#### ARTICLE

# University Students' Digital Reading and Writing Migration

# Luis Alfonso Argüello Guzmán

luis.arguello@campusucc.edu.co Universidad Cooperativa de Colombia

> Submitted in: February 2011 Accepted in: June 2011 Published in: January 2012

#### Recommended citation

ARGÜELLO, Luis Alfonso (2012). "University Students' Digital Reading and Writing Migration" [online article]. *Revista de Universidad y Sociedad del Conocimiento (RUSC)*. Vol. 9, No 1. pp. 200-216 UOC. [Accessed: dd/mm/yy].

<a href="http://rusc.uoc.edu/ojs/index.php/rusc/article/view/v9n1-arguello/v9n1-arguello-eng">http://rusc.uoc.edu/ojs/index.php/rusc/article/view/v9n1-arguello/v9n1-arguello-eng</a> ISSN 1698-580X

#### Abstract

This paper discusses the impact of new electronic media on young university students' reading and writing habits. The methodological design is ethnographic and involved an observation register of reading and writing situations. The analysis was based on several categories: written-material culture, text-screen interaction, intertextuality, digital migration and the convergence of literacies. The results show that the digital migration of university readers and writers is evident from the way they structure a document, from Google's influence on the search for and selection of documentary and bibliographic sources, and from the way they incorporate citations in texts.

#### Keywords

digital natives, digital screens, written-material culture, young university students

# Migraciones digitales de lectura y escritura en estudiantes universitarios

#### Resumen

Este texto presenta un fenómeno comunicacional de lectura y escritura en el horizonte de los nuevos medios electrónicos. El diseño metodológico es de carácter etnográfico por cuanto se ha realizado un registro de observación de situaciones de escritura y lectura. El análisis se realiza a partir de las categorías de cul-

University Students' Digital Reading and Writing Migration

tura material escrita, interacción texto-pantalla, intertextualidad, migraciones digitales y convergencia de alfabetos. Los resultados se hacen evidentes en las migraciones digitales del lector y escritor universitario al organizar una página, en la influencia de Google en la búsqueda y selección de fuentes documentales y bibliográficas, así como en la forma de incorporar citas en los textos.

#### Palabras clave

nativos digitales, pantallas digitales, cultura material escrita, jóvenes universitarios

# Introduction

# 1. Field of inquiry

The convergence of digital screens has familiarised young people with ICT-mediated lifestyles. From this perspective, the questions that arise are:

- What communicative interactions and digital interactivities do young university students construct around the electronic screens that mediate in their textual production?
- Do electronic screens structure young university students' textual production?
- What are young university students' reading and writing practices?

### 2. Background

The prior research on which this article is based requires an acknowledgment of three referential domains: young people, screens and digital media; the Internet and young university students; and university reading and writing practices.

## 2.1 Young people, screens and digital media

Research on young people, screens and digital media has generated a wealth of studies in Latin America. These studies have gradually forged concepts such as jóvenes.com (akin to Generation Z), the multimedia generation and the digital generation. Professor María Teresa Quiroz has published two books entitled Jóvenes e Internet. Entre el pensar y el sentir (2004) and La edad de la pantalla. Tecnologías interactivas y jóvenes peruanos (2008). The setting for the first one was the city of Lima, and it deals with the city's schoolchildren's thoughts on and feelings about television, computers, video games and the Internet. Based on interviews and focus groups, it explores the schoolchildren's conceptions of books, virtual communication (chats, instant messaging), schools, teachers, the country and their own life projects. The second books deals with the changes arising from ICT access and use, and new forms of sensibility, taking schools and new communication media as the reality, although the work settings were Chiclayo (a city on the coast), Iquitos (a city in the rainforest) and Cusco (a city in the mountains).

University Students' Digital Reading and Writing Migration

The article "Navigators and castaways in cyberspace: psychosocial experience and cultural practices in schoolchildren's appropriation of the Internet" by José Cabrera Paz (2001) forms part of a research project that comes under the "PAN-LAC Small-Grant Program on ICT Research Issues". It explores the Internet's incorporation into school culture and Internet use. The methodological design had a psychosocial approach based on an ethnographic qualitative model. Seventy-six interviews were conducted in six schools in Bogotá (Colombia) and a focus group comprising 16 participants was held.

