



MOBILE DEVICES INCREASING OPPORTUNITIES FOR INFORMAL LEARNING AND SECOND LANGUAGE ACQUISITION

Carl Storz

Katherine Maillet

Carine Brienne

Laure Chotel

*Institut Telecom, Telecom Ecole de Management
9, rue Charles Fourier – 91011 EVRY, France*

Catherine Dang

<http://www.4nmedia.com>





Outline

1. Introduction
 2. Background
 3. Methodology – quantitative survey
 4. Results and discussion
 5. Conclusion
- Acknowledgments/Contacts
- References



1. INTRODUCTION

- Potential of the mobile phone = 1.7 bn smartphones in 2014 (The *Independent*, 2010)
- Our research aims to identify the importance of English language media in English language acquisition amongst university students, more especially in mobile and informal learning contexts
- *Research question: How does the consumption of media made available with mobile devices enhance second language acquisition?*
- Results of a quantitative study amongst of a group of 638 French-speaking university students
- Research conducted within the LIMED project (Linguistic Meta-Educational Engine for Audiovisual Content) : www.limed.org



2.1. Background: Linguistic Meta-Educational Engine for Audiovisual Content (LIMED)

- LIMED's ambition: to propose a new interactive, individualised, and motivating application to learn a foreign language while watching and enjoying authentic video on a mobile device or PC.
- The project will design and implement the automatic generation of comprehension quizzes for highly attractive pre-existing audio-visual content (foreign language TV series or news, etc.).
- This engine will be implemented for contents that can be accessed on the go, anywhere and at any time.
- The interactivity introduced by the quiz, combined with a scoring system as used in video games provides instant results, monitors progress, and encourages regular practice.
- Young learners find the same experience in language learning that they have in their digital lives.
- The user experience should be perceived as entertainment, rather than education (Edutainment).



2.1. Background: LIMED Partners

- LIMED innovation is twofold. First it brings together areas of expertise that rarely work in common (language learning methods and multimedia characterisation) and second it targets a web-based, open multimedia description system covering both low-level descriptions and high level ontologies.
- This research was conducted within the framework of the LIMED project funded by the European Commission's FEDER program and the Ile de France Region.

Le projet LIMED est cofinancé par l'Union Européenne. L'Europe s'engage en Ile de France avec le Fonds Européen de Développement Régional.

mymultimediaworld



www.limed.org





2.1. Background: MY4n-News, Learning English with mobile devices and PCs

- Pedagogical approach
 - Immersion with international news
 - Articles and video clips
 - Language learning tools: dictionary, sub-titles
 - Personal learning space: wordlists, quizzes
- Learning approach for MY4n-News Learner:
 - Facilitate language practice
 - Improve listening and reading comprehension
 - Immersion in authentic media
- Approach for MY4n-News Teacher
 - Facilitate access to resources and creating exercises
 - Follow learner activity
 - Select contents, edit quizzes, integrated messaging, statistics
- <http://www.4nmedia.com>





2.2. Motivation for conducting the study and context

- Observations:
 - Fairly standardized primary and secondary program of study for language learning
 - Disparity in English language proficiency in Master's programmes
 - Importance of Internet in providing learning opportunities, facilitating access to authentic English language media
- Our aim: to measure and compare the time spent in formal, non-formal, and informal learning
- 638 students aged 19 – 23 enrolled in Master's degree programmes in engineering and management in France



2.3. Theoretical background in Second Language Acquisition

- **Meaningful input** (Krashen, 1985)
- **Personalisation**
- **Motivation**
- **Mobility** (Traxler in Bachmair 2010)
- **MALL** (Mobile Assisted Language Learning and CALL (Computer Assisted Language Learning)
 - Traxler, 2007
 - Kukulska-Hulme and Shield (2008)



2.3. Theoretical background in Formal, non-formal and informal learning

- Theoretical background:
 - Coombs (1968)
 - Hrimech (1996)
 - Shurugensky (2000)
 - Livingstone (2000, 2001)
- Formal learning: schools or a school system
- Non-formal learning: not officially recognized as degree awarding institution, no certification
- Informal learning: everyday life, i.e. activities whose main objective is not education



3. METHODOLOGY – QUANTITATIVE SURVEY

- Questionnaire to collect data
- Conducted in 2010-2011 academic year and beginning of 2011-2012 academic year from entire student body of 1,771 Master's degree students
- Questions covered English language learning experiences
- 638 questionnaires were validated for analysis

3.1 Survey

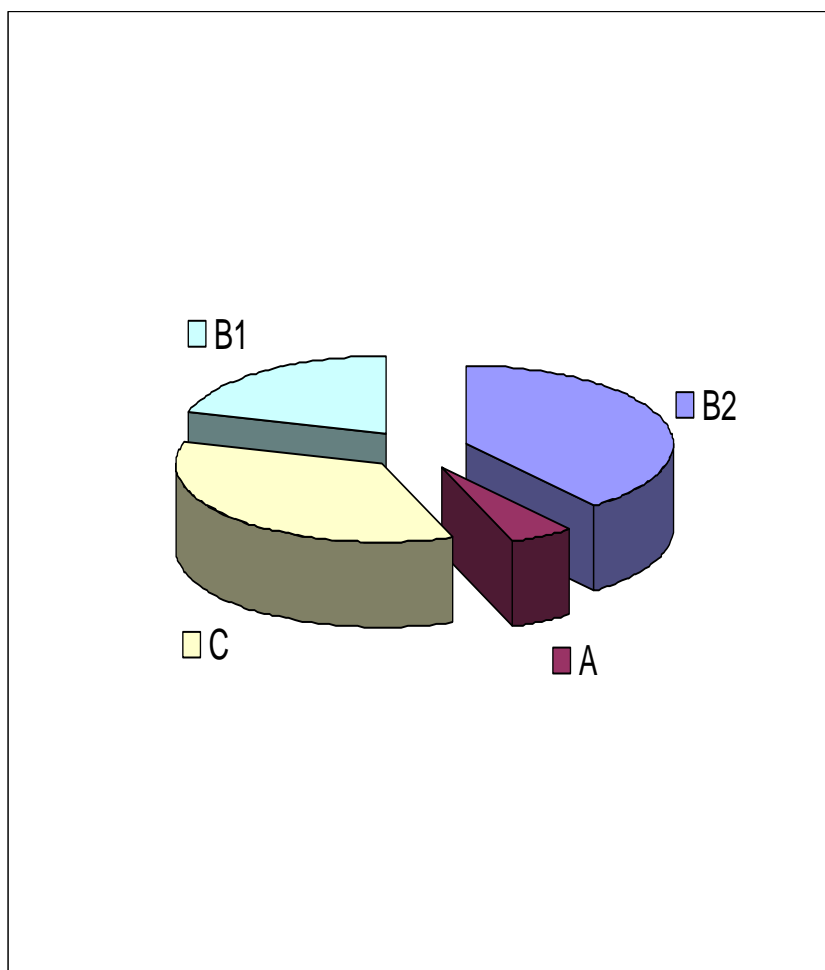
- Included 13 questions and was distributed in paper-based format during English classes and made available online.
- **Survey was designed to :**
 - (1) Quantify the amount of time each student has spent throughout their lifetime learning English: formally, non-formally, and informally;
 - (2) Quantify the amount of time spent annually accessing English language media and the type of media most often accessed;
 - (3) Quantify the most frequently used forms of access to media: non-networked (print and electronic), non-mobile Internet, mobile Internet;
 - (4) Correlate the individual learning paths to the students' level of English as identified by standardized tests;
 - (5) Evaluate how well equipped the students are with mobile devices and
 - (6) Evaluate the students' perceptions about mobile devices as a tool for learning.



3.2 Questionnaire results correlated to students' level of English and CEFR

- Questionnaires were correlated with students' level of English:
 - ***Test of English for International Communication : 263 questionnaires with TOEIC***
 - ***Oxford Placement Test : 338 questionnaires with OPT scores***
- Tests scores were correlated to the Common European Framework of References for Languages (CEFR).

3.2. CEFR level of respondents

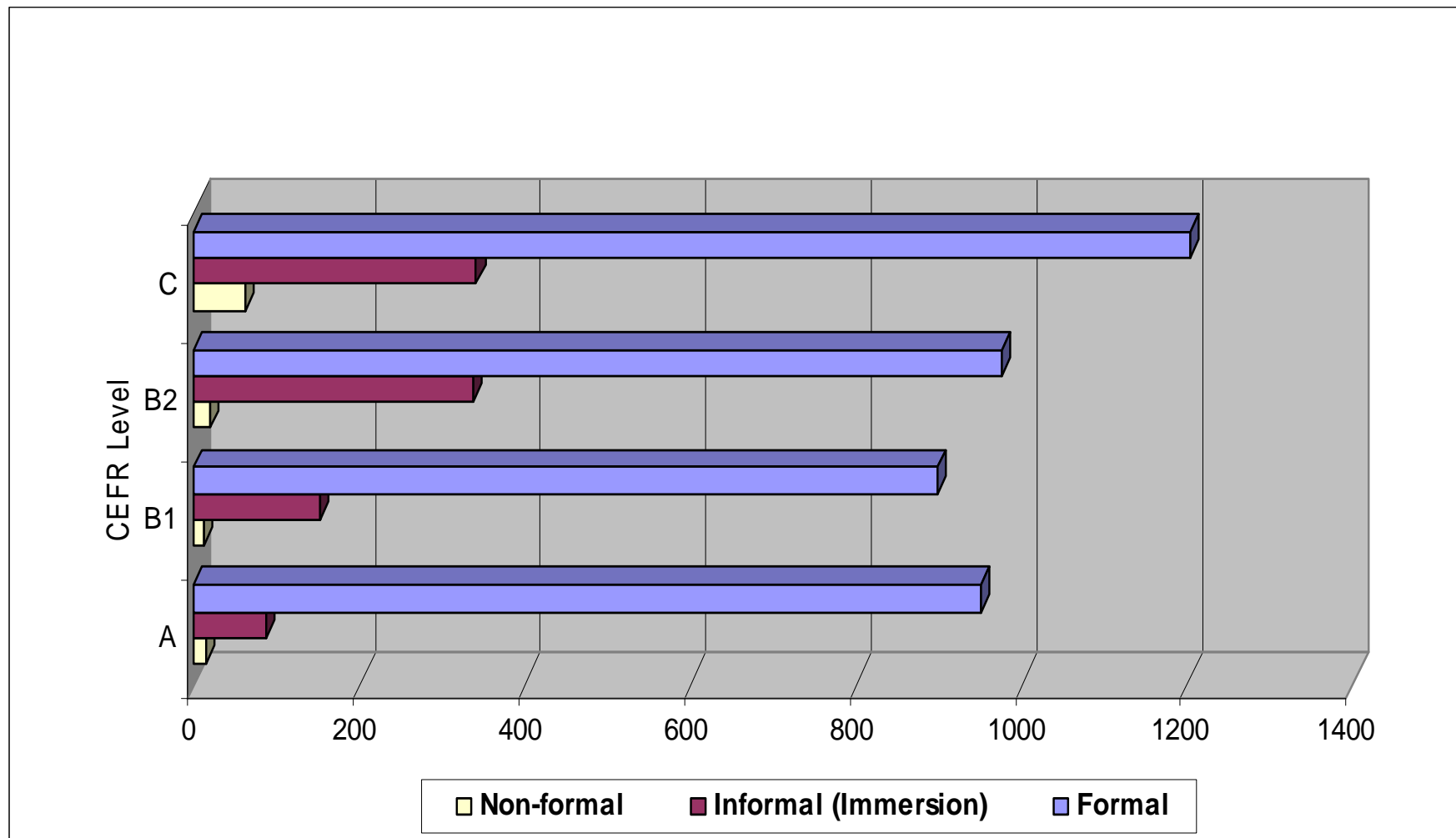


CEFR Level	Number of students	%
A	30	5%
B1	124	19%
B2	237	37%
C	210	33%
Students without standardized test score	37	6%
TOTAL	638	100%

3.3 Student Profile

- Majority of respondents native speakers of French
- Aged between 19 and 23
- Required to study English for Master's degree, must obtain 780 on the TOEIC (Level B+ CEFR)
- Spent approximately 10 years studying English in school from elementary school through higher education

4.1. Results: Comparison of hours cumulated in formal, non-formal, and informal (immersion) English language learning

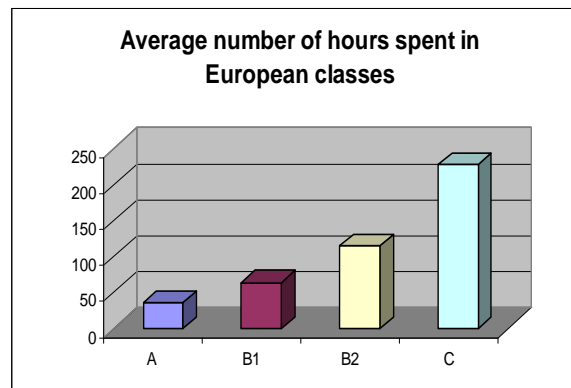
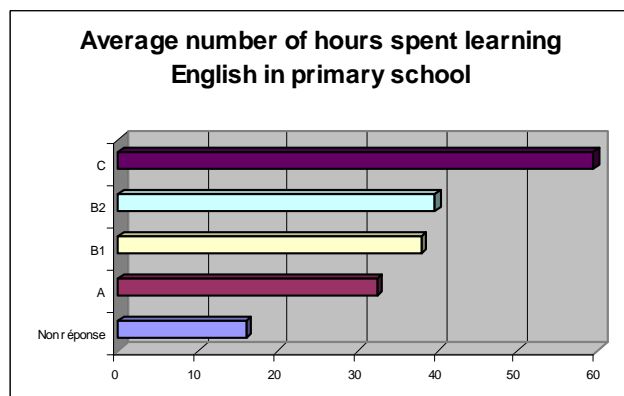


4.1. Formal and informal learning



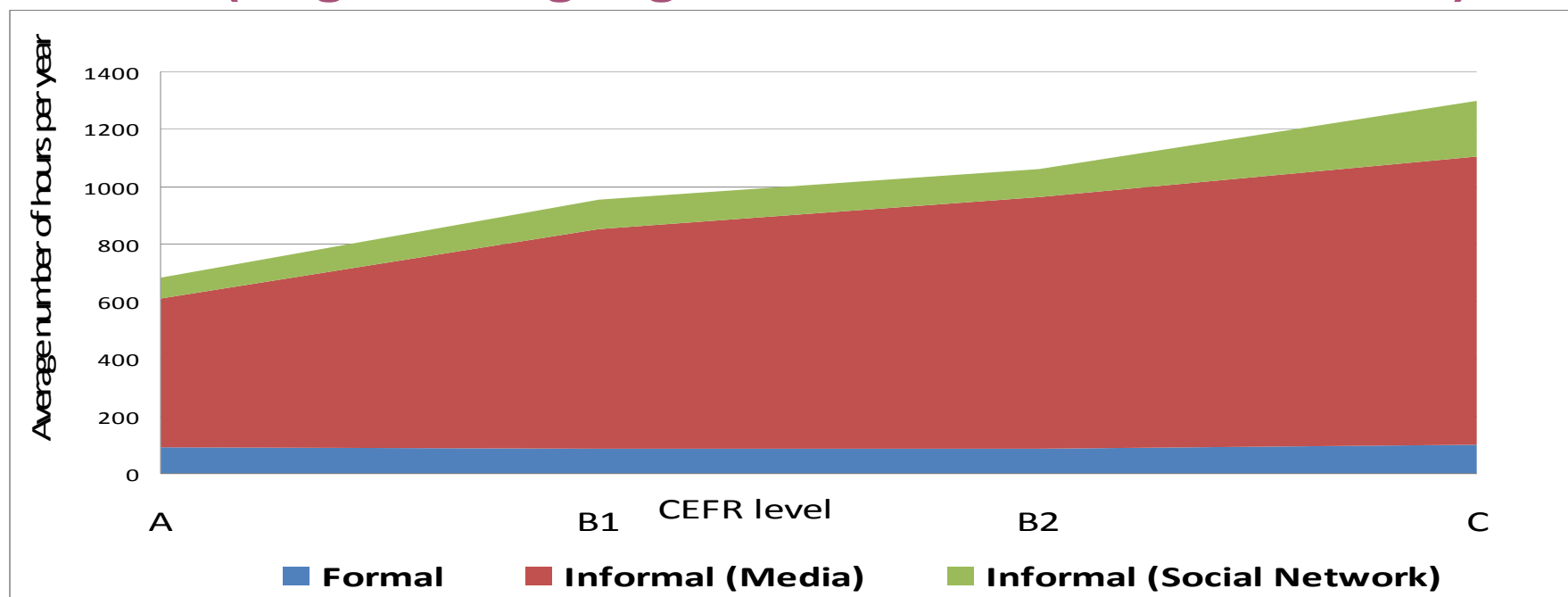
- 40% of students study English in Elementary School
- 93% of students study English in Middle School
- 96% of students study English in High School
- 3% of students study in bilingual classes
- 11% of students study in European classes

Formal Learning	Average Number of hours	% of global average
A	950	91
B1	897	86
B2	976	93
C	1204	115
Global average	1045	



Immersion	Average Number of hours	% of global average
A	88	29
B1	151	50
B2	337	111
C	341	113
Global average	303	

4.2. Results: Comparison of annual number of hours spent in formal and informal learning (English language media and social networks)



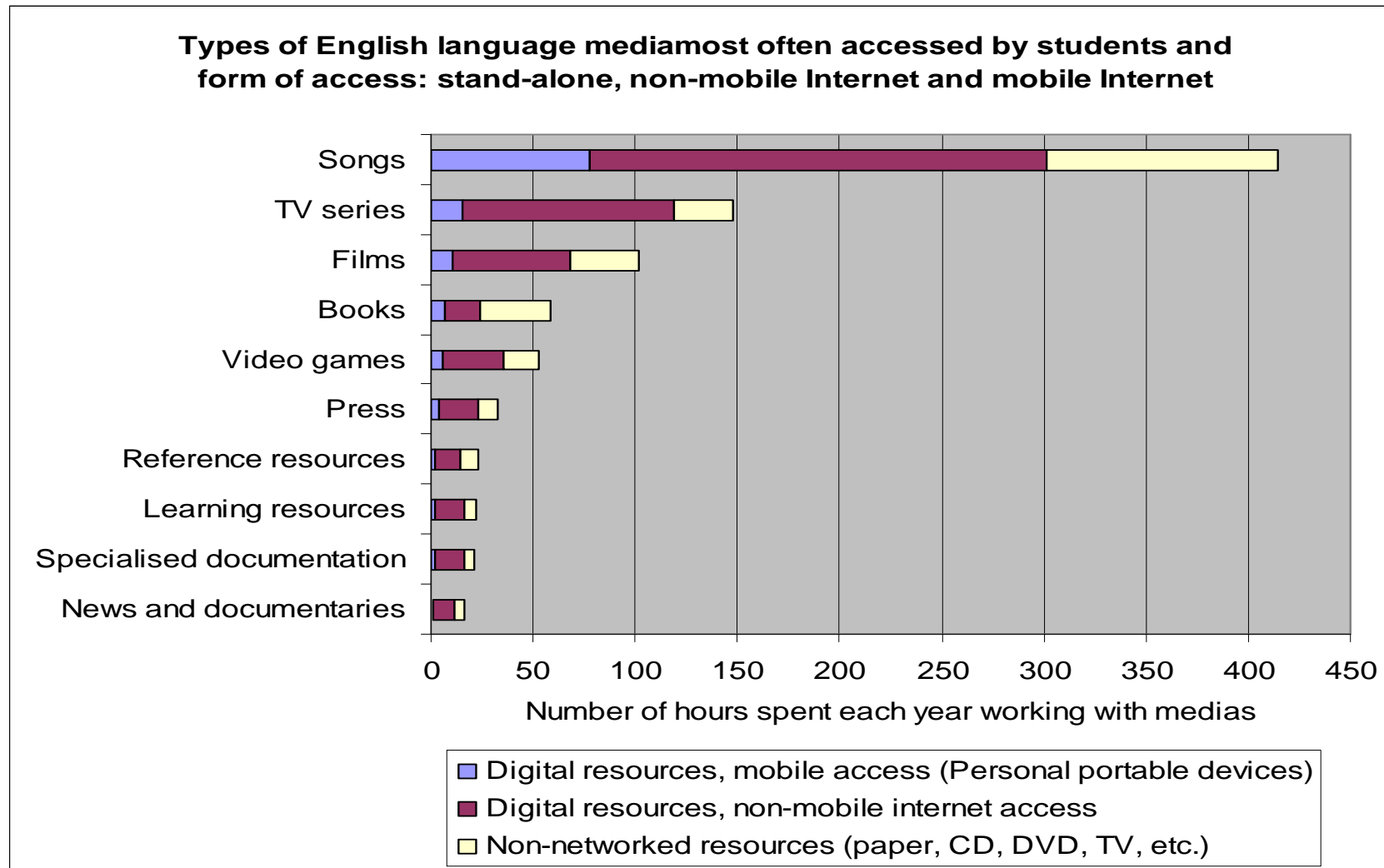
	A	B1	B2	C
Formal learning	92	88	90	102
Informal learning (Media)	520	767	877	1001
Informal learning (Social Networks)	71	102	93	194
Informal Learning/Formal Learning	6	10	11	12

4.2. Reasons why students work with English language media

Personal taste, leisure, pleasure	208
Improve my level of English	166
To learn vocabulary and idiomatic expressions	8
To improve my English accent	5
To improve my listening skills	4
Request from teachers	36
Quality, diversity, accessibility of resources available in English (compared to French)	28
Better quality of media in Original Version	21
To get a different view of the news	9
Curiosity	5
To improve my general culture	8
It's a habit	2
Specific needs	2
Circle of friends	1



4.3. Results: Personalisation and access to English language media





88% of students listen to music in English

- **347 students gave titles; 767 titles were given for 81 different titles**
- **The style of music students listen to:**
 - Rock: 188
 - Pop: 153
 - RnB: 67
 - Rap: 46
- **Some singers and bands cited:**
 - Mickael Jackson: 4
 - Beatles, Muse, Rolling Stone, Coldplay, Metallica...

83% of students watch films

- 360 students gave titles of films; 731 titles were cited for 262 different titles
- The most frequently cited titles were:
 - Inception: 63
 - The Social Network: 23
 - Black Swan: 19
 - Shutter Island: 17
 - The King's Speech: 17
 - Invictus: 15
 - Inglorious Bastards: 14
 - Avatar: 14
 - Harry Potter: 13
 - Thor:12
 - Wall Street: 12
 - Iron Man : 10
 - The Lord of the Rings: 10
 - Forrest Gump: 10



82% of students watch TV series

- 384 students gave titles for TV series; 950 titles were cited for 110 different titles cited
- The most frequently cited TV shows:
 - How I Met your Mother: 161
 - The Big Bang Theory: 92
 - Desperate Housewives: 70
 - Dr House: 54
 - Dexter: 50
 - Gossip Girl: 37
 - Grey's Anatomy: 28
 - Friends: 25
 - Glee: 24
 - Lost: 22





50% of students read the press in English

- 214 gave titles of newspapers and magazines; 322 titles were cited for 42 different titles
- The most frequently cited titles:
 - Time: 95
 - The Economist: 66
 - The New York Times: 44
 - The Guardian: 20
 - Newsweek: 15
 - International Herald Tribune: 12
 - Financial Times: 10
 - Wall Street Journal: 8
 - Glamour: 6

**The
Economist**

The New York Times

theguardian

Newsweek

International Herald Tribune

FINANCIAL TIMES

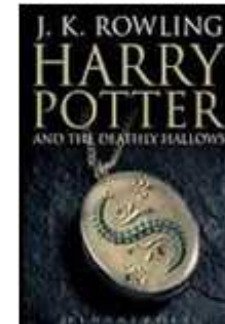
THE WALL STREET JOURNAL.

TIME Magazine

GLAMOUR

36% of students read books

- 160 students provided titles; 259 titles were cited for 116 different titles
- The most frequently cited titles were:
 - Harry Potter (J.K. Rowling):
 - *Twilight* (Stephenie Meyer): 20
 - *The Lord of the Rings* (J. R. R. Tolkien): 14
 - *Pride and Prejudice* (Jane Austen): 10
 - *The Da Vinci Code* (Dan Brown) and Agatha Christie: 7 for each title





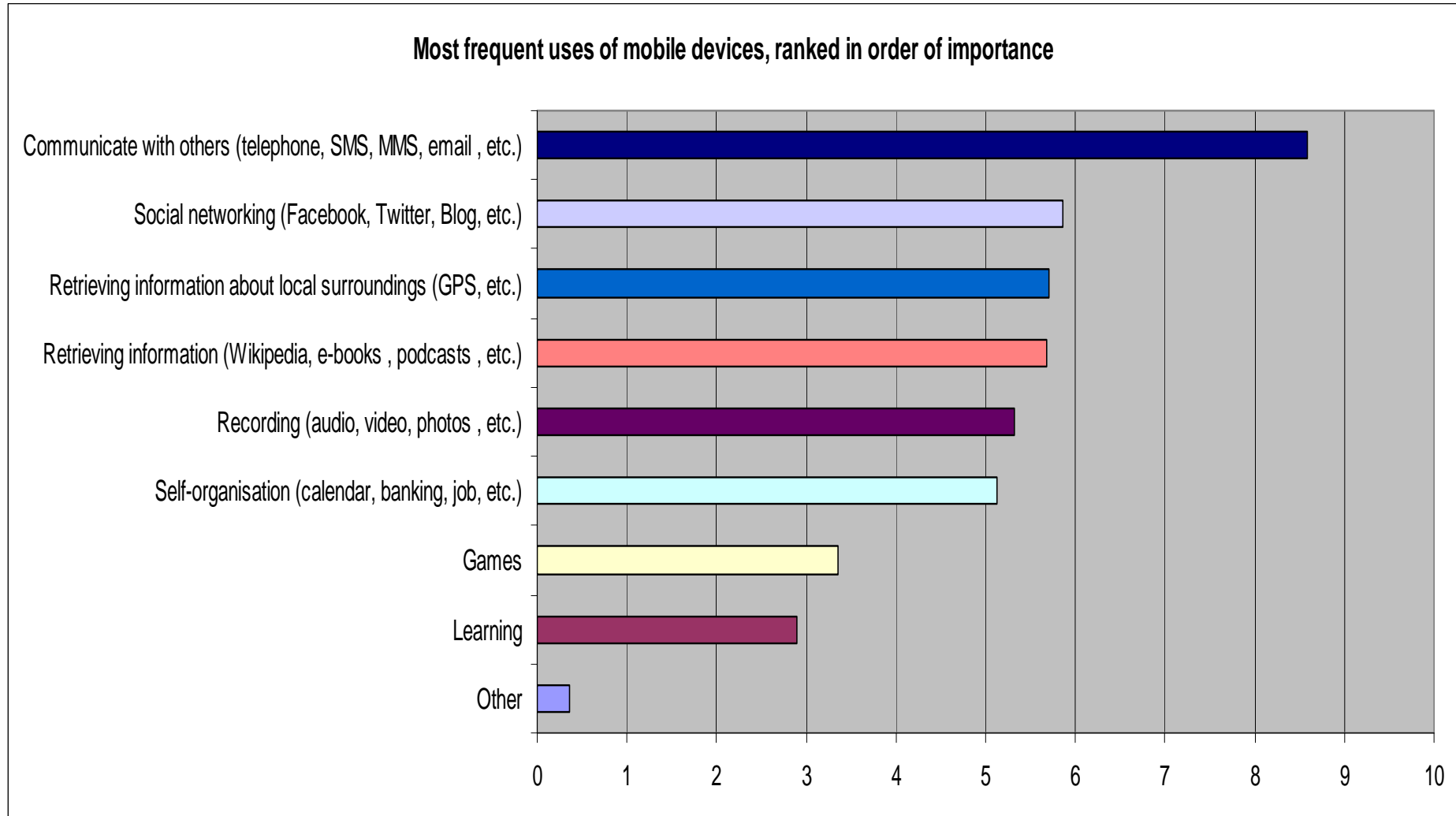
4.3. Access to English language media

- **30% non-networked**
 - Students read books 59% of the time in a non-networked format
- **70% is electronic and networked**
 - 57% non-mobile network
 - 13% mobile network
- **89% of students have a mobile phone**
- **68% have a mobile phone with internet access**
- **4.2% of students have a tablet**





4.4 Use of mobile devices for learning



5. CONCLUSION

- The results of our quantitative study show a strong, positive correlation between a student's level of English and the amount of time he/she spends accessing English language media and working on social networks.
- 70% of students' access to English language media is networked.
- Future: follow up the questionnaires with face-to-face semi-directed interviews



ACKNOWLEDGEMENTS/ Contacts

- This research was conducted within the framework of the LIMED project funded by the European Commission's FEDER program and the Ile de France Region (www.limed.org).
- Contacts:
 - Katherine.Maillet@it-sudparis.eu
 - Carl.Storz@it-sudparis.eu
 - c.dang@4nmedia.com
 - www.4nmedia.com

Le projet LIMED est cofinancé par l'Union Européenne. L'Europe s'engage en Ile de France avec le Fonds Européen de Développement Régional.





REFERENCES

- Allen, D. 2004. *Oxford Placement Test 1 Test Pack*. Oxford University Press, Oxford, New York.
- Bachmair, B., 2007. M-Learning and media use in everyday life. In: N. Pachler 2007. *Mobile learning: towards a research agenda*, WLE Centre, IoE. London, England, pp. 105-153.
- Bachmair, B., 2010. *Medienbildung in neuen Kulturräumen*. VS-Verlag für Sozialwissenschaft, Wiesbaden, Germany.
- Brougère, G. and Ulmann, A.-L., 2009. *Apprendre de la vie quotidienne*. PUF, Paris.
- Chaka, C., 2009. From Classical Mobile Learning to Mobile Web 2.0 Learning. In: R. Guy, 2009. *The Evolution of Mobile Teaching and Learning*. Information Science Press, Santa Rosa, USA, pp. 79-102.
- Chotel, L. et al, 2011. Cas pratique d'apprentissage de l'anglais sur mobile et/ou PC : équipements technologique et pratiques d'étudiants et d'enseignants. *Ludovia*, Ax-Les-Thermes, France.
- Coombs, P.H., 1968. *La crise mondiale de l'éducation : analyse de systèmes*. Paris, PUF; republished in 1989 Bruxelles, DeBoeck-Wesmael.
- European Commission, 2010. Définitions de l'apprentissage formel, non formel, informel. http://ec.europa.eu/education/lifelong-learning-policy/doc52_fr.htm
- Godwin Jones, R., 2011. Emerging Technologies: Mobile Apps for Language Learning. *In Language Learning & Technology*. Vol. 15, No. 1, pp. 2-11. <http://ilt.msu.edu/issues/june2011/emerging.pdf>
- Guy, R. ed., 2009. *The Evolution of Mobile Teaching and Learning*. Information Science Press, Santa Rosa, USA.
- Hrimech, M., 1996. L'apprentissage informel : voie royale de l'autoformation. *Les sciences de l'éducation pour l'ère nouvelle*, n. 39, Vol. 1-2, pp. 217-239.
- Krashen, S. D., 1985. *The Input Hypothesis*. Longman, London, England.
- Kukulska-Hulme, A., 2006. Mobile language learning now and in the future. In: P. Swenson, ed., *Från vision till praktik: Språkutbildning och Informationsteknik*. Swedish Net University (Nätuniversitete), Sweden, pp. 295-310. <http://oro.open.ac.uk/9542/1/kukulska-hulme.pdf>
- Kukulska-Hulme, A., and Shield, L., 2008. An Overview of Mobile Assisted Language Learning: can mobile devices support collaborative practice in speaking and listening? *In Recall*, Vol. 20, No. 3, pp. 271-289. <http://oro.open.ac.uk/11617/1/S0958344008000335a.pdf>
- Kukulska-Hulme, A., 2009. Will mobile learning change language learning? *In ReCALL*, Vol. 21, No. 2, pp. 157-165. http://oro.open.ac.uk/16987/2/AKH_ReCALL_Will_mobile_learning_change_language_learning.pdf
- Livingstone, D.W., 2000. Exploring the iceberg of adult learning: findings of the first Canadian survey of informal learning practices. *NALL working paper #10-2000*. <http://webspace.oise.utoronto.ca/~living13/icebergs/index.html>
- Livingstone, D.W., 2001. Adults' Informal Learning: Definitions, Findings, Gaps and Future Research. WALL Working Paper No.21, 2001. Centre for the Study of Education and Work. Department of Sociology and Equity Studies in Education, Toronto, Canada. <https://tspace.library.utoronto.ca/retrieve/4484/21adultsinformallearning.pdf>
- Naismeth, L. P. et al, 2004. Literature Review in Mobile Technologies and Learning. Futurelab, Bristol. England. http://www.futurelab.org.uk/sites/default/files/Mobile_Technologies_and_Learning_review.pdf
- Pachler, N., ed., 2007. *Mobile learning: towards a research agenda*. WLE Centre, IoE, London, England.
- Redecker C. and Punie, Y., 2010. Learning 2.0 Promoting Innovation in formal Education and Training in Europe. *In ECTEL '10 Proceedings of the 5th European conference on Technology enhanced learning conference on Sustaining TEL: from innovation to learning and practice*, pp. 308-325.
- Redecker C. et al, 2010. Learning 2.0 – The Impact of Social Media on Learning in Europe (JRC Technical Notes). Office for Official Publications of the European Communities, Luxembourg, Luxembourg. <http://ftp.jrc.es/EURdoc/JRC56958.pdf>
- Rudd, T., et al, 2006. Towards New Learning Networks. Futurelab, Bristol, England. http://www2.futurelab.org.uk/resources/documents/opening_education/Learning_Networks_report.pdf
- Sharples, M., et al. 2007. *Big Issues in mobile learning*. LSRI, University of Nottingham, England. <http://mlearning.noekaleidoscope.org/repository/BigIssues.pdf>
- Schugurensky, D., 2000. The Forms of Informal Learning: Towards a Conceptualization of the Field. NALL Working paper. www.nall.ca/res/19forms_of_informal.htm
- Stockwell, G., 2008. Investigating learner preparedness for and usage patterns of mobile learning. *In ReCall*, Vol. 20, No. 3, pp. 253-270.
- Stockwell, G., 2010. Using Mobile Phones for Vocabulary Activities: Examining the Effect of the Platform. *In Language Learning & Technology*, Vol. 14, No. 2, pp. 95-110.
- Tannenbaum, R J. and Wylie, E.C., 2008. *Linking English-Language Test Scores Onto the Common European Framework of references: An Application of Standard-Setting Methodology*. ETS, Princeton, USA.
- Taylor, J., 2006. What are the appropriate methods for evaluating learning in mobile environments? Evaluating Mobile Learning In M. Sharples, ed., *Big Issues in Mobile Learning*. Kaleidoscope Network of Excellence, Mobile Learning Initiative, Nottingham, England, pp.26-29. <http://mlearning.noekaleidoscope.org/repository/BigIssues.pdf>
- Traxler, J., 2007. Defining, Discussing, and Evaluating Mobile Learning: The moving finger writes and having writ... *In International Review of Research in Open and Distance Learning*. Vol. 8, No. 2, pp. 1-12. <http://www.irrodl.org/index.php/irrodl/article/view/346/875>