

# Convocatoria de ayudas de Proyectos de Investigación Fundamental no orientada

## TECHNICAL ANNEX FOR TYPE A or B PROJECTS

### 1. SUMMARY OF THE PROPOSAL (the summary must be also filled in Spanish)

**PROJECT TITLE:** IES 2.0: Digital literacy practices. Materials, classroom activity and online language resources.

**PRINCIPAL INVESTIGATOR:** Daniel Cassany i Comas

#### SUMMARY

(brief and precise, outlining only the most relevant topics and the proposed objectives):

We aim to explore and assess the changes brought about by introducing the use of laptops, wifi, digital textbooks and virtual learning environments (summed up as “digital classrooms”) in teaching reading and writing at secondary school level. There are 4 objectives: 1) collect, describe and analyse the didactic materials in order to find out how much they really benefit from the many possibilities that internet provides and to suggest improvements in this area; 2) describe and assess the reading and writing tasks (educational sequencing, interaction, students and teachers’ opinions) in order to produce a catalogue of “good practices”; 3) collect, describe and analyse students’ written production to find out which changes are caused by the digital medium and which specific problems are posed in these texts, and offer linguistic and didactic suggestions for improvement, and 4) identify the language-processing technologies used by schoolchildren when reading and writing (spell-checkers, translators, dictionaries), and describe how they use them to develop proposals and guidelines which will enhance a more complete and intelligent use and knowledge of the tools, taking as a starting point the problems we find.

We propose a mixed methodology, more qualitative than quantitative, and a combination of ethnographic techniques (classroom observation, interviews with students and teachers) and discourse analysis (analyses of students’ conversation and written production). We will develop 5 corpora for analysis (digital materials, classroom observations, students and teachers’ interviews, samples of schoolchildren’s writing and data on the use of language-processing technologies) which will be processed with appropriate software (text analysis and video software). Data will be triangulated and provide answers to hypotheses of this project, which are: a) “digital classrooms” tend to reproduce previous teaching routines; b) these environments increase access, experience and learning for some digital literacy practices, which students develop of their own accord independently from the school curriculum; c) these environments create suitable conditions to develop educational practices that enhance competences, cooperation and student independence, which can relate to knowledge and skills that students bring with them, thus leading to a more effective and meaningful learning experience. This proposal is framed within New Literacy Studies and is based on interdisciplinary research in reading and writing from Library and Documentation Studies, Computer-mediated Discourse Analysis or Multimodal Electronic Discourse.

Several reasons justify this choice of topic: 1) the national and regional Governments have backed the gradual widespread introduction of “digital classrooms” in compulsory education, therefore it is very urgent to provide guidelines and effective and reliable models based on empirical research, not speculation; 2) previous research does not offer positive data and there are many unanswered questions due to the novelty of the topic; 3) our research group is mature, knowledgeable of the subject, it has enough experienced members and prestige, having completed two consecutive successful projects on new literacy practices. In light of the above our group is fit for the purpose of this project.

## TITULO DEL PROYECTO:

### RESUMEN

(breve y preciso, exponiendo sólo los aspectos más relevantes y los objetivos propuestos):

Proponemos explorar y valorar los cambios que provoca la introducción de portátiles, wifi, libros de textos digitales y entornos virtuales de aprendizaje (en conjunto, las "aulas digitales") en la enseñanza de la lectura y la escritura en secundaria. Hay 4 objetivos: 1) recopilar, describir y analizar los materiales didácticos, para valorar si aprovechan las posibilidades de la red y sugerir mejoras al respecto; 2) describir y valorar las tareas de lectura y de escritura (secuencia didáctica, interacción, opiniones de alumnos y docentes), para hacer un catálogo de "buenas prácticas"; 3) recopilar, describir y analizar los escritos del alumnado, para descubrir qué cambios provoca el medio digital y qué limitaciones específicas presentan estos textos, y para ofrecer pautas lingüísticas y didácticas de mejora, y 4) identificar las tecnologías lingüísticas que usan los chicos al leer y escribir (verificadores, traductores, diccionarios), describir cómo las usan y desarrollar propuestas y orientaciones que fomenten un conocimiento y uso más inteligente y completo, a partir de las limitaciones detectadas.

La metodología propuesta es de tipo mixto, más cualitativa que cuantitativa, y combina técnicas de la etnografía (observaciones de aula, entrevistas a alumnos y docentes) y del análisis del discurso (análisis de conversaciones y de escritos de alumnos). Elaboraremos 5 corpus de análisis (materiales digitales, observaciones de aula, entrevistas a alumnos y docentes, escritos de alumnos y datos sobre el uso de las tecnologías), que se procesarán con herramientas informáticas (programas de análisis de texto, video), se triangularán y ofrecerán respuestas a las hipótesis que plantea el proyecto: a) las "aulas digitales" tienden a reproducir las rutinas previas de enseñanza; b) estas aulas incrementan el acceso, la experiencia y el aprendizaje de algunas prácticas letradas digitales, que desarrollan los alumnos por su cuenta y que no se corresponden con el currículo escolar, y c) con estas aulas se crean las condiciones didácticas adecuadas para desarrollar prácticas educativas más competenciales, cooperativas, autonomizadoras, que conecten con los conocimientos y las destrezas que trae el alumnado, de manera que se promueve un aprendizaje más efectivo y significativo. La propuesta se inscribe en la tradición de los New Literacy Studies y se fundamenta en investigaciones interdisciplinarias sobre la lectura y la escritura procedentes de la Biblioteconomía, el Análisis del Discurso de la Comunicación Mediada por Ordenador o el Discurso Electrónico Multimodal.

Varios motivos justifican la elección de este tema por parte de nuestro grupo: 1) los gobiernos central y autonómico han apostado por la implementación paulatina de "aulas digitales" en la educación obligatoria, de modo que es urgente la formulación de orientaciones y modelos efectivos y contrastados, basados en la investigación empírica y no en la especulación; 2) la investigación previa no ofrece datos positivos y presenta muchos vacíos dada la novedad del tema; 3) nuestro grupo de investigación posee la madurez, el conocimiento del tema, la fuerza de efectivos y el reconocimiento externo necesarios para acometer una investigación global como esta, después de haber desarrollado con éxito dos proyectos consecutivos sobre las nuevas prácticas letradas.

## 2. INTRODUCTION

(maximum 5 pages)

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- The introduction should include: the aims of the project; the background and the state of the art of the scientific knowledge, including the essential references; the most relevant national and international groups working in the same or related topics.
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### Aims of the project and background

We intend to study the changes brought about in compulsory education by the introduction of a modality of 'virtual', 'electronic' or 'online' teaching. In recent years the National and Regional Governments are committed to implementing this modality gradually in Spanish public education. A large number of secondary education schools (IES Spanish abbreviation to be used henceforth): a) have created virtual platforms or virtual learning environments (EVA henceforth); b) they have bought licences to use digital materials (PDF format, web browsers, private software); c) they have supplied every student with a laptop (funded by the institution); d) they have opened wifi networks in the centre for free access to internet, and e) they have developed promotion policies — induced even— educators to adopt this teaching modality. (It is what is known as School 2.0 (IES 2.0 in this project), since we adapt Tim O'Really's popular metaphor for Web 2.0, although it is actually called differently in each Spanish Region.)

In Catalonia the Project is called eduCAT1x1 and, according to the institutional webpage<sup>1</sup>, at the start of academic year 2010-11 there were about 100,000 students in 617 IES with a laptop and digital textbooks, and it was forecasted that the figure would reach 140,000 in the second term of the same year, with the sixth 'wave' (or stage) of implementation. The experience started basically in ESO 1 and 2 (first and second years of obligatory secondary education, which is a four year period), although there are also about 21 pilot centres for ESO 3 and the last two years of primary education (years 5 and 6). On the other hand, one of the publishers involved (Teide) reports that it has sold 23,000 licences for the use of its digital materials, although many teachers call for a paper version of them to complement them in the classroom (when wifi is out or for when they prefer to use books and paper). In the rest of Spain there is no other project as big as that, but there are noteworthy and varied pilot experiences in a large number of centres in various Regions. Maybe the economic crisis or possible Cabinet changes in Government will change the pace of this initiative, but not its direction. There is no going back.

That is why now is the time to start empirical research that is comprehensive and well documented on the impact brought about in education by the introduction of information and communication technologies (ICTs henceforth), or the so-called learning and knowledge technologies (LKT). Further motivation that justifies this choice are the following:

- a) After two consecutive research projects focused on the description and the analysis of critical reading comprehension new literacy practices, our group has the maturity, the know-how, knowledge and experience that are all required to take on an investigation set in a living environment, and complex, as is a classroom or education centre;
- b) Previous literature is abundant, but more speculative than empirical and more local (or focused on particular aspects) than global, so there is a real niche for this issue which needs to be filled;
- c) Various researchers in the group organise, at UPF and UdG two Masters Degree programs of teacher training for secondary education (speciality of Catalan and Spanish Language and Literature), so through this channel it will be simpler to contact centres, educators and students to act as informants for the project;
- d) The results of the investigation can be implemented at once and will be useful in improving the 'digitalisation' programs that are being started in Spain or other countries, given the urgent interest in the matter.

Our Project is based on an ethnographic approach, with an ecological view that includes all the agents involved (students, educators, authorities), the artefacts (materials, hardware), the settings (EVA, classroom) and the practice (educational organisation, classroom interaction, language tasks), but it focuses entirely on reading, writing and literacy. We aspire to obtain a large number of qualitative empirical data (quantitative, too), coming from several sources and perspectives, and after processing and interpreting them, see how they offer reliable answers to the following research questions:

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<sup>1</sup> See: <http://www.educat1x1.cat/>, and also council site ATRIA. <http://atria.cat/Castellano/paginas/default.aspx>

1. The introduction of laptops, digital materials and internet: can they renovate educational practices, or on the contrary, are they just 'old wine in new bottles', as suggested by research (Adell & Castañeda Quintero 2010)? What changes are caused by the arrival of laptops, internet and digital resources?
2. What say do students and teachers have in this new educational modality (Garrido Miranda 2010)? How do they understand it and appreciate it? Do Spanish perceptions coincide with those abroad (Kalman and de la Garza 2006; Cuban, Kirkpatrick & Peck 2001)?
3. Do the didactic digital materials of the publishers take full advantage of computerization (hyperlinks, multimodality, interface, etc.)? and the resources on internet (Fontich 2010)? What resources do they use, how, and for what tasks, and in what contexts?
4. What are the reading and writing tasks that generate the greatest satisfaction among students and teaching staff, and which enhance meaningful, critical learning (what could be regarded as 'good practices'; Danish Technological Institute ed. 2008)? What characteristics do these model or ideal tasks have (Canales Reyes 2007)?
5. How does language teaching change (spelling, syntax, lexis, discourse) with universal access to language technologies and resources (checkers, translators, dictionaries, databases)? Does this modality integrate and make good use of these technologies? How so?
6. How can each one of the digital genres best be used (chatrooms, wikis, webs, forums, blogs) for each subject (Language, Foreign language, non-linguistic subjects)? (Warlick 2009; Balagué Puxan 2009).
7. What are the most appropriate tasks to be done in class 'face-to-face' and which ones are more appropriate to be done online 'screen-to-screen', when both context are available? How is virtual activity best coordinated with physical presence? (Kelly, Mc Cain & Jukes 2009)
8. Does this educational modality get students (digital natives; Prensky 2010) to enrich the educational centre and its curriculum with knowledge and skills they have learnt on their own—often on internet, with their peers or networks of friends, as 'practice communities'—(European Council 2008)? Does this educational modality constitute a 'bridge' or a 'third space' (Moje et al 2004; Gutiérrez 2008) between the academic and the vernacular? Does it enhance the creation of Personal Learning Environments (Atwell 2007)?

#### **Current State of scientific and technical knowledge**

In the first place, a fruitful use of ICTs and internet in education is an interdisciplinary area that has aroused interest in a number of fields, beyond the recent political decision to digitalise the classroom environment. In Pedagogy, Computer Science, Psychology, Library and Documentation Studies, general teaching or the teaching of specific subject areas (Language, Math, Social Science, Science) with their specific methodologies, it is relatively easy to find research groups and relevant works that approach this issue from their angle.

As mentioned above, research shows, with certain specific traits, that introducing ICT's in education: a) reproduces past teaching practices (Adell & Castañeda Quintero 2010), b) it is not integrated in educational centres (Gros 2000), c) it is underused (Cuban 2000), or d) it does not produce benefits or noteworthy changes (Kalman & de la Garza 2006). The same message comes from the conclusions of the European Council's report on the impact of ICT's in lifelong learning:

1. "The impact of ICT on education and training has not yet been as great as had been expected [...]";
2. "Although ICT has the potential to develop a "learning continuum" that would support lifelong learning and embrace formal, informal and workplace learning, this has not yet been realised [...]";
3. "Innovative content and services are urgently needed [...]", and
4. "One of ICT's main strengths is its capacity to support informal learning. Self-learning and informal peer-learning are by far the two most important mechanisms for obtaining skills and competences [...]".

Beyond these global assessments, numerous studies, such as Kelly, Mc Cain y Jukes (2009), Danish Technological Institute (2008), Balagué Puxan (PhD 2009) regarding blogs or the monograph on 'Wiki and higher education in Spain' (2010), they describe 'good digital practices', they explore the didactic potential of each medium, and ultimately, they offer a broad overview which is comprehensive and varied of the ICT applications in classroom environments, although they do not provide empirical data for learning, user satisfaction, or improvement in academic performance.

Secondly, in the more specific area of ICT's and language teaching, the terms used for self-reference in the field of research in recent years show relevant progress: *Computer-Assisted Language Learning (CALL)* of the nineteen-nineties, which stresses the support of computers in individual language learning. That moved on to

*Network-based Language Teaching or Language Learning on Line*, in the new millennium, they point out the social nature of learning. More recently research has diversified and is focused on specific aspects of language learning, such as the use of chatrooms in sociolinguistics (Campuzano 2003), the use of WebQuests as EFL learning tools (Pérez Puente 2007), the exploitation of video and photo repositories (Davies y Merchant 2009) or the virtual environment of Second Life (Gillen 2009). They are studies that focus on different 'electronic genres', and they describe the technical possibilities and show various examples of successful experiences.

Thirdly, in the specific area of digital reading and writing—our interest here—we can distinguish various research paths, which provide theoretical frameworks, key concepts, research methodologies and relevant results for this project:

- **The natives and digital experts.** Various studies from the field of documentation studies (Williams and Rowlands 2007, Gómez Hernández, Calderón Rehecho & Magán Wals 2008) or from psychology (Fogg 2003; Nielsen 2008) describe with empirical data the behaviour of internauts and put a finer point on Prensky's (2010) famous speculations on multimodal, interactive, cooperative or playful profile of teenage digital natives. They portray a profile of a youngster with mechanical computer skills, but with serious difficulty in keeping up reading for a long period, understanding and critical appreciation of what s/he has read, choosing strategies for browsing or scaffolding information to adapt it to persona needs. To this end it is crucial to use the concept of informational literacy (or AFLIN), supplied by documentation studies. Many Governments have adopted it recently as standard currency in digital education.
- **Computer Mediated Communication (CMC).** The Branch of Discourse Analysis to do with electronic texts and verbal interaction online already has a relevant volume of studies, results and methods and offers a solid description of synchronic electronic genres (chat, role-play games) and asynchronic (email, forum, web, blog, wiki) used in online learning. Herring's state of the art (2001) is still most relevant or the recent handbooks by Kelsey & St Amant K ed. (2007) and Yus (2010), which offer linguistic references to proceed to analyse didactic materials and students' productions. In this context, a basic concept that has been proposed in this framework is 'ideophonematic writing' (used in chatting or texting; Torres and Vilatarsana 2003).
- **New literacies.** In the ethnographic trend of New Literacy Studies, noteworthy are the studies that explore multimodal literacy practices, carried out by young internet natives in their private life, beyond the reach of schools or other institutions. Youngsters enjoy reading or writing alternative genres, such as 'fanfic' (fiction-mania, Black, 2008) and using challenging techniques like 'remix' (copy, paste, mix, and recontextualise). Noteworthy are pioneering studies by Jenkins (1992 and 2006), the exhaustive exploration of digital practices by youngsters studied by Lankshear & Knobel (2008) or the more recent work by Coiro, Knobel, Lankshear and Leu (2009), Williams (2009) and Alverman ed. (2010), among others. This research path provides the cornerstone for studying what boys and girls do outside their schools and what they can bring to class as *a priori* knowledge.
- **Multimodal Electronic Discourse.** Halfway between Discourse Analysis, New Literacy Studies and Semiotics, research on multimodality and, specifically, electronic discourse that integrates several modes of representation of knowledge (static image, moving pictures, audio, virtual reproduction) provides another theoretical and methodological perspective on which this proposal is based. Kress's (2003) more theoretical research on the intentional character of the relationship between meaning and mode of representation is complemented with the handbooks by Kress & van Leeuwen (2001) and O'Halloran (2004), Jewitt (2006) and Royce & Bowcher ed. (2006), which offer parameters and guides to analyse multimodal discourse.

Overall, these four research perspectives constitute the present state of knowledge that is more specific to our field of study and the starting point to take on this project.

### Groups that work on the same subject

We list only those groups whose work is exclusively on digital reading and writing:

- *Lancaster Literacy Research Centre* from Lancaster University. It is a centre specifically devoted to reading and writing, the leading centre in Europe, where various leading researchers in the field work David Barton (director), Mary Hamilton or Roz Ivanic. Among the works published recently to do with this project we highlight David Barton and Papen (2010) or the ones by Julia Gillen (2009) and Peachey, Gillen, Livingstone & Smith-Robbins, ed. (2010). <http://www.lancs.ac.uk/fss/centres/llrc/index.php>
- *New Literacies Research Lab* at the University of Connecticut. One of the leading groups in the USA, in the

size and number of their projects and the number of their researchers, led by thoroughly experienced researchers like Don Leu, or more recently, Julie Coiro. Among their publications we can point out the editing work of *Handbook of Research on New Literacies* over a 1,000 pages long (Coiro, Knobel, Lankshear & Leu (2009). See: <http://www.newliteracies.uconn.edu/pubs.html>

- *Everyday literacies*. Although it is not a formal academic group, the works of Colin Lankshear & Michele Knobel constitute an unquestionable point of reference in this field, in its interest, current relevance, and quantity, like their famous work from 2006, with three revisions and a translation into Spanish. <http://everydayliteracies.blogspot.com/>
- Department of Investigation in Education (DIE) from CINVESTAV. No doubt the centre for educational research of the highest prestige in Mexico and one of the most renown in the Spanish-speaking World, with researchers like Emilia Ferreiro, Elsie Rockwell or Judith Kalman. The latter two work with the ethnographic approach of this project and Kalman is developing several projects of analysis of the impact that new technologies have on illiteracy like Kalman & de la Garza (2006), Guerrero & Kalman (2010). <http://www.cinvestav.mx/die/>

### Most relevant bibliography

- ADELL SEGURA, J. & L. CASTAÑEDA QUINTERO. (2010) "Los Entornos Personales de Aprendizaje (PLEs): una nueva manera de entender el aprendizaje". in ROIG VILA, R. & M. FIORUCCI eds. *Stumenti di ricerca per l'innovazione e la qualità in ambito educativo. La Tecnologia dell'informazione e della Comunicaciones e l'interculturalità nella scuola*. Roma: TRE Univesita degli Studi.
- ALVERMANN, D. E. ed. (2010) *Adolescents' on line Literacies (New Literacies and Digital epistemologies)*. Peter Lang.
- ATTWELL, G. (2007) "The Personal Learning Environments —the future of eLearning?", *eLearning Papers*, 2/ 1. <http://www.elearningeuropa.info/files/media/media11561.pdf> <10-1-2011>
- BALAGUÉ PUXAN, F. M. (2009) "Us dels blogs com a suport al procés d'ensenyament i aprenentatge a l'educació superior", PhD dissertation, Barcelona: Universitat de Barcelona. <http://www.tdx.cat/TDX-0310110-123633> <10-1-2011>
- BARTON, D. & U. PAPAN. (2010) *The Antropology of Writing. Understanding Textually Mediated Worlds*. London: Continuum.
- BERGER, P. & S. TRESLER. (2010). *Choosing Web 2.0 Tools for Learning and Teaching in a Digital World*. Libraries Unlimited.
- BLACK, R. (2008) *Adolescents and Online Fan Fiction*. New York: Peter Lang.
- BURNISKE, R. W. (2008) *Literacy in the Digital Age*. Thousands Oaks. C. A. Corwin Press. Second Edition.
- CAMPUZANO, L. (2003) "Trabajando con chat en cursos de postgrado en línea", *Cultura & Educación*, 15 (3): 287-298.
- CANALES REYES, R. (2007) "Identificación de factores que contribuyen al desarrollo de actividades de enseñanza y aprendizaje con apoyo de las TIC, que resulten eficientes y eficaces. Análisis de su presencia en tres centros docentes.", PhD dissertation, Barcelona: UAB. <http://www.tdx.cat/TDX-0412107-121749> <10-1-2011>
- CARRINGTON, V. & M. ROBINSON, ed. (2009) *Digital Literacies. Social Learning and classroom practices*. Sage.
- CASTAÑEDA QUINTERO, L. coord. (2010) *Aprendizaje con Redes Sociales. Tejidos educativos para los nuevos entornos*. Sevilla: MAD Eduforma.
- COUNCIL OF EUROPE (2008) "The use of ICT to support innovation and lifelong learning for all. A report on progress". Brussels: SEC (2008) 2629 final. <http://ec.europa.eu/education/lifelong-learning-programme/doc/sec2629.pdf> <10-1-2011>
- CUBAN, L. (1986) *Teachers and machines: The classroom use of technology since 1920*. New York: Teachers College.
- CUBAN, L. (2000). *Oversold and underused. Computers in the classroom*. Cambridge: Harvard University Press.
- CUBAN, L.; KIRKPATRICK, H. & C. PECK, C. (2001) "High access and low use of technologies in high school classrooms: Explaining an apparent paradox.", *American Educational Research Journal*, 38(4): 813-834.
- DANISH TECHNOLOGICAL INSTITUTE ed. (2008) Compendium of good Practice Cases of e-learning. Education and Culture DG. [http://ec.europa.eu/education/lifelong-learning-programme/doc/elearningcomp\\_en.pdf](http://ec.europa.eu/education/lifelong-learning-programme/doc/elearningcomp_en.pdf) <10-1-2011>
- DAVIES, J. & G. MERCHANT. (2009) *Web 2.0 for Schools. Learning and Social Participation*. Nueva York: Peter Lang.
- FOGG, B. J. (2003) *Persuasive Technology. Using Computers to Change What We Think and Do*. San Francisco: Morgan Kaufmann. [www.bjfogg.com/](http://www.bjfogg.com/) <8-1-2011>
- FONTICH, X. (2010) "Llibres de text y digitalització a les aules: parlem-ne", *Articles*, 50, 69-84.
- GARRIDO MIRANDA, J. M. (2010) "Creencias sobre el rol de las tecnologías de información y comunicación en la formación inicial de docentes: explorando las diferencias entre estudiantes y docentes universitarios.", PhD dissertation, Barcelona, Universitat de Barcelona. <http://www.tdx.cat/TDX-0120110-134523> <10-1-2011>
- GEE, J. P. & HAYES, E. R. (2011, in prevision) *Language and Learning in the Digital age*.
- GILLEN, J. (2009) "Literacy practices in Schome Park: a virtual literacy ethnography", *Journal of Research in Reading*, 32/1: 57-74.
- GÓMEZ HERNÁNDEZ, J. A.; CALDERÓN REHECHO, A. & J. A. MAGÁN WALS. (2008) *Brecha digital y nuevas alfabetizaciones*. Madrid: Biblioteca Complutense. [www.ucm.es/BUCM/biblioteca/OLibro.pdf](http://www.ucm.es/BUCM/biblioteca/OLibro.pdf) <10-1-2011>
- GROS, B. (2000) *El ordenador invisible. Hacia la apropiación del ordenador en la enseñanza*. Barcelona: Gedisa.
- GUERRERO, I. & J. KALMAN. (2010) "La inserción de la tecnología en el aula: estabilidad y procesos instituyentes en la práctica docente.", *Revista Brasileira de Educação*, 15 (44): 213-229.

- GUTIÉRREZ, K. (2008). "Developing a Sociocritical Literacy in the Third Space", *Reading Research Quarterly* 43(2): 148-164.
- HERRING, S. C. (2001) "Computer-mediated communication", in D. Schiffrin, D. Tannen & H. E. Hamilton ed. *The Handbook of Discourse Analysis*, Blackwell Publishing, 612-634.
- JENKINS, H. (1992) *Textual poachers. Television fans & Participatory Culture*. London: Routledge.
- JENKINS, H. (2006). *Fans, Bloggers and Gamers: Exploring Participatory Culture*. New York: New York University Press.
- JEWITT, C. (2006) *Technology, Literacy, Learning. A Multimodal approach*. Routledge.
- JUKES, I. & Mc CAIN, T. (2010) *Understanding the Digital Generation: Teaching and Learning in the New Digital Landscape. The 21th Century Fluency Series*. 21th Century Group.
- KALMAN, J. & B. V. STREET coord. (2010) *Lectura, escritura y matemáticas como prácticas sociales*. Diálogos con América Latina. México: Siglo XXI.
- KALMAN, J. & Y. DE LA GARZA (2006) *Incorporación de la Tecnología de la Información y la Comunicación (TIC) a la práctica docente en la educación secundaria. Informe presentado a la Secretaría de Educación Pública*. México: CINVESTAV-ILCE. [http://www.cinvestav.mx/die/lets/docs/lets\\_sur\\_incorporacion\\_tic.pdf](http://www.cinvestav.mx/die/lets/docs/lets_sur_incorporacion_tic.pdf) <10-1-2011>
- KALMAN, J. & CARVAJAL, E. (2007) "Hacia una contextualización de la enseñanza y el aprendizaje en las aulas de la Telesecundaria", *Centro*, 69-106.
- KELLY, F. S.; Mc CAIN, T. & I. JUKES. (2009) *Teaching the Digital Generation*. Corwin Press.
- KRESS, G. (2003) *Literacy in the new media age*. London: Routledge.
- LANKSHEAR, C. & M. KNOBEL. (2006) *New Literacies*. Open University Press. 2nd ed. in 2008 and in prevision 3th in 2011.
- LAW, N. (2004) "Teachers and Teaching Innovations in a Connected World", in A. Brown & N. Davis eds. *Digital Technology, Communities and Education*. London: Kogan Page.
- MOJE, E. *et al.* (2004). "Working toward third space in content area literacy: An examination of everyday funds of knowledge and Discourse". *Reading Research Quarterly* 39(1): 38-70.
- NIELSEN'S, J. (2008) "How little do users read?", *Alertbox*, 6, May. [www.useit.com/alertbox/percent-text-read.html](http://www.useit.com/alertbox/percent-text-read.html) <10-1-2011>
- PEACHEY, A.; GILLEN, J.; LIVINGSTONE, D.; SMITH-ROBBINS, S. ed. (2010) *Researching Learning in Virtual Worlds*. London: Springer.
- PÉREZ PUENTE, E. M. (2007) "Las WebQuests" como elemento de motivación para los alumnos de Educación Secundaria Obligatoria en la clase de lengua extranjera (inglés)", PhD dissertation, Barcelona, Universitat de Barcelona. <http://www.tdx.cat/TDX-0226108-110146> <10-1-2011>
- PRENSKY, M. (2010). *Teaching Digital Natives. Partnering for real learning*. Corwin Press.
- ROYCE, T. & BOWCHER, W. ed. (2006) *New directions in the analysis of multimodal discourse*. Mahwah, N.J.: Erlbaum.
- SOLOMON, G. & L. SCHRUM. (2007) *Web 2.0 new tools, new schools*. Washington DC International Society for Technology in Education.
- SPIPKA, R. ed. (2010) *Digital Literacy for Technical Communication: 21 Century Theory and Practice*. Routledge.
- TORRES I VILATARSANA, M. (2003) "Aproximació a l'escriptura ideofonemàtica o netspeak en català", *Actes del 2n Congrés ONLINE "Cap a quina societat del coneixement?"*, Barcelona: Observatori para la Cibersociedad. [www.cibersociedad.net/congres2004/grups/fixacom\\_publica2.php?grup=86&id=671&idioma=ca](http://www.cibersociedad.net/congres2004/grups/fixacom_publica2.php?grup=86&id=671&idioma=ca) <10-1-2011>
- WARLICH, D. F. (2009) *Redefining Lit-er-a-cy 2.0*. Linworth Books.
- "Wiki y educación superior en España, I y II" (2010) *RED [Revista de Educación a Distancia] y Red U [Revista de Docencia Universitaria]*. [www.um.es/ead/red/M11/](http://www.um.es/ead/red/M11/) and [www.um.es/ead/red/M12/](http://www.um.es/ead/red/M12/) <10-1-2011>
- WILLIAMS, Bronwyn T. (2009). *Shimmering Literacies: Popular Culture and Reading and Writing Online*. New York: Peter Lang.
- WILLIAMS, P. & I. ROWLANDS. (2007) *Information Behaviour of the Researcher of The Future*. A British Library and JISC Study (Joint Information Systems Com.). [www.jisc.ac.uk/whatwedo/programmes/resourcediscovery/googlegen.aspx](http://www.jisc.ac.uk/whatwedo/programmes/resourcediscovery/googlegen.aspx) <10-1-2011>
- YUS, F. (2010) *Ciberpragmática 2.0. Nuevos usos del lenguaje en Internet*. Barcelona: Ariel.

[Methodological references are listed in the Methodology section]

### 3. OBJETIVES

(maximum 2 pages)

- ◆ 3.1 Describe the reasons to present this proposal and the **initial hypothesis** which support its objectives (maximum 20 lines)

The initial hypothesis is that the introduction of laptops, wifi networks, digitised textbooks and EVA in secondary education: a) does not bring about substantial changes in educational practice, it tends to reproduce previous routines and adapt them to internet; b) it increases access, experience, and learning of some literacy practices that students develop of their own accord—even if it be informally or extracurricularly—, and c) it creates adequate didactic conditions for developing educational practices that are more to do with competences or focus on verbal use, cooperation, self-learning enabling and interconnected with digital literacy activity as developed by students beyond the sphere of formal education, such that it enhances a more effective and meaningful kind of learning. The project sets out to corroborate these hypotheses and identify and describe the 'good practices' in digital education, empirically and debated, in order to reproduce them in other contexts.

The literature has described novel modes developed by 'digital natives' (present-day secondary education students) to interact on internet in private settings (multimodality, hypertextuality, parallel processing or multitasking, intensive interaction or cooperation, involvement in 'practice communities'), and also their important cognitive limitations (lack of critical understanding and strategic skills, ignorance of digital resources). It has also developed and promoted educational possibilities offered by the ICTs (WebQuest, EVA; e-portfolios) to 'connect' to those digital natives and create more favourable conditions for learning. But the non-speculative studies that evaluate the application of the ICTs and these resources to learning are rare and not always positive. The widespread use in Spain in the short term of general programs of 'digitisation' of teaching in secondary education creates the conditions that are optimum to propose an initial research of an exploratory nature, and qualitative, which can provide numerous and varied empirical data as well as providing answers on the matter.

- ◆ 3.2. Indicate the **background and previous results** of your group or the results of other groups that support the initial hypothesis

There are a lot of studies that conclude that the introduction of ICTs in schools does not generate on its own improvement in teaching, learning or performance in standard school tests (hypothesis a), e.g. Cuban (2000), Law (2004) or Kalman and de la Garza (2006) and Guerrero and Kalman (2010). They suggest that change is slow, and teaching staff does not feel qualified to use the ICTs, and would rather stick to education done on paper, adapted to screens and EVA. These data were confirmed by three prior interviews carried out—as groundwork for this project—on two technical councillors of the program for introducing widespread use of laptops into Catalonia by its Regional Government and the editor for language of the publishing house with largest market share in digital texts in Catalonia.

The results for reading and writing online (hypothesis b) are prolific and varied, but here we are particularly interested in the ones that show that internet creates special conditions for motivation so that youngsters can develop their creativity, their literacy skills and their digital dexterity and know-how. Jenkins (1992), Lankshear and Knobel (2008) or Black describe particular written genres, literacy and multimodal practices and, ultimately, language learning that many youngsters achieve as they interact online. Some of the researchers of the group follow this line, like Sanz (2009), Cassany and Ayala (2008), Cassany (2010), Cassany and Hernández (in press).

The studies that explore the didactic possibilities offered by Web 2.0 for secondary education (hypothesis c; Solomon and Schrum, 2007; Warlich 2009; Davis and Merchant 2009; Carrington and Robinson ed. 2009; Berger and Tresler 2010, among others) show the diversity of resources, their versatility to adapt to all contents and contexts and, above all, their affordances or most relevant potential, in order to promote reading and writing practices which focus on language use, in higher critical skills, in cooperative skills or in the process of becoming more independent and getting ready for lifelong learning. Overall, they tend to explore the possibilities and characteristics offered by each electronic genre (wiki, forum, blog), or each resource (wikipedia, YouTube, photo repositories, etc.)

- ◆ 3.3. Describe briefly the **objectives** of the project.

1. Collect, describe, analyse and review digital didactic materials offered by commercial publishers, which were approved by the school (course books, supplementary materials, notebooks, and so on),



and the materials supplied by the teaching staff in the classrooms under study. This includes:

- 1.1. Identifying, describing and analysing the format for presenting and distributing the materials (PDF, publisher's webpage, the school's EVA, and so on).
- 1.2. Describing the organisation of the whole package, the structure of the didactic unit, the textual characteristics of the included texts and the learning tasks as proposed.
- 1.3. Analyse three specific items of these materials:
  - a) the reading and writing proposals;
  - b) the use of non-verbal multimodal resources (pictures, video, audio, virtual reproduction, etc.);
  - c) the good use of external resources (press, accessible books, websites, blogs, wikipedia, etc.);
2. Identify, describe and review learning practices that are developed in the classrooms with these materials. This includes:
  - 2.1. Identify the subset of materials used in the face-to-face sessions and describe the educational practice they generate (didactic sequence, interaction, time, writing production).
  - 2.2. Collect, describe and triangle the points of view of the students and their teachers on the abovementioned digital practice.
  - 2.3. Identify, describe and review the learning practices with the main synchronic digital genres (chatting) and asynchronous genres (email, forum, web, blog, wiki).
  - 2.4. Analyse two specific aspects of these practices:
    - a) the use that is made of face-to-face interaction in the classroom (speech, pair work or group work) among the students and between them and the teacher, in managing digital resources;
    - b) the relationship that digital educational practices of the classroom establish or enhance with the use of the ICTs that students develop out of school, of their own accord.
3. Collect, describe, analyse and review varied samples of writing produced by the students in previous digital practices and in non-school contexts. This includes:
  - 3.1. Identify, describe and review the particular traits of digital writing, their relationship with the context of communication and how they differ from writing on paper.
  - 3.2. Describe and compare texts produced in school settings and personal contexts, exploring their distance and their connections.
4. Identify the digital technologies and language resources used in the classrooms under study, and the ones used by the students of their own accord away from school. This includes:
  - 4.1. Identify the classroom practices that enhance an effective use of the aforementioned technologies and resources, and describe and review their didactic characteristics (objectives, sequences, interaction, text types).
  - 4.2. Identify the technologies and resources used by the students away from school settings; describe how they use them, in which contexts and circumstances they learnt how to use them and how they integrate them, or not as the case may be, in classroom practices.
  - 4.3. Analyse two aspects on this point:
    - a) Identify resources not used (or unknown functions) and describe the difficulties involved in their use and the students' language needs for this;
    - b) draw up recommendations and proposals for use that increase the independent and intelligent use of the abovementioned technologies and resources, in the classroom (integrated in the language subject or subject without language contents) or away from a school setting.

◆ **3.4. For Coordinated projects only, the coordinator must indicate (maximum 2 pages):**

- the global objectives of the coordinated project, the need for coordination, and the added value provided by this coordination
- the specific objectives of each subproject
- the interaction among the objectives, activities and subprojects
- the mechanisms of coordination for an effective execution of the project.

## 4. METHODOLOGY AND WORKING PLAN

(in the case of coordinated projects this title must include all the subprojects)

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**Detail and justify precisely the methodology and the working plan.** Describe the working chronogram.

- ◆ The working plan should contain the tasks, milestones and deliverables. The projects carried out in the Hesperides or in the Antarctic Zone must include the operation plan.
  - ◆ For each task, it must be indicated the Centre and the researchers involved in it.
  - ◆ If personnel costs are requested, the tasks to be developed by the personnel to be hired must be detailed and justified. Remember that personnel costs are eligible only when personnel is contracted, **fellowships are not eligible** as personnel costs.
- 

### Methodology

Given the broad, complex nature of the object of research (it includes subjects—students and teachers—, classroom activities, multimodal materials, writing and conversations) and the objectives that require a global and ecological explanation, we will use a qualitative methodology, descriptive-analytical, which will combine ethnographic techniques (interviews in depth, observations, recordings and notes taken in the classroom, triangulation of points of view) and discourse analysis (analysis of writing samples and conversations with the support of concordance software). We will also provide quantitative data where possible and we might even survey for objective 4. The fundamental theoretical apparatus will stand on the analysis of the data from New Literacy Studies (Gee, 2004 and 2010; Street, 1984; Brice Heath & Street, 2008; Barton & Papen, 2010; Zavala et. al. 2004; Cassany 2006), incorporating the tradition of Discourse Analysis (Critical Discourse Analysis, Computer Mediated Analysis Kelsey & St. Amant ed. 2007; Yus, 2010; Multimodal Electronic Discourse, Kress & van Leeuwen 2001, O'Halloran 2004) and the didactic proposals of the communicative approach, as used by the group in the previous two projects.

The research will be restricted to the level and area of education that has most digitalisation presence, and that is the first two years of compulsory secondary education (ESO 1 and 2, 12-14 year-olds), despite the fact that there are also experiences in higher and lower levels. Moreover, the scope is limited to classrooms with individual laptops per student (through Educat1x1 program in Catalan public education or others). The idea is to study a broad sample, diverse and representative of said classrooms, mainly in the Barcelona and Girona areas (but other places, too). It is not possible at this time to determine the exact number of schools or classrooms. We are also interested in analysing literacy practices in various language subjects on the curriculum (Spanish Language and Literature, Catalan Language and Literature, and Foreign Language) and in two non-language content subjects (one from the areas of Social Sciences and one from the Science-related subjects), in order to carry out comparisons.

Let's see in detail the corpora that will be developed and their processing and analyses.

**1. Corpus of didactic materials.** It will be built from the digital textbooks, supplied by the publishing houses, and with the complementary material of the EVA used in each classroom. The data obtained from pdf or access, register and shots from screens will be analysed with the parameters applied traditionally to analysis of textbooks (Fernández, 2005), extended with the methods of multimodal analysis. This corpus will help to achieve objectives 1 and 4 and will specifically involve the following factors:

- Detect and quantify textual genres used, from the selection of texts and their didactic functions in the pedagogical context.
- Identify and describe the didactic sequence used in the educational process for each unit (language skills, curricular contents, tasks types) and the specific tasks of reading and writing.
- Analyse the didactic characteristics of literacy tasks for learning (type of interaction, degree of independence, task type, degree of authenticity and meaningfulness, etc.).
- Analyse multimodality specifically (mode of picture, video, and sound) and its integration with writing.
- Identify, describe and review the resources and tasks used by information technology.

**2. Corpus of educational practices.** Recordings will be done in video of a varied and representative sample of the classes for the levels and subjects mentioned above. These video recordings will focus selectively on various

aspects of the class: general interaction between the teacher and his/her group, pair work, or some group work by students, etc. To minimise contamination of the scene, small-size cameras will be used, and the first hours of recording will be discarded, until the teacher and pupils are familiar with the scenario. The observers will work with habitual instruments (recording templates, observation log, afterwards thinking and summary). The recordings will be studied onscreen and we will transcribe passages that are worthy of interest for posterior analysis. The transcription and video recording will be of varying degrees of detail depending on the objectives of the study (medium level of verbal transcription, high level proxemic transcription and didactic movements; Payrató 1995; Castellà, Comelles, Cros & Vilà 2007). This corpus will be used in line with objectives 2 and 4 and will focus on the following items:

- Describe and analyse the reading and writing tasks in the classroom (student-student and group-teacher interactions, temporal sequence, use of screens and/or papers, use of the textbook, etc.).
- Identify and describe specifically the didactic sequences based on electronic genres, like chatting, forum, wiki, blog, etc.
- Analyse the use and functions of orality in the classroom in managing and carrying out reading and writing exercises (teacher's strategies, speech turns, modalising and politeness, etc.).
- Analysis of the use of the functions performed by the modes of Picture, video, sound and gestures in reading and writing activities (use of photos and video for reading, multimodal text commentary, etc.).

**3. Corpus of interviews.** It will be built from in-depth interviews, semi-structured and located (in the classroom, in front of the computer screen) with a representative sample of the group of students and teachers from the classrooms recorded; several interviews will be done on the same informant in order to contrast the data obtained throughout the rest of the corpus. The interviews will take on an *emic* approach, in order to understand the educational activity from the interviewees' own experience. This corpus will serve the purpose of working towards all the objectives and will focus on the following items:

- Describe representations (conception, assessment, attitude, impressions, etc.) that the students have as well as the teachers of the digital materials, the EVA, online education, with laptops, and the digital reading and writing tasks.
- Identify and describe reading and writing activities that students do of their own accord, away from school, as well as attitudes and assessments that they have on them.
- Describe representations (conceptions, assessment, attitudes, etc.) that students have of their own academic writing and their vernacular writing (from corpus 4).
- Explore the knowledge and use that students and teachers have of technologies to do with language in and out of school, and their assessment of them.

**4. Corpus of academia and vernacular writing done by students.** It will be built with a representative diverse sample of written productions, academic (done in school or for school according to teacher's guidelines) and vernacular (done on the students' own initiative, away from any school activity), digital or on paper. This corpus will aid towards objectives 2, 3 and 4, and will focus on the following items:

- Describe the discursive characteristics of the written sample: modalization and politeness, wealth of vocabulary, syntactic variety, use of normative standard, or ideophonematic code (e.g. SMS or chatroom).
- Contrastive analysis of texts by the same student, academic and vernacular types, in order to explore similarities and differences.
- Contrastive analysis of texts by the same student done on paper and on a computer screen.

**5. Corpus of data for technologies and language resources.** It will be built from information obtained from previous corpora on knowledge and use of digital technologies and language resources. It will include passages of materials, classroom sequences, excerpts of interviews or written digital texts or on paper. 'Technologies and language resources' is used here to refer to: a) dictionaries (DRAE, DIEC, Enciclopèdia); b) terminological databases (Termcat); c) spell checkers (Word, OpenOffice); d) online translators (Google Translator, press, universities); e) corpus with search engines and concordances (CREA, Corpus del Español, CTILC); f) document templates and forms; g) webpages and encyclopedias with language information (Wikipedia), h) sites that integrate several resources like the ones just mentioned (Centro Virtual Cervantes, Español Urgente, Optimot). On this point some interviews might be used to collect information from a larger number of informants. This secondary corpus will focus on objective 4.

To end with, let us mention that the previous corpora will be processed with various software tools suited to the objectives and type of analysis: Atlas-ti for the processing of qualitative data; *Player* for audio processing, and *Pinacle Edit* for video). It also needs to be said that triangulation will be done from five points of view:

1. Analysis of materials and EVA used in the schools and selected classrooms.
2. Non-participatory observation in the classroom and direct analysis of the classroom recordings.
3. Teachers' points of view drawn from their interviews.
4. Students' points of view drawn from the interviews of those involved.
5. Analysis of academia and vernacular samples of writing by students involved and interviewed.

The opportunity to count on data from so many different angles and to be able to contrast every objective from all these sources provides great validity and consistency to the project's results.

### Work Plan

According to the methodology laid out, the project will be carried out in eight tasks, some of them partially overlapping over time. This chart breaks down the activities for each task, whereas the timesheet that comes after it shows who is responsible for each one and its timing.

Task		Activities involved
1st	Constitution of the corpus 1 (didactic materials)	Select, purchase, obtain (pdf, screenshots, access) and <b>cataloguing texts</b> .
2nd	Corpus analysis 1	Data analysis(classroom activities, multimodal resources, external links); extract results and interpret them.
3rd	Making the instruments for obtaining the data of corpus 2 and 3	Determine the formal conditions for the corpus, select exploitation tools, write scripts for the interviews, prepare tables for class observation, select schools, groups and sessions; deal with schools, etc.
4th	Building the corpus 2 (classroom activities)	Observe classes and record; triangulation it live teacher-observer; visualise and <b>partially transcribe them</b> .
5th	Building the corpus 3 (interviews) and obtain data for corpus 4	Select teachers and students; carry out located interviews, listen to and <b>transcribe them</b> . Request and collect students' writing samples.
6th	Corpus analysis 2 and 3 (classes & interviews analysis).	Comparative viewing and analysis of data from corpus 2 (classroom activities) and 3 (interviews to the protagonists); extract qualitative and quantitative data; interpret results.
7th	Build & Analyse corpus 4 (students' written samples)	Process (digitalise, catalogue) students' writing simples; digitalise writing on paper; data analysis and extraction; interpret results and triangle with authors in second interviews.
8th	Build & Analyse corpus 5 (data on language technologies)	Revise the four types of corpus, obtain new data and build this secondary corpus. Possibly do a brief survey among teachers and students; <b>index and process data</b> ; comparative analysis of the corpus, extract data and interpret results.
9th	Final conclusions	Joint revision of all the results and draft project conclusions.

### Hired Staff

We request the hiring of a support technician for 6 months, half-time, spread over three years according to the needs of the project. This technician must be qualified in written Catalan and Spanish, user know-how of office software (Word, Excel, etc.) and will be responsible for tasks marked in bold in the above chart: a) cataloguing corpus 1 texts; b) partial transcription of the oral exchanges in the classroom video recordings; c) complete transcription of the audio interviews; d) digitalization of the corpus writing samples on paper from corpus 4, and e) indexing and processing de data of a survey.

We also include a procurement request for a senior computer technician for a period of one month, on a half-time contract, to execute the data management software and to create the initial parameters for the data base.

### **Adequacy of the size of the group**

The group has three full-time researchers for this Project (Cassany, Castellà and Morales). Cassany and Castellà will bear the load of the global design, and Morales will provide them with support online for the work involved in building the corpora. The seven researchers working part-time for the Project will work in Barcelona (López Ferrero, Bach and Oliver) and in Girona (Cicres, Llach, de Ribot and Sanz) and they will focus on working on the data from the schools in these areas. The 5 PhD researchers (Aliagas, Ayala, Egiazarian, Merino and Vargas) will provide support for the project with their PhD findings. All of this shows why the group has a sufficient number of members to carry out the work plan as proposed.

### **References cited:**

- BLOOME, D. et. al (2008). *Discourse Analysis in Classroom. Approaches to Language and Literacy Research*. New York: Teachers College Press. Columbia University.
- BRICE HEATH, S. & B. V. STREET. (2008). *Ethnography. Approaches to Language and Literacy Research*. New York: Teachers College Press.
- CASSANY, D. (2006) *Rere les línies. Sobre la lectura contemporània*. Barcelona: Empúries. Spanish translation: *Tras las líneas. Sobre la lectura contemporánea*. Barcelona: Anagrama.
- CASTELLA, J. M.; COMELLES, S.; CROS, A. & M. VILA. (2007): *Entendre(s) a classe. Les estratègies comunicatives dels docents ben valorats*. Barcelona: Graó. Spanish translation: *Entender(se) en clase. Las estrategias comunicativas de los docentes bien valorados*. Barcelona: Graó.
- COIRO, J.; KNOBEL, M.; LANKSHEAR, C. & D. LEU. (2009) *Handbook Research on New Literacies*. New York: Routledge.
- FERNÁNDEZ, M<sup>a</sup> C. (2005). "Principios & criterios para el análisis de materiales didácticos", SÁNCHEZ, J. & I. SANTOS. (2005). *Vademécum para la formación de profesores*. Alcobendas: SGEL (2004), pp. 715-734.
- GEE, J. P. (2004). *Situated Language and Learning. A critique to traditional schooling*. Routledge.
- GEE, J. P. (2010). *How to do Discourse Analysis*. Routledge.
- KELSEY, S. & St. AMANT K. ed. (2007) *Handbook of research on Computer Mediated Communication*. London: IGI Global.
- KRESS, G. & T. van LEEUWEN. (2001) *Multimodal Discourse: the modes and media of contemporary communication*. New York: Oxford University.
- PAYRATÓ, LI. (1995): "Transcripción del discurso coloquial", in Luis CORTÉS ed. *El español coloquial. Actas del I Simposio sobre análisis del discurso oral, Almería, 23-25 de noviembre de 1994*, p. 45-70, Almería: Universidad de Almería.
- PALTRIDGE, B. & PHAKITI, A. (2010). *Continuum Companion to Research Methods in Applied Linguistics*. Continuum.
- O'HALLORAN, K. ed. (2004) *Multimodal Discourse Analysis. Systemic Functional Perspectives*. London/New York: Continuum.
- STREET, B. (1984) *Literacy in Theory and Practice*. Nova York: Cambridge University Press.
- ZAVALA, Virginia; NIÑO-MURCIA, Mercedes & Patricia AMES. Ed. (2004) *Escritura & sociedad. Nuevas perspectivas teóricas & etnográficas*. Lima: Red para el desarrollo de las ciencias sociales en el Perú.

#### 4.1 CHRONOGRAM MODEL (EXAMPLE)

This chronogram must indicate the persons involved in the project, including those contracted with project funds. Underline the name of the person responsible of each task.

ActivitiesTasks	Centre	Persons	First Year (*)	Second Year (*)	Third Year (*)
1 <sup>a</sup> Build corpus 1	UPF	<u>Castellà</u> De Ribot, Llach, Sanz, Cassany, <i>Técnico contratado.</i>	X X X X X		
2 <sup>a</sup> Analyse corpus 1	UPF	<u>López Ferrero</u> All members	X X X		
3 <sup>a</sup> Create tools for obtain data for corpus 2 and 3	UPF	<u>Cassany</u> Castellà, López, Morales, Oliver, De Ribot, Bach, Sanz	X X		
4 <sup>a</sup> Build corpus 2	UPF	<u>Cassany</u> All members (except Morales). <i>Hired technician.</i>	X X X	X X X X X X	
5 <sup>a</sup> Build corpus 3 and obtain data for corpus 4	UPF	<u>Castellà</u> All members (except Morales). <i>Hired technician.</i>	X X	X X X X X X       X X	X X X
6 <sup>a</sup> Analyse Corpus 2 and 3	UPF	<u>Cassany</u> All members	X	X   X   X	X X X X
7 <sup>a</sup> Build and analyse corpus 4.	UPF	<u>López-Ferrero</u> De Ribot, Llach, Cicres, Cassany, Sanz, Castellà, Morales (analysis). <i>Hired technician</i>		X X X	X X X X
8 <sup>a</sup> Build and analyse corpus 5	UPF	<u>Cicres</u> Llach, Cassany, Bach. <i>Hired technician</i>		X X X	X X X X
9 <sup>a</sup> Final conclusions.	UPF	<u>D. Cassany</u> All members.			X X X X

(\*) Mark an X inside the corresponding boxes (months)

## 5. BENEFITS DERIVED FROM THE PROJECT, DIFUSION AND EXPLOTATION OF RESULTS

(maximum 1 page)

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The following items must be described:

- ◆ Scientific and technical contributions expected from the project, potential application or transfer of the expected results in the short, medium or large term, benefits derived from the increase of knowledge and technology.
  - ◆ Diffusion plan and, if appropriate, exploitation plan of the results.
- 

### Scientific and technical contributions

We expect to obtain these benefits in the form of knowledge:

1. A description and complete and accurate analysis of the technical characteristics (linguistic and didactic) of the digital materials for reading and writing, produced from publishing houses or supplied by teachers, and an assessment of their adequacy for digital media.
2. Empirical data, complete, quantitative and qualitative, on the good use and difficulties involved in using these materials and this educational modality in real contexts, with a sizeable and varied sample of the schools. We will also the real assessment of them by students and teachers, and we will be able to suggest future paths for progress.
3. Numerous and varied quantitative and qualitative data on how students use the ICTs and digital reading and writing away from school settings, and on how they relate to and disconnect from formal educational activities on the curriculum and in the classroom. We will be able to discover ways to make better connections between formal education and the interests and activities of the digital natives.

These data will make it possible to:

- a) Make suggestions and recommendations with a scientific basis (rather than speculative), of a linguistic and didactic nature, aimed at improving the future production of materials by the publishing houses, at arguing with sound and abundant evidence for teaching practices in the classroom and at offering solid data to build future pedagogical proposals in digital environments.
- b) Produce pedagogical resources (syllabi, didactic activities, software, etc.) for facilitating the use and benefits from the range of language technologies available on internet, based on real data regarding use, difficulties, interest, and how much people know about them.

These results contribute towards developing quality and efficiency in education at a time when there are such challenges as: a) implementing in secondary education the use of personal laptops, e-textbooks, and an EVA linked to the classroom; b) train present-day students (digital natives) with grown-up teachers (digital immigrants) who are not familiar with this educational modality; and c) increase the habit of reading and the capacity to understand critically, seriously called into doubt by tests such as PISA.

### Dissemination

The results of the Project will be disseminated according to the following process:

1. The partial and final results will be presented and debated first in specialist conferences, in applied linguistics, language teaching and learning, or literacy, in Spain (*Sociedad Española de Lingüística, Asociación Española de Lingüística Aplicada, Sociedad Española de Didáctica de la Lengua y la Literatura; Docencia Universitaria e Innovación*) or internationally (*Asociación Europea de Profesores de Español; International Reading Association, Association Internationale de Linguistique Appliquée*).
2. The final results of the project will be published in specialist papers, in specialist bulletins for the field, preferably in indexed journals in data bases and strong impact (*Lenguaje & Textos, Textos, Artículos, Cultura y Educación, Temps d'Educació*) and international ones (*Lectura y vida, Signos, Reading and Writing, Written Communication, Applied Linguistics, Language Learning & Technology, Discourse & Society, Discourse Studies, British Journal of Educational Technology Reading Research Quarterly, Journal of Adolescent & Adult Literacy*), in Spanish and in English.

3. The most elaborate results, complete and argued, widely illustrated with examples, will be published in a full volume, monographically, either as a book, or a special edition of a journal.

The corpus of data collected, processed and labelled (didactic materials, interviews, texts, screenshots, etc.) will be uploaded onto a webpage designed specifically for the research group so that other researchers can use it in the future. We will use the group's web site (<http://www.upf.edu/dff/reerca/grups/grael/LC/index.html>) or a new one with a link to it.

The set results (corpus of data, answers to the research questions, analysis methodology developed) will be presented in Masters Degree Programs in Teacher Training for secondary education (in the field of Spanish and Catalan Language and Literature) at the three Universities (UPF, UAB & UdG), which have several members of our group among their teachers. A final indirect benefit is that the project will make it possible to consolidate and extend cooperation between the above mentioned research groups (especially from Latin America), with the future aim of creating a thematic network in digital reading and writing.



## 6. BACKGROUND OF THE GROUP

(In the case of a coordinated project the topics 6. and 6.1. must be filled by each partner)

(maximum 2 pages)

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### ◆ Indicate the previous activities and achievements of the group in the field of the project:

If the project is related to other previously granted, you must indicate the objectives and the results achieved in the previous project.

If the project approaches a new research field, the background and previous contributions of the group in this field must be indicated in order to justify the capacity of the group to carry out the project.

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### Previous Activity

The present proposal is the continuation of two previous consecutive projects. The first one was *La competencia receptiva crítica: análisis y propuesta didáctica* (HUM2004-03772/FILO; 2004-2007). It studied the degree of critical understanding (of the ideology) achieved by readers of various text types, it designed tools for assessment and created didactic resources for the classroom. The second one was entitled *Descripción de algunas prácticas letradas recientes. Análisis lingüístico y propuesta didáctica*, (HUM2007-62118/FILO; 2007-2010) and collected a corpus, described and analysed some of the new discourses and reading practices, born out of digital reading and writing or ideophonematic writing (chat, SMS). This second project suffered some delays and we requested and got an extension of the deadline for its execution, (to 30-3-2011). This is why we are applying for this project in this call—and not the previous one.

The group has been active since 2003 with regular sessions of presentation and debate of ongoing research, with the attendance of researchers from outside of the project. The group organises conferences and seminars with international specialists (S. Cuban & D. Barton from Lancaster Univ., M. Niño-Murcia from Iowa Univ., J. Kalman from CINVESTAV-IPN-DIE, V. Zavala from PUCP, G. Kress from London Univ.) and open debate seminars (like Lekenlin in 2008 [<http://lekenlin.blogspot.com/>] or the panel “Lectura y escritura en línea”, at the *IV Congreso de la Cibersociedad, Crisis analógica y futuro digital*, 2009). Since then the IP has remained the same (Cassany) and most members (Castellà, López Ferrero, Oliver); some students have earned their PhD (Morales, Cotano) or are about to (Aliagas), and we have new intake of researchers. For this application there are four new additions to the team from the Universitat de Girona with whom there has been previous activity: G. Sanz worked with Cassany and Castellà in previous periods; J. Cicres, S. Llach and M. D. de Ribot worked on Lekenlin and carried out research together on similar subjects to this one.

### Achievements

In these six years we have proposed, applied and disseminated basic concepts for research such as ‘literacy’, ‘critical literacy’, ‘vernacular practice’ or ‘critical reading competence’; we have established the components of an understanding of ideology, we have analysed and assessed didactic reading materials, we have developed quantitative and qualitative comprehension pilot tests, and there have been suggestions and didactic proposals towards an improvement of teaching reading skills. We have broken new ground in research, such as the connection between multimodal academic genres and professional ones, literary practices online and ‘outlaw’ (fanfic, realist stories, social networks), or the influence of literacy development in L1 while learning Spanish as L2.

The group has been highly productive. As for the first project (2004-07) 8 scientific papers were published in international bulletins and 6 in national ones; 17 books, book chapters and international monographs and 3 national ones, and 6 keynote speeches in international conferences and 18 nationwide. On the second project (2008-09), only the annual reports of 2007 and 2008 add up to 23 published research papers, 34 conference paper readings, 15 books or book chapters and one special edition devoted to the issue in a journal. The scientific databases (ISI Web of Knowledge, SCOPUS or Google Scholar) show evidence of these works and their impact on the scientific community.

### Capacity

As Principal Investigator, Cassany has directed 5 projects and has participated in another 5 competitive projects. He has published 14 books, 23 chapters, 74 papers and has been a guest speaker in over 54 Spanish and International conferences. Castellà and López Ferrero have considerable research experience, certifiable by their numerous publications and participations in R and D. Bach, Oliver, Morales, Llach and Cicres earned their PhDs more recently but

their research is also noteworthy. Aliagas, Ayala, Egiazarian, Merino and Vargas make their contribution through their PhD work, as their research is along the same lines as this project. Sanz is a secondary school teacher, as well as a UdG lecturer, and has published papers and research work on online reading and writing. These researchers have been working for several years as a real team, as can be seen in their joint publications.

### Adequacy of the team

The composition and profile of the group are appropriate for the proposed topic: Cassany and López Ferrero are Phds in Language teaching; Bach, Castellà, Cicres, Llach and Oliver in Linguistics and applied linguistics, and de Ribot in Romance Languages and Philology. The group's track record is focused on the study of literacy and its didactics, with different angles. López Ferrero and Castellà have previous publications on modalization and discourse utterance, and López Ferrero and Aliagas have published studies on materials analysis. Morales and Oliver have worked with specialised discourse in science and they are familiar with the non-language-content subjects. Llach, Cicres and De Ribot have published several studies on phonetics and phonology and they will take on the study of speech in the classroom. Recently they have carried out several studies on language competence and the attitudes of university students in relation to language learning and the ICTs. Overall, the group has undeniable experience in dealing with many of the elements that come together in this project.

### Selection of publications of the group to do with the projected applied for:

- ALIAGAS, C.; CASTELLÀ, J. M. & D. CASSANY. (2009) "Aunque lea poco, yo sé que soy listo. Estudio de caso de un adolescente que no lee literatura", *Revista OCNOS*, 5: 97-112.
- ALIAGAS, C.; CASSANY, D. & J. M. CASTELLÀ. (2008) "Literacy in the life of a 'struggling reader'", *Academic Exchange Quarterly*, 12 (3): 230-236.
- ALIAGAS, C.; LÓPEZ FERRERO, C. & ARAVENA, S. (2008). "Discurso y sociedad en las clases de lengua materna: leer la ideología y comprender críticamente". En BLAS ARROYO, J.L. et al. (eds.). *Discurso y sociedad II. Nuevas contribuciones al estudio de la lengua en contexto social*. Castelló de la Plana: Universitat Jaume I, pp. 115-126.
- CASSANY, D. (2010) "La letra digital y sus poderes", *Arbor; anejos*, 3: 183-200.
- CASSANY, D. (2008) "Bibliotecas en la era digital", en Bonilla, E.; Goldin, D. & R. Salaberria ed. *Bibliotecas & escuelas. Retos y desafíos en la sociedad del conocimiento*. México: Océano travesía. p. 311-338. 2008.
- CASSANY, D. (2010) "Leer y escribir literatura al margen de la ley", *I Congreso Iberoamericano de Lengua y Literatura Infantil y Juvenil* [CILELIJ] Fundación SM, Santiago de Chile. En: *CILELIJ. Actas & Memoria del Congreso*. Madrid: Fundación SM / MEC de España. p. 497-514.
- CASSANY, D. & G. AYALA. (2008) "Nativos e inmigrantes digitales en la escuela", *Participación Educativa*, 9: 57-75. [www.mec.es/cesces/revista/revista9.pdf](http://www.mec.es/cesces/revista/revista9.pdf) <19-1-11>
- CASSANY, D. & J. M. CASTELLÀ. (en prensa) "Aproximación a la literacidad crítica". *Revista Perspectiva*, 28/2: 00-00. Dossier: "Letramentos em contextos educativos", editado por A. Fischer, N. Lemos Pelandré & M. L. Dionísio. Universidade Federal de Santa Catarina (UFSC), Florianópolis.
- CASSANY, D. & D. HERNÁNDEZ (en prensa) "¿Internet: 1; Escola: 0?", *Articles*, 53. Monográfico: "Què llegeixen els no-lectors". Previsto: 2011.
- CASSANY, D. & C. LÓPEZ FERRERO. (2010) "De la Universidad al mundo laboral: Continuidad & contraste entre las prácticas letradas académicas & profesionales", G. Parodi, ed. *Alfabetización académica & profesional en el siglo XXI: leer & escribir desde las disciplinas*. Barcelona: Planeta Ariel. p. 347-374.
- CASSANY, D. & G. SANZ. (en prensa) "Llegir i escriure a la xarxa", A. CAMPS *Llengua catalana i literatura. Complements de formació disciplinar*. Barcelona: Graó.
- CICRES, J., DE RIBOT, M. D. & LLACH, S. (2009). "Recerca d'informació a Internet pels estudiants universitaris: estratègies, criteris i propostes de millora". *V Congrés Internacional de Docència Universitària i Innovació. El canvi en la cultura docent universitària*. [CD-ROM]. Lleida.
- DE RIBOT, M.D.; LLACH, S.; CICRES, J. (2010). "La incidencia de las nuevas tecnologías en los hábitos formativos de los estudiantes de magisterio". *Pixel-Bit. Revista de Medios & Educación*, 37: 107-120.
- LÓPEZ FERRERO, C.; BATTANER, P.; ATIENZA, E. et al. (2009). "Características lingüísticas & discursivas del texto académico". *Textos*, 50: 47-67.
- LÓPEZ FERRERO, C.; ALIAGAS, C.; MARTÍ, F. & S. ARAVENA. (2008). "La lectura crítica en secundaria: una mirada a los libros de texto y a las prácticas docentes". En CAMPS, A. & MILIAN, M. (coords.). *Miradas y voces. Investigación sobre la educación lingüística y literaria en entornos plurilingües*. Barcelona: Graó, Colección Crítica y fundamentos, pp. 105-117.
- SANZ, G. (2009) *Escritura jove a la xarxa. Dinamització de l'ensenyament i l'aprenentatge de l'expressió escrita mitjançant l'aprofitament de l'ús que els joves fan d'internet*. Barcelona, Generalitat de Catalunya. <http://www.upf.edu/dtf/recerca/grups/grael/LC/>
- SERRA, P., CICRES, J., DE RIBOT, M.D. & LLACH, S. (2009). "La reflexió metalingüística dels estudiants i el domini de la gramàtica normativa. Una proposta de millora basada en l'autoaprenentatge dels estudiants". *Actes del II Congrés Internacional UNIVEST 2009. Claus per a la implicació dels estudiants a la Universitat* [CD-Rom].

## 7. TRAINING CAPACITY OF THE PROJECT AND THE GROUP

(In the case of Coordinated Projects this issue must be filled by each partner)

This title must be filled only in case of a positive answer to the corresponding question in the application form.

Justify that the group is able to receive fellow students (from the Suprograma de Formació de Investigadores) associated to this project and describe the training capacity of the group. In the case of coordinated projects, each subproject requesting a FPI fellowship must fill this issue.

Note that all necessary personnel costs should be included in the total budget requested. The available number of FPI fellowships is limited, and they will be granted to selected projects as a function of their final qualification and the training capacity of the groups.

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The following indicators show the group's training capacity:

**Teaching in PhD programs.** 9 of the 15 researchers (Bach, Cassany, Castellà, Cicles, Llach, López Ferrero, de Ribot, Oliver, Morales) hold PhDs; 5 are teachers in PhD programs and Research Masters Degrees in the UPF Department of Translation and Linguistics and the Institute of Applied Linguistics, with a mention from the Ministry of Education for its High Quality; 2 of us (Cassany and López Ferrero) were invited as teaching staff to PhD programs in Spain (universidades de Barcelona, Autónoma de Barcelona, Zaragoza, Coruña-Vigo) and abroad (Pontificia Católica Universidad de Valparaíso; Universidad de Concepción; Universidad de Los Andes en Mérida).

**Research Supervision.** The group has plenty of experience in supervisions:

- **Doctoral Theses.** 5 completed PhDs and some which are close to completion, like Aliagas's, supervised by Cassany and Castellà, another one by Carmen Pastor, about to be submitted in hard copy to the Department and examiners for approval prior to the Viva voce examination. Over the next two years it is estimated that Merino and Ayala will also finish theirs.
- **Master's Theses.** Cassany and López Ferrero have supervised a large number of master theses papers, as the end of the postgraduate studies in the *Máster de Formación de Profesores de ELE* at the UB and UPF, and Cicles and Llach in the Masters Degree of the same name at the UdG.
- **Other work.** Bach, Cassany and López Ferrero work with the UPF Translation and Interpreting Faculty, in supervising and tutoring degree thesis papers, which involves fieldwork research. Cassany and López Ferrero have supervised several leave of absence research projects awarded to secondary school teachers (e.g. F. Martí, G. Sanz, T. Clos, M. Calderón, J. Lloret).

**Experience in investigating and in training researchers.** 4 investigators (Bach, Cassany, Castellà and López Ferrero) are highly experienced in research from working in other projects of R&D, where they have worked with grant interns from several Spanish programs and from abroad in training researchers.

**Editing and assessing research.** Cassany, Castellà and López Ferrero have worked together as editors and anonymous referees in numerous research areas (bulletins, books and conferences) and in various Spanish programs (AGAUR, Ministry of Education) and international research projects (Chile). They are also part of the review committee for several research journals in the fields (see CV).

**Grants and Interns.** In the last 6 years, the applying team has obtained 6 grants to train interns in research in several programs: 2 in 2005-06 (Aliagas, from the Ministry of Education, and Morales, from the Universidad de Los Andes), 2 in 2006-07 (Aparicio, from the Ministry of Education; and Hernández, from Conacyt México); 2 in 2007-08 (Merino, from AGAUR; and Ayala, from UPF); and 1 in 2009-10 (Vargas, from AGAUR). The group attracted PhD students from several countries (Spain, Venezuela, Colombia, Mexico) and undergraduates from various degrees (Humanities, English, Spanish, Teacher training).

**Consolidated Group and member of networks.** The applying team is part of [Gr@el](#) (Research group in learning and teaching of languages), which was awarded recognition as a "consolidated group with funding" in the last two calls in competition held by the AGAUR for the Catalan Government (18-10-05: exp. 00097, and 3-7-09: exp. 2009 SGR 803). Finally, Gr@el joined several thematic networks for discourse studies (*Xarxa temàtica d'estudis del discurs*, 1997-00 and 2000-04; CIRIT, PB-96-0291) and for the didactics of language and literature (*Xarxa LLERA de didàctica de la llengua i la literatura*: "L'educació lingüística i literària en entorns plurilingües"; 2006-09, exp. XIRE 00001), both competitive and promoted by the Catalan Government.

In view of all that has been presented here, the applicants are capable of receiving a grant for a PhD internship and provide the intern with adequate training.