In Bolivia, work has been undertaken on the "ICT for Development" research line. Researchers Patricia Uberhuaga Candia, Orlando Arratia Jiménez and Mariela García Miranda did a study on young people from Cochabamba (2005 and 2006). The results were published in two books: Entre lo colectivo y lo individual. El puente de transición de las identidades de los jóvenes en el uso del Internet (2005) and Jóvenes.com. Internet en los barrios populares de Cochabamba (2006). The first one explores the impact of ICTs, Internet use and its expression in the subjectivity of young Bolivian people from three working-class neighbourhoods of Cochabamba. The second one deals with the cultural practices inherent to the working-class neighbourhoods of Cochabamba and young people's interaction with the Internet for entertainment purposes.

Roxana Morduchowics wrote the book entitled *The Multimedia Generation*. Young People's Cultural Meanings, Consumptions and Practices, in which she offers an insight into how new generations use ICTs. The book is based on a survey carried out in Argentina on a sample of 3,330 young people, 3,300 adults and 3,300 households, under the Ministry of Education's "Schools and Media" programme. The book explores the cultural meanings, uses and practices of watching television, listening to music, reading books, talking on mobile phones and surfing the Internet.

Research on *young people, screens and digital media* has also generated a wealth of important works in Canada, France, the United Kingdom, the United States and Norway. The works entitled "Les jeunes et Internet: Représentations, usages et appropriations" (2001) by Évelyne Bevort and Isabelle Bréda, and "Les jeunes et Internet. Représentations, utilisation et appropriations" (2001) by Jacques Piette, Christian-Marie Pons, Luc Giroux and Florence Millerand contain the results obtained in France and Canada (Québec) of a joint project on "Young People and the Internet" involving France, Canada (Québec), Belgium, Spain, Italy and Switzerland.

The first one was undertaken in Paris (a large city) and La Rochelle (a small city); the second one was undertaken in Montreal (a large city) and Sherbrooke (a small city). The parameters of the joint reports' common protocol were to explore young people's representations of the Internet phenomenon, online content, and the social, family and school impact of Internet use. In addition, the work examined the appropriation of Internet technologies in daily life on the basis of conducts, learning methods, media consumption habits and attention. Finally, they ascertained frequency of use, duration of connection, and place and conditions of access. The methodological design was based on a questionnaire and interviews (24 in both cases), with a sample of 524 young people (for the French part) and 576 young people (for the Canadian part).

The work entitled "Living and Learning with New Media: Summary of Findings from the Digital Youth Project" (2008) is the summary publication of results from the "Digital Youth Research" project

University Students' Digital Reading and Writing Migration

undertaken in the United States under the guidance of anthropologist Mimi Ito at the University of California, Irvine. The results identified three kinds of participation: "hanging out" (a conduct of young internauts who use messages with digital tools to keep in touch with their friends without any pre-established intention), "messing around" (an interactive social practice in which young surfers search for online information without any prior intention, with access to online digital resources) and "geeking out" (a digital social practice of surfing under the expertise of digital tools and participation in specialist communities of online experts). In the project design, 659 semi-structured interviews were conducted, 28 study diaries were kept and focus groups comprising 67 participants were held. There were also 10,468 Myspace and Facebook profiles, and 15 online focus group discussion forums.

"Young people, new media" by Sonia Livingstone and Moira Bovill (1999) is the final report of the "Children, Young People and the Changing Media Environment" project undertaken in the United Kingdom. This project was undertaken on the basis of category references that went from childhood to childhood and youth, from television to the media ecosystem, and from the impact to the uses and meanings of media. It explored new media in relation to social change in accordance with the public/private context, lifestyle diversity, activity convergence (work, relationships and education) and changes in modes of communication. The project's methodological design had a qualitative phase (interviews conducted with the more than 200 children and young people in 27 groups) and a quantitative phase (a questionnaire completed by 1,303 children).

"Onliners. A report about youth and the Internet" by Taran L. Bjørnstad and Tom Ellingsen (2004) is a report on research undertaken in Norway for The Norwegian Board of Film Classification on young people and Internet use in accordance with various parameters: role, uses and meanings, and encounters between available content and personal preferences in terms of content use. The study dealt with young people's initial contact with the Internet, places of use, e-mail (Hotmail), chats, online gaming, the Internet and Obvies (music downloads), the Internet and school culture, and uses of available content. The methodological design employed a qualitative approach. In the research process, the researchers selected a school A and a school B. The Internet was a focal area of teaching in school A but not in school B. In total, interviews with 40 pupils (years 8 and 10) were conducted.

#### 2.2 The Internet and young university students

Research on the Internet and young university students has left a trail of works in which representations, uses and meanings of the Internet are studied. The report entitled "Patrones de uso de internet en estudiantes universitarios" by Montserrat Sánchez Ortuño, María Raquel Sánchez Ruiz and Agustín Romero Medina (2000) contains the research results of a project that analysed differences in accordance with several variables of Internet use: the most commonly used applications, reasons for connecting, session duration and addictive Internet use. The methodological design involved a survey of 113 students at the University of Murcia.

"Uso de internet por los estudiantes de la Universidad Autónoma de Madrid" by Eva Medina and José Vicens Otero (2002) analysed Internet use by students at the Autonomous University of Madrid. It was about professional and academic use, and the most commonly used services were e-mail,

University Students' Digital Reading and Writing Migration

general information searches and study information searches. The research design was based on a sample of 765 surveyed students from a variety of faculties and schools (Teacher Training, Medicine, Law, Psychology, Philosophy, Economics, Chemistry, Biology, Physics and Information Technology).

"Conocimientos, habilidades y características del acceso a Internet en estudiantes de medicina de una Universidad Peruana" by Pedro Horna, Walter Curioso, Carlos Guillén, Carla Torres and Jorge Kawano is an article that examines knowledge, skills and the Internet access characteristics of Medicine students at Cayetano Heredia Peruvian University. The most commonly used services were e-mail and gaming. The students had no command of tools focusing on health-related information searches. The research design was structured around a survey of 272 Medicine students (out of an enrolled total of 690).

## 2.3 University reading and writing practices

Research on *university reading and writing practices* involves several variables, such as access to texts, reading habits and frequency, and text types. "Realidad y simulación de la lectura universitaria: el caso de la UAEM" by Guadalupe Carrillo Torea (2007) is an exploratory study based on surveys conducted with students at the Autonomous University of Mexico State to ascertain their reading levels, their reading defects and the projection of their cultural levels. The research design was structured around a survey.

"Las prácticas de lectura en estudiantes universitarios" by Ana Teberosky, Joan Guhrdia and José Escoriza (1996) reports on exploratory research into study reading practices, or exercising study reading skills, in a sample of 243 Psychology students and 156 Teacher Training students at the University of Barcelona. It also describes the study and reading materials that the students used for their courses, as well as the availability of such materials in the library. The methodological design was based on an indirect measurement test of exposure to reading materials and its correlation to the university students' academic levels. The conclusion drawn from the research was that the future of reading in higher education could be categorised into three types: superficial reading, which only extracts information for an exam; fragmentary reading, which severs the relationship between the content and the medium; and anonymous reading, in which titles and/or authors are unknown.

Lectura y escritura en la universidad: una investigación diagnóstica by Mireya Cisneros (2005) is a book published following the research project entitled "Estrategias de lectura y escritura usadas por estudiantes que ingresan a la universidad". The project was structured around a corpus of expository and argumentative texts read by 1,413 students at the Technological University of Pereira, with whom work was undertaken on reading comprehension and text construction processes.

The book entitled *Lecturas y escrituras juveniles*. Entre el placer, el conformismo y la desobediencia by Giovanna Carvajal Barrios (2008) presents the results of a research project on young university students' reading practices in the context of cultural consumption and production processes. The research examined the reading and writing practices of five students at the University of Valle, as well as their modes of reading and writing. The methodological design was qualitative in nature, and the five cases were registered through discussion groups and in-depth interviews.

University Students' Digital Reading and Writing Migration

# Methodology

# 3. Methodological design

This qualitative research was structured around the observation and monitoring of communicative and educational situations, the description of textual representations and the systematisation of descriptive notes.

In order to organise the focus groups, the topics of discussion were the Communicative Competencies and Research Design courses that the students took in the first and second academic periods of 2009. There were three focus groups:

- Group 1: "University Readers and Writers", comprising 11 students.
- Group 2: "The Internet in Universities", comprising 11 students.
- Group 3: "Evaluation of Books", comprising 33 students.

In the focus groups, interviews were conducted with 20 students on the Systems Engineering academic programme's Communicative Competencies course that the students took in the first and second academic periods of 2009.

The students forming part of these focus groups were young people aged 16-21 from the urban and suburban catchment areas of the university. Their personal technology appropriation traits were defined by the ownership of mobile devices that they brought with them to the university, as well as by having competencies to access social networks and websites.

Textual information for the documentary register was collected for the first academic period of 2008, the second academic period of 2008 and the first academic period of 2009 through assignments for the Formulating Research Projects course on the Systems Engineering academic programme. In the first academic period of 2008, six hardcopy and electronic assignments (the latter attached as files to e-mails) were registered. In the second academic period of 2008, nine hardcopy and two electronic assignments (the latter attached as files to e-mails) were registered. In the first academic period of 2009, five hardcopy and electronic assignments (the latter attached as files to e-mails) were registered. In the second academic period of 2009, 20 hardcopy assignments were registered.

# 4. Analysis categories

The questions that need to be posed here are: Which angle of analysis should be adopted in order to approach the complexity of adolescent events associated with an academic world that has fixed the printed word in books? And how do these young people turn reading and writing into a subject of interconnection and intertextuality?

The matter of interconnection deals with the young university students' links to an interactive world that generates rites of passage from an analogue culture to a digital culture. The matter of

University Students' Digital Reading and Writing Migration

intertextuality questions hardcopy textual production, taking account of the shift from text written down on paper to the production of documents on the surface of a screen.

In this web of concepts, attempts are made to study the university students' answers, uses, practices, habits and endeavours in reading and writing processes on the basis of the following analysis categories: written-material culture, text-screen interaction and digital migration.

#### 4.1. Written-material culture

A textual culture is evident in hardcopy and on-screen inscriptions that structure the cognitive domains of reading and writing processes (Chartier, 1995; Vanderdorpe, 2003) in the light of new media for reading, writing, looking up and processing textual information, and in the light of a type of written-material culture (Petrucci, 2003). This textual evaluation means distinguishing, as Raffaele Simone (1998, 2001) does, between books as a closed textual medium and text as a material surface open to any medium.

#### 4.2 Text-screen interaction

The on-screen display and manipulation of text, or its 'screenisation' (Turkle, 1998; Levis, 2009), together with the transformation of the reading and writing medium, is evident in a new generation of young people whose cultural capital focuses on popular things and on electronic media (Morduchowics, 2003; Buckingham, 2000); these are the young people who instigate a discursive interaction between human beings and computers (Herrings, 2001).

#### 4.3 Digital migration

In the context of the research on which this study is based, the digital migration of the students (digital natives) does not go through the linear sequences of the print culture (Mead, 1970). Rather, the students interconnect by means of the electrification and digitisation of the mind; a mind that is connected to surfing, searching and browsing networks. At this level, there are two vocabularies and two literacies that come together in a clash of generations (Mead, 1970): analogue hardcopy and digital on-screen text. This gives rise to an ontological and semantic regime of digital natives and immigrants (Prensky, 2001; Boschma, 2008; Montgomery, 2006; Palfrey & Glasser, 2008).

## Results

# 5. Digital reading and writing migration

The rise of the Internet has changed the way we look up documentary and bibliographical sources to write university assignments. In its unlimited space of search potential, it is possible to find digital

University Students' Digital Reading and Writing Migration

books, electronic periodical publications, specialised databases, and content and search websites that help us locate topics, texts and authors.

University students reading and writing processes leave a trail of the value they place on books as learning objects, of Internet use and access habits in universities, and of texts that interact with other texts (referred to here as "digital palimpsests").

#### 5.1 Evaluation of books

Books are still the point of reference from which young university students value reading processes. This indicates that, in spite of not having strong linear reading habits, students consider books as an immediate reference, associated with the processing of information that is not available in its entirety. Books are still the constituent axis of searching for information for study purposes.

**Student N:** Books give more comprehensive information about lecture topics, the Internet only gives summarised information... there are so many documents on the Internet about the same topic... a book is more comprehensive.

**Student J:** Well, Mr Argüello, books are very important for studying... but they're not fun... take Penney's Calculus, for example... the Calculus book isn't fun.

Books are at an intersection of interests, between being fun and existing as physical objects of compulsory reading. In this move, they are perceived as physical objects associated with compulsory reading for the purpose of studying lecture topics.

**Student M:** Students don't like the books our lecturers bring to lectures... and the worst thing is that they bring us blurry – and even scrappy – photocopies... without any titles and without knowing who wrote them... so reading is really boring... and then what do I do? Well, I enter the name of the author and the title of the photocopied book... everything comes up on Google...

On this point, books as objects of knowledge are valued for their curricular practicality because access to information is limited to course content, so the content is cross linked and there is proximity between the content of the book and of the course. At this level, an encounter between two modes of access to academic information takes place: from books, which are limited and course focused, and from the Internet, which is open and complementary to course content.

**Student J:** (continued)... The Calculus book isn't fun... and the answers to the exercises are on the Internet... what the lecturer explains on the board is sometimes so confusing that it's easier to do with simulations on computer screens... there may be exercises in the book that are easier to see on maths web pages.

University Students' Digital Reading and Writing Migration

When evaluating books as textual complements available in various formats, students add a component of compulsoriness to hard copy books. They consider books to be restricted, did actic objects of knowledge, which discourages them from approaching them. For the university students, books carry the burden of seriousness and difficulty associated with study reading, within the context of a university schooling tradition that has encouraged the association books with *study reading* as a compulsory academic activity.

**Student N:** ... it's not that we don't read... if the books we use on Systems are practical... there isn't time to think about the Calculus book... or about the one on Operating Systems... some lecturers don't even bring us a reading list... and some don't even hand out the course programme... you need time... and patience to get into a book... I work on and read the lecture stuff...

#### 5.2 The Internet in universities

Students' Internet use in universities is proportionate to the impact of personal meanings and uses of Internet services, owing to the newness and up-to-date nature of the information viewed on social-contact and information websites' pages. Internet uses are evaluated on the basis of access to personal contacts and information searches in accordance with the individual interests of each student.

**Student L:** If students don't know how to surf the Internet... how do they do the assignments they are asked to do in lectures? All the information is on the Internet... if they don't know how to use it, how do they do their assignments?

Here, it is possible to observe that the students evaluate certain parts to refer to the whole: a service (Messenger) is taken as the Web as a whole, and a utilitarian function is assigned to it (doing university assignments).

Thus, it is found that when students access the digital screen, they do so in accordance with certain sequentiality criteria involving the same interests of attention and connectivity: this conduct is regulated by the type of service that they access first (Messenger) and by the one that they access last (Google).

**Student V:** ... when I go into the university's Systems room, I get anxious because I can't see Messenger... so that's why, when I'm in the Systems room, I only use the computer to open Google... to open tabs... to choose paragraphs... to copy stuff to hand in an assignment... I feel fine on my own computer because I can see Messenger while I'm doing a university assignment.

In terms of access and availability, accessing the Internet from a public place (the university's IT Systems room) is not that same as accessing it from home, although, according to focus Group 2 "The Internet in Universities", the routine is the same.

**Student K:** It's like this Mr Argüello, I turn my computer on... if I'm in my room, of course... the first screen is Messenger, I open YouTube to watch some videos, check out Facebook and then I open Google to search for information for an assignment...

University Students' Digital Reading and Writing Migration

**Student B:** At home, everyone shares the computer... when I get back from university, the first thing I do is go onto Messenger to chat with my friends about what has happened to us during the day... on Facebook I try to find about a cousin who lives in another city... I leave my university work to last, and I do it in the Systems room...

The university students have three spatial routines for accessing the Internet: from the university's IT Systems Department's computer rooms, from computers installed in the Library's rooms and the from the classroom (using Wi-Fi).

# 6. Digital palimpsests

For university readers and writers who take recourse to Internet file and storage resources, reading is associated with the fragmentation of documents. This practice turns a fragment into an intertext without any author or publisher references or any explicit title. However, the result of selecting and incorporating fragments into a blank document is that the stability of the closed text is destroyed.

In a university academic assignment, this textual instability of the on-screen register of writing could be called a 'digital palimpsest', owing to the fact that the university students reuse fragments of digitised texts. In other words, they copy and paste fragments to a file that they then delete and forget about. The surface of the text (on paper or on screen) becomes a 'digital palimpsest' when the student structures an on-screen document by using fragments of digitised texts like a collage.

#### 6.1 Searching for documentary and bibliographical sources

Of the 25 documents reviewed, seven have bibliographical references with the entries:

- www.google.com.co
- http://www.monografias.com/.../tesisgrado/tesisgrado.shtmltesisymonografias.blogspot.com/
- http://es.wikipedia.org/wiki/informaci%C3%B3n

These entries correspond to a search query requested by the lecturer to review textual structures on how to draft a monograph. Their transcription is given in terms of the address (domain name and route), but no account is taken of the document's title or authorship.

**Lecturer:** In terms of constructing these Google, monografía.com and Wikipedia bibliographical references, where did you get the model from? (interviewer)

**Student N:** Well, if the lecturers don't give us a reading list, I do a general search on Google... a lot of these photocopied book chapters don't give any details about the author or the title... that's why Google, Wikipedia or monografía.com appear in the bibliographical references... I looked at another piece of work and that's why I put it down like that. (interviewee)

University Students' Digital Reading and Writing Migration

On this point, bibliographical references are presented as a hybridisation of hardcopy references and electronic references, with entry types like the following:

- http://books.google.com/books?id=x2LpgZ
- Beekman G. Introducción a las computadoras, publicado por Pearson Educación. 2000.

In the first entry, the address (route) for the electronic book is given without any details about the author, the title or the publisher; in the second, there is a bibliographical reference to a hardcopy book with the following structure: *author*, *title*, *publisher and year*, while *the place of publication* and *pages* are missing.

**Lecturer:** What idea did you have in mind when you wrote these two entries for digital bibliographical references? (interviewer)

**Student Y:** No ... I didn't make it up... you told us that we had to put the full details of the location of the document... and that's what I did... that's the address for these pages... there's the page. (interviewee)

**Lecturer:** Are these links to pages of documents that can be found in these web pages? (interviewer)

**Student Y:** No ... they are links to the web pages... the documents and the pages are the same thing... if a page doesn't state who wrote it, well it doesn't have an author... how do you put it down in the bibliographical references...and if the lecturer doesn't tell us how to do it, you put down something you don't know how to do. (interviewee)

From the time when a fragment of text is located to the time when it is incorporated into another text, like a textual collage on the on-screen Word document, a hypertextual structuring that organises the surface of the screen takes place.

**Lecturer:** So you enter a word on Google. Then what do you do? (interviewer)

**Student M:** Well... I open all the tabs at the same time... I review them and highlight what I understand, and choose what I want to use in a Word document... Control C and Control V. (interviewee)

**Lecturer:** What do you search for on Google?

**Student M:** I search for information that the lecturer tells us about... for an essay... it seems that the lecturers have all decided to set essays...

## 6.2 Copy and paste

'Copy and paste' is a form of textual production based on the appropriation of intertexts without acknowledging the source from which a fragment has been taken; it is the literal copying of a fragment of text by citation or reference through a modality of composition called 'Ctrl C + Ctrl V'.

University Students' Digital Reading and Writing Migration

In these academic assignments, the university students show two 'copy and paste' variants: textual form and typographical form (Argüello, 2009a).

- 6.2.1. Copy and paste: the textual form. In these documents produced by the university students, the following 'copy and paste' practices can be found:
  - The extraction of a fragment from a text A, found online, and its incorporation into a text B, a university assignment, without acknowledging any textual link to the original appropriated text and without maintaining any correspondence with the linking text.
  - The incorporation of citations from a linked text A in the textual body of a linking text B, without any explicit reference through a footnote or a reference structure (surname, date, page).
  - The mention of an author in the textual body, but without presenting an internal reference in the document, or giving a footnote or inserting the reference in the bibliography at the end.
- *6.2.2. Copy and paste: the typographical form.* In these documents produced by the university students, the following 'copy and paste' practices can be found:
  - A multiplicity of font types in the same text (four assignments contained a combination of Verdana and Times New Roman, 13 contained a combination of Arial Normal and Arial Web, and two contained a combination of Arial Web and Trebuchet).
  - Different font sizes in the same text (four assignments contained a combination of Verdana 8.5 and Times New Roman 12, 13 contained a combination of Arial Normal 12 and Arial Web 10, and two contained a combination of Arial Normal 12 and Trebuchet 10.5).
  - Line spacing in the formatting of texts (21 assignments had a combination of single and 1.5 line spacing, 12 had a combination of single and double line spacing).

## Discussion

# 7. University students' digital migration

To remain in the position of university readers and writers is to remain in a subjective state of information searching, browsing and processing through on-screen displays on computers (Turkle, 1998; Quiroz, 2008; Levis, 2009), with the scaffolding and textualities of new reading and writing surfaces that restructure textual comprehension and production processes.

Looking up documents and bibliographical references is a related activity but not the only one in young people's on-screen textual interactions, owing to the fact that, in a sequential order, Messenger and Facebook services account for most of these socio-technical interactions, and that the academic activity of looking up documents and textualities is a non-exclusive activity within the uses and meanings of digital media for young university students.

University Students' Digital Reading and Writing Migration

Among university students, the reading and writing (Cassany, 2006; Gubert, 2010) of new electronic textualities represents an angle of approach to the electronic text as a book open to new forms of knowledge circulation, and the surface of the text as an entity of scholarly register that is not exclusive to the pages of the hardcopy book.

# 8. Open books

Books have lost their academic weight (Darnton, 2010) as stable, universal works of reference, and have now become complementary to the processing of academic information, on a par with online documentary and bibliographical reference works.

This loss of academic reference centrality does not mean that they will disappear. Rather, the stable closed text (Petrucci, 2003; Simone, 1998, 2001) will shift towards a text on which other textualities converge.

The book format, as the nucleus of consultation in the reading practices of young university students, has been decentred and replaced by the on-screen browsing of web pages, which does not mean that the status of university readers and writers has been dissolved, although the mode of reading with full awareness has shifted from what it means to read texts to seeing web pages of documents that contain information.

#### 9. Text surfaces

In addition to the decentring of books is the fact that the surface of the page is no longer based on the linear structure of written documents. Rather, it is based on the on-screen display of electronic pages through the practice of cutting and pasting fragments of text (Argüello, 2009a). Consequently, the surface of the computer screen is transformed into the search query itself: students present the pages, the screen and the documents accessed as if they were one and the same thing; they mix up the surface of the textual content with the surface of the format.

The Internet has redefined the state of reading comprehension and textual production; university readers and writers become internauts that surf websites; on-screen text is a collage of textualities; and personal interests dominate search, browsing and connection habits.

## References

ARGÜELLO, L. A. (2009a). "Cortar y pegar. La producción textual de trabajos escolares universitarios" [online article]. *Revista Question*. No 21. [Accessed: 20 August 2008].

<a href="http://perio.unlp.edu.ar/question/numeros\_anteriores/numero\_anterior21/files/arguelloguzman\_1\_informes\_verano2009.htm">http://perio.unlp.edu.ar/question/numeros\_anteriores/numero\_anterior21/files/arguelloguzman\_1\_informes\_verano2009.htm</a>

ARGÜELLO, L. A. (2009b). "Convergencia de alfabetos: la formación de profesores en Educación Superior" [panel lecture]. In: XCongreso Latino americano de Lectura y Escritura. 29 July, 1 and 2 August. Lima: Apelec Perú / International Reading Association / Universidad Marcelino Champagnat.

- BEVORT, É.; BRÉDA, I. (2001). "Les jeunes et Internet. Représentations, usages et appropriations" [online]. [Accessed: 15 April 2008].
  - <a href="http://www.clemi.org/fr/ressources/publications/outils-d-analyse-et-de-reflexion/bdd/">http://www.clemi.org/fr/ressources/publications/outils-d-analyse-et-de-reflexion/bdd/</a> page/2>
- BJØRNSTAD, T. L.; ELLINGSEN, T. (2004). "Onliners. A report about youth and internet" [online report]. [Accessed: 25 August 2006].
  - <a href="http://www.saftonline.org/vedlegg/1789/SAFTOnliners.pdf">http://www.saftonline.org/vedlegg/1789/SAFTOnliners.pdf</a>
- BOSCHMA, J. (2008). *Generación Einstein. Más listos, más sociables y más rápidos*. Barcelona: Ediciones Gestión 2000.
- BUCKINGHAM. D. (2000). *After the death of childhood. Growing up in the age of electronic media.* London: Polity Press.
- CABRERA PAZ, J. (2001). "Náufragos y navegantes en territorios hipermediales: experiencias psicosociales y prácticas culturales en la apropiación de Internet en jóvenes escolares"/"Navigators and castaways in cyberspace: psychosocial experience and cultural practices in schoolchildren's appropriation of the Internet". In: M. BONILLA, G. CLICHE. *Internet y sociedad en América Latina y el Caribe*. Quito: FLASCO. Pages 39-129.
- CARRILLO CORREA, G. (2007). "Realidad y simulación de la lectura universitaria: el caso de la UAEM". Educere. No 36, pages 97-102.
- CARVAJAL BARRIOS, G. (2008). *Lecturas y escrituras juveniles. Entre el placer, el conformismo y la desobediencia*. Cali: Editorial Universidad del Valle.
- CASSANY, D. (2006). Tras la línea. Sobre la lectura contemporánea. Barcelona: Anagrama.
- CHARTIER, R. (1995). Forms and Meanings. Text, performances, and audiences from codex to computer. Philadelphia: University of Pennsylvania Press.
- CISNEROS, M. (2005). *Lectura y escritura en la universidad: una investigación diagnóstica*. Pereira: Universidad Tecnológica de Pereira.
- DARNTON, R. (2010). Las razones del libro. Futuro, presente y pasado. Madrid: Trama Editorial.
- GUBERN, R. (2010). *Metamorfosis de la lectura*. Barcelona: Anagrama.
- HERRINGS, S. (2001). "Computer-mediated discourse". In: D. SCHIFFRIN, D. TANNEN & H. HAMILTON (eds). *Handbook of discourse analysis*. Oxford: Blackwell. Pages 612-634.
- HORNA, P.; CURIOSO, W.; GUILLÉN, C. [et al.] (2002). "Conocimientos, habilidades y características del acceso a Internet en estudiantes de medicina de una Universidad Peruana" [online article]. *Anales*. [Accessed: 10 December 2008].
  - <a href="http://sisbib.unmsm.edu.pe/BVrevistas/anales/v63\_n1/pdf/conocimientos\_internet.pdf">http://sisbib.unmsm.edu.pe/BVrevistas/anales/v63\_n1/pdf/conocimientos\_internet.pdf</a>
- ITO, M. (ed.). (2008). "Living and Learning with New Media: Summary of findings from the Digital Youth Project" [online]. [Accessed: 13 December 2008].
  - <a href="http://digitalyouth.ischool.berkeley.edu/files/report/digitalyouth-WhitePaper.pdf">http://digitalyouth.ischool.berkeley.edu/files/report/digitalyouth-WhitePaper.pdf</a>
- LEVIS, D. (2009). *La pantalla ubicua (Televisores, computadoras y otras pantallas)*. Buenos Aires: La Crujía Ediciones. 2<sup>nd</sup> ed.
- LIVINGSTONE, S.; BOVILL, M. (1999). "Young people new media" [online]. [Accessed: 11 December 2008]. <a href="http://www.lse.ac.uk/collections/media@lse/pdf/young/foreword.pdf">http://www.lse.ac.uk/collections/media@lse/pdf/young/foreword.pdf</a>

- MEAD, M. (1970). *Cultura y compromiso. Estudio sobre la ruptura generacional.* Buenos Aires: Granica editor.
- MEDINA, E.; OTERO, J. V. (2002). "Uso de Internet por los jóvenes de la Universidad Autónoma de Madrid" [online article]. *Madrimasd*. [Accessed: 18 December 2008].
  - <a href="http://www.madrimasd.org/revista/revista11/investigacion/investigacion1.asp">http://www.madrimasd.org/revista/revista11/investigacion/investigacion1.asp</a>
- MONTGOMERY, C. (2006). *Generation digital. Politics, commerce, and childhood.* Cambridge, Massachusetts: MIT Press.
- MORDUCHOWICS, R. (2008). Generación multimedia. Significados, consumos y prácticas culturales de los jóvenes / The Multimedia Generation. Young People's Cultural Meanings, Consumptions and Practices. Buenos Aires: Paidós.
- PALFREY, J.; GASSER, U. (2008). Born digital: Understanding the first generation of digital natives. New York: Basic Books.
- PIETTE, J.; PONS, C. M.; GIROUX, L.; MILLERAND, F. (2001). "Les jeunes et Internet. Représentation, utilisation et appropriation" [online]. [Accessed: 30 March 2008].
  - <a href="http://www.mcccf.gouv.qc.ca/publications/info/jeunes\_internet\_2001.pdf">http://www.mcccf.gouv.qc.ca/publications/info/jeunes\_internet\_2001.pdf</a>
- PRENSKY, M. (2001). "Digital natives, digital immigrants" [online]. *On the Horizon*. Vol. 9, No 5. [Accessed: 15 July 2008].
  - <a href="http://www.marcprensky.com/writing/Prensky%20%20Digital%20Natives,%20Natives,%20Digital%20Natives,%20Digital%20Natives,%20Digital%20Natives,%20Digi
- QUIROZ, M.T. (2004). *Jóvenes e Internet. Entre el pensar y el sentir*. Lima: Fondo Editorial de la Universidad de Lima.
- QUIROZ. M. T. (2008). *La edad de la pantalla. Tecnologías interactivas y jóvenes peruanos*. Lima: Fondo Editorial de la Universidad de Lima.
- ROMERO MEDINA, A.; SÁNCHEZ ORTUÑO, M.; RUIZ, M. R. (2000). "Patrones de uso de Internet en estudiantes universitarios" [online]. [Accessed: 10 December 2008].
  - <a href="http://www.um.es/docencia/agustinr/pca/internet4.PDF">http://www.um.es/docencia/agustinr/pca/internet4.PDF</a>
- SIMONE, R. (1998). "El cuerpo del texto". In: G. NUMBERG. El futuro del libro. ¿Esto matará aquello? Barcelona: Paidós. Pages 247-256.
- SIMONE, R. (2001). La tercera fase. Formas de saber que estamos perdiendo. Madrid: Taurus.
- TURKLE, S. (1997). *La vida en la pantalla. La construcción de la identidad en la era de Internet.* Barcelona: Paidós.
- UBERHUAGA CANDIA P.; ARRIAGA JIMÉNEZ, O.; GARCIA MIRANDA, M. (2005). Entre lo colectivo y lo individual. El puente de transición de las identidades de los jóvenes en el uso de internet. La Paz: Ediciones PIEB.
- UBERHