p. 283.

Cohen's later definition of strategy use seems to include both learning and use (performance). Indeed, the language learning versus language use division is not always clear-cut. Oxford [11] also makes the point that learning can only be achieved through language use.

Not only does the line between language learning strategies and language use strategies seem to be blurred, but also more recent literature points out that we should not be talking about strategies at all but underlying processes, with a shift away from product (strategies) towards process (self-regulatory and self-management processes [12] [13], [14] p. 332). This brings us to the methodology used in this study.

# 3. Methodology

A questionnaire with a mix of closed and open-ended questions was sent to 590 Beginners French students enrolled in an online course at the Open University (OU). A good return was obtained as 87 of these questionnaires were sent back fully completed (a good average return for external surveys). Out of these 87 respondents, 25 agreed to take part in the next phase, which involved completing a concurrent Think-Aloud Protocol (TAP) activity explained below. Nine respondents completed the monologue TAP activity and sent back their recording, but only five of these were actually useable in the study. The results of three participants at various levels of pronunciation attainment were then probed further through semi-structured interviews to build up some interesting case studies.

For the TAP activity, which participants recorded themselves, 10 French words were chosen above their level to encourage learners to "engage in strategic reasoning, either describing their thought processes in advance of pronouncing a word, or retrospectively justifying their pronunciation of it" [15] p. 13 and thus minimising automaticity. The phonemic transcription appeared next to each word as it does in the dictionaries used by students. In addition, the Phonemic Chart designed as a distance learning tool was given to the participants to be used as an aid to overcoming difficulties with some phonemes contained in the list of words. Students were able to identify the phonemes they found difficult by looking at the phonemic transcription next to the 10 given words. The participants were asked to record their thought processes as

they endeavoured to pronounce words from the list with the help of the interactive Phonemic Chart.

# 4. Findings

In terms of type and frequency of strategies mentioned in the questionnaire responses, two out of three respondents used a range of metacognitive, cognitive and affective strategies. Cognitive strategies were used much more than affective ones so there is a need to attend to foreign language anxiety in course material and when teaching online.

Cognitive strategies included focused listening, drilling, deduction of known pronunciation rules and transfer of previous knowledge. Avoidance behaviour is very often displayed by L2 learners when it comes to pronouncing difficult phonemes. Almost a third (28.7%) waited for another student to use the difficult word and 12.6% generally used another word with similar meaning, which means that altogether, 41.3% claimed that they tried to get around the word they found difficult to pronounce by using an avoidance strategy. The most frequently mentioned cognitive strategies were:

- Using virtual visuals
- Practising with the tutor rather than with peers/asking for his/her help
- Obtaining and listening to tutor's feedback
- Repetition/drilling
- Learning the International Phonetic Alphabet (IPA) and practising on one's own

Affective issues (but not necessarily strategies to deal with affect) were also mentioned, including positive self-talk and deep breathing as well as self-reassurance that making mistakes is acceptable, feeling that the online tutorial is a supportive learning environment and being able to deal with insufficient feedback. Perceived lack of feedback was a point aired repeatedly by respondents in the questionnaire and emphasises the critical role of the tutor when providing feedback. Metacognitive strategies actually emphasised what qualities a good, independent learner should display, including organisation skills and self-evaluation.

The TAPs yielded extremely valuable data, which was organised using NVivo. Nodes relating to FLA accounted for 52.1% of the coded data, a sizeable proportion indicating the pertinence of teaching strategies to address FLA.

# 4.1 Affective strategies

Self-encouragement was one of the strategies participants used to address negative emotions. However, some participants could not accept that they had completed the activity successfully without expressing emotions of self-denigration. Reinforcing positive self-evaluation is thus an important message to include in self-access materials.

# 4.2 Cognitive strategies

By far the most used cognitive strategy was repetition of the sounds and whole words. Inference was sometimes used to guess the pronunciation of one phoneme through the pronunciation of the whole word. Some also made use of language materials as sources of help, in this case, the Phonemic Chart. Repeated activities and access to helpful resources should thus be included in the course materials.

Deduction was also used, or a conscious application of pronunciation rules they knew or of knowledge that they had just gained during the activity. Participants also related new information to other notions already accumulated in their memory, showing the need for retrieval practice activities.

Imagery was sometimes used in an attempt to visualise information to help memory storage or to compare some of the strange looking phonemes to something known in order to process new knowledge a finding to keep in mind when designing course materials.

Respondents made use of auditory representation, meaning that they kept a sound or sound sequence in their heads. As TAPs enabled them to voice what they were thinking, it was possible to 'hear' the sound in their mind, thereby showing the usefulness of this process-oriented investigation instrument. It would have been difficult to observe this internal process otherwise and the three methodological criticisms of reactivity, automaticity and addressivity highlighted by Bowles [16] were all taken into consideration in the design of the TAP activity.

# 4.3 Metacognitive strategies

Participants used a range of metacognitive strategies such as planning how to complete the task or the content sequence. They also previewed the task to try to identify problems. Other strategies involved grouping, i.e. organising their learning on the basis of common attributes. Learners thus need to have access to session aims and a detailed overview at the beginning of their learning event.

Some comments indicated that progress on the task was checked regularly, as well as comprehension and production while using the chart. This self-assessment was necessary because of the absence of feedback when learning in solo mode, a point which also emerged from the questionnaire and was reinforced in the interviews.

As this study investigated the two learning environments used by distance language learners, there was evidence that learning strategies differed in these two contexts (solo mode via CALL and group learning via CMC). Table 1 shows the main differences in strategy use in both learning environments.

Group Learning in Online Sessions (CMC)	Individual Learning (CALL)
More affective strategies used than in CALL	Affective strategies
<ul> <li>taking a deep breath before speaking</li> </ul>	<ul> <li>self-encouragement</li> </ul>
• practising when microphone is off to	
decrease levels of anxiety	Cognitive strategies
• trying to overcome shyness by meeting	using imagery to remember phonemic
more people online before sessions	transcription
	drawing on deduction
Cognitive strategies	connecting new knowledge to
listening to the teacher's intonation	previous learning
• asking the teacher to repeat phonemes in	• reviewing notes
context	• listening to sound files (drill and kill)
obtaining feedback	• learning the IPA
• using available visuals (whiteboard, chat	<ul> <li>using self-access feedback (corrigés</li> </ul>
box)	[answer key] or Phonemic Chart) as no
No. 10 Control of the	teacher's feedback available
Metacognitive strategies	
• being aware of preferred learning style,	Metacognitive
visual or auditory	taking time to prepare learning ses- sion
	<ul><li>self-evaluating progress so far</li><li>finding various sources to check pro-</li></ul>
	nunciation

**Table 1** – Use of Strategies in Two Learning Environments.

In general, more affective strategies were needed during online sessions as interaction and communication with peers and the lecturer were required. The issue of feedback came to the fore as it was overtly available during taught online sessions but only covertly so in solo mode practice. The learners had to

look for feedback themselves and it was sometimes felt it was not specific enough. Coping with ambiguity was therefore more of an issue when learning in solo mode. The positive aspect of this mode of learning though lay in further metacognitive strategies being used as more time could be devoted to preparing and evaluating the learning event.

# 5. Implications for practitioners

Murphy et al. suggest that "distance tutors have to provide students with a range of strategies that they can use to develop particular language skills, such as pronunciation" [17] p. 409. The present study endeavoured to help language teachers and course designers to understand better the interaction between the learning of a skill and strategies used in a new learning environment. Such knowledge should help them decide what strategies need emphasising to learners either during an online session or through course materials.

As distance learners study in at least two learning environments (in solo mode and in online tutored sessions), teachers need to make them aware of the nature and importance of teacher feedback in each mode so that learners can make the best use of the sort of feedback available in different environments. A tutor can give specific feedback during an online session whereas covert or general feedback is available when learners listen to the course material models.

Another implication is suggested by Cohen: "Strategy instruction needs to be integrated into language instruction so that learners are provided with an opportunity to enhance their language learning experiences" [18] p. 147. Course designers might wish to include in their course materials strategies that students actually use when learning in solo mode as highlighted by the findings above, to help them cope with a new learning environment [5].

#### 6. Further research

White states that the research agenda developed as a consequence of elearning is important "to inform and guide pedagogical practice within rapidly evolving virtual learning environments" [19] p. 249. In their discussion on the use of appropriate strategies when working with new online tools, Hampel and Stickler remark that in order to acquire new literacy skills, "explicit training in these strategies and coping mechanisms has to be provided" but "more research is needed to identify the precise skills and strategies that can be taught to teachers and students in preparation for their online tutorials" [20] p. 135. Although the present project investigated the strategies that learners use when learning pronun-

ciation on their own and online, it would be useful to find out through an intervention study (a) whether these can be taught during tutorials or as part of the learning materials, (b) their most effective sequencing and (c) whether the application of these strategies would make a difference to learners' phonological outcomes. In terms of learning, it would be interesting to establish a taxonomy of strategies for distance learners based on Peterson's [21] inventory of strategies related to pronunciation in a conventional classroom.

Through an exploratory investigation, this study sought to deepen our understanding of learners' learning strategies. As technology continues to undergo rapid change, so do pedagogical applications to language learning. We hope we have provided some insights into what it is like to learn pronunciation outside the classroom, and what learners do to cope affectively and cognitively with a challenging sub-skill in a new learning environment.

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## IRINA DAVID\*

## AUTONOMOUS ENHANCEMENT OF COMMUNICATION SKILLS IN FOREIGN LANGUAGES – A BLENDED LEARNING APPROACH

## Abstract

This article discusses the benefits of blended learning in foreign language teaching and learning, with special focus on learners' autonomy. Theoretical comments on the topic will be followed by an overview of the main strategies and tools used in the framework of the Erasmus+ Project Oportunidance – Dance Your Way to Other Cultures.

#### 1. Introduction

Multilingualism and engagement in lifelong learning are key values in European contemporary society, as without them individuals cannot fully benefit from the opportunities provided by the open-border world we live in, characterised by constant free flow of knowledge, capital and workforce. Furthermore, these two values are considered important elements of being a European citizen and have been heavily promoted by European Union institutions both locally and internationally.

One of the European Commission's main goals is to encourage people to understand the importance of being able to communicate in foreign languages, as this allows people from different countries to interact with each other and exchange ideas. At the same time, it "encourages us to become more open to others, their cultures and outlooks" [1]. In addition, "multilingual citizens are better placed to take advantage of the economic, educational and professional opportunities created by an integrated Europe" [2].

Surveys conducted among European Union citizens have revealed that people seem to be aware of the need to become multilingual. In a 2012, survey, the figures indicated that 88% of Europeans claimed they recognised the importance of multilingualism with 84% of the respondents saying that in their opinion Europeans should be able to speak a foreign language and 72% saying that two or more foreign languages should be spoken [2]. However, at the time of the survey, only 54% of the respondents were able to interact in a foreign language, 25% in two foreign languages and 10% in more than two foreign languages [2]. In Romania, values were lower than the European average. While 73% of the respondents stated that it is necessary to

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know one foreign language and 60% supported the idea that two or more foreign languages should be spoken, only 48% of the participants could communicate in a foreign language, 22% in two foreign languages and 8% in three foreign languages or more [3].

Just as in the case of multilingualism among European citizens, similar discrepancies between institutional intentions and public opinion, on the one hand, and people's engagement in this type of activity on the other, can be noticed when it comes to lifelong learning. Thus, while lifelong learning is considered by EU institutions as a significant feature of personal and professional growth, there are still many people who do not dedicate time and resources to it. Studies in the field of adult education, constant development of competences and acquisition of new ones have established that active engagement in lifelong learning has a positive impact on individual development, employability, work performance, organisational and economic growth [4] [5]. However, actual participation figures in lifelong learning activities do not match expectations. Eurostat surveys on participation in education and training among adult learners show that in the period 2007-2016 only approximately 10% of Europeans engaged in adult education. In 2016 the European average had a value of 10.8% and there were significant differences between participation figures in various European Union countries. Sweden was at the top of the list, with engagement in adult education reaching a value of 32.9%, while Romania was at the bottom, with a participation value of 1.2% [6].

The drive towards multilingualism and lifelong learning combined with people's still low ability to become multilingual or to participate actively in adult education indicates that individual and institutional expectations do not come with tools and measures that can be used effectively to encourage people to develop themselves. There is still a need in the market for educational programme that are tailored to adult learners' needs and learning styles. The next sections of this article will briefly present the characteristics of adult learning, with special focus on autonomy as key feature. The article will also include a section with information on the Erasmus+ *Oportunidance* – *Dance Your Way to Other Cultures* project, whose main purpose is to help adult learners to develop their multilingual and intercultural skills.

## 2. The key features of adult learning

The literature in the field of adult education is vast and researchers have provided a wide range of sets of characteristics that can be applied to this specific type of education. Malcolm Knowles' frequently quoted description of the features of adult learning identifies five key elements that define it. They are: "self-concept", "role of experience", "readiness to learn", "orientation to learning" and "motivation to learn" [7] [8]. The adult learner is someone who has developed from a state of dependency to that of independence and control, someone who has acquired experience and who expects to make use of and share this experience while learning. Furthermore, the adult learner is a person who can no longer be forced to engage in learning. The motivation to learn is internal and adults engage in learning experiences only if what they learn is fully adapted to their expectations and lifestyles, allows them to use and share previously acquired knowledge and can be applied instantly in both personal and professional contexts [7] [8] [9].

If the motivation to learn is internal, this means that learning programme aimed at adults need to be adapted to their needs, as well as give them control over when, what and how to learn, "for example by being flexible and fitting in with everyday life, available at times and in places that are accessible to adult learners, with no barriers to prevent learners of all ages and abilities engaging in education" [9].

One of the key features of adult learning is autonomy. Defined by Henri Holec as "the ability to take charge of one's own learning" [10], autonomy is a prerequisite of adult education. Holec considered that autonomy had to be ensured on two main levels: on the one hand, it is necessary to give learners the freedom to choose what learning experiences they want to engage in and what learning strategies to use, and on the other, it is required to create learning contexts that allow and encourage learners to be autonomous [10]. This idea is also present in Holec's later work, where he highlights that "the autonomous learner is not automatically obliged to self-direct his learning either totally or even partially. The learner will make use of his ability to do this only if he so wishes and if he is permitted to do so by the material, social and psychological constraints to which he is subjected" [11].

While autonomous learning is based on the idea that people should be allowed to take control of their learning experience, deciding what, when, where or how often to study, it also takes into account the role of the educators and designers of lifelong learning programmes, whose presence is necessary to create an environment where learners can feel not only free to make their choices, but also supported if necessary. Most researchers in the field of adult education, lifelong learning and autonomous learning seem to agree that autonomy should not be perceived as complete freedom, with no intervention from the part of an educator. Autonomous learners tend to feel

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isolated and lose their motivation if they cannot communicate with peer learners or with a teacher when they feel the need.

All these elements were considered when the project presented in the following section of the article was designed and implemented.

# 3. Autonomous learning in the framework of the Oportunidance Project: Dance your way to other cultures

The Erasmus+ Project entitled *Oportunidance – Dance Your Way to Other Cultures* was designed and implemented as a response to European adult learners' need to develop their verbal and non-verbal communication skills in an environment that is adapted to their busy lifestyle and caters to a wide variety of learning styles. The project is a multidimensional one, a "life-long learning project of non-formal education, which addresses adults who are passionate about foreign languages, dancing and European culture and civilization" [12].

The educators involved in implementing the project are foreign language teachers from the Department of Modern Languages and Business Communication from the Bucharest University of Economic Studies – the institution which coordinates the project, the Université Libre de Bruxelles, Universidade de Lisboa, Escola Oficial d'Idiomes de Barcelona-Drassanes, dance trainers from Association Club Vertical/ Dance School Oportunidad – Romania and teachers of human kinetics from Universidade de Lisboa.

The tools used to achieve the goals of the project include both a series of online instruments and face-to-face interaction. The online support for enhancing multilingualism and cultural awareness, as well as non-verbal communication through dance is provided through foreign language activities posted on an e-learning platform designed for the project [13] and through dance tutorials in various languages uploaded on the project's YouTube channel [14].

This article focuses mainly on the online foreign language lessons and on the face-to-face multinational events, analysing how they facilitate effective autonomous learning. Apart from the obvious benefits provided by most elearning platforms – e.g. possibility to access the material whenever the learners want, with no limitations on how much time the learners spend on the platform and how often they access it – the online platform of the *Oportunidance Project* comes with other features that make it possible for its visitors to engage effectively in autonomous learning. The first way in which learner autonomy is encouraged on the online platform is by allowing learners to

choose the language(s) they want to study from a list of six: Romanian, English, French, Spanish, Catalan and Portuguese. Secondly, the learners can choose what area of communication to study from four options: general language, business communication, as well as dance-related or intercultural communication. Thirdly, they are encouraged to analyse their own language proficiency and to select for each language they choose to learn or develop the level they want to focus on from A1 to B1. Finally, the activities themselves are designed to encourage learners to be autonomous. There are various types of activities in each lesson so that learners can identify the ones that best match their learning style. Furthermore, at the end of each lesson there is a forum, where learners can share their experience and opinions with peer learners and language trainers, get in touch with people with similar interests regarding foreign languages and specific social and cultural issues analysed in the lessons, as well as develop their written communication skills.

The same environment conducive to learners taking control of their learning and selecting what activities to get engaged in and in which way to complete them was ensured through several multinational events. Throughout the period 2015-2017 the members of the project organised numerous local events whose main purpose was to allow learners to meet face-to-face and share ideas on how the project had helped them and also to encourage them to make comments regarding the main challenges they had faced. In 2017 three multinational events, with participants mainly, but not exclusively from Romania, Belgium, Spain and Portugal were organised. The purpose of these events was to encourage learners to communicate in the foreign languages they were studying, learn new things about other cultures, share information about their own culture and engage in learning activities aimed at helping them to check their own progress and practise what they had learned. During each event there were two sessions of language lessons usually two or three different language lessons were held simultaneously in different rooms to allow learners to choose which lessons they wanted to attend – two sessions of dance tutorials – sessions for different types of dances taught in different languages were held simultaneously - socialising games and intercultural events.

The design and implementation of the *Oportunidance – Dance Your Way to Other Cultures* project started in 2015 and ended in 2017. However, the lifespan of the project is expected to extend far beyond this period, due mainly to two reasons. Firstly, the online foreign language platform will continue to function and provide support to European adults interested in developing their multilingual competences, as well as represent a bridge be-

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tween them and peer learners with similar interests. Secondly, written communication on the platform and face-to-face interaction during the multinational events created a community of learners who will keep in touch and further develop their intercultural and foreign language competences beyond the scope of the project.

## 4. Conclusions

As shown in this article, multilingualism and lifelong learning are core values of European citizenship, without which individuals cannot fully benefit from the opportunities that they could enjoy. However, even if institutions and individuals recognise the importance of these two values, figures show that low percentages of Europeans are multilingual or engage in lifelong learning. One possible explanation for the discrepancy between understanding the need to acquire or develop specific skills, on the one hand, and the actual acquisition of the respective skills, on the other, could be the failure to create learning environments and programme that are fully adapted to adult learners' needs, lifestyle and learning strategies.

The Erasmus+ *Oportunidance* – *Dance Your Way to Other Cultures* project tried to address these issues by designing activities meant to support effective autonomous learning both online and in face-to-face interaction. The project, whose main purpose was to help interested learners to develop their multilingual, intercultural and social skills, created a multinational community of adult learners who are better equipped to learn autonomously and to continue to further develop their competences and add new information to their knowledge about European cultures and languages.

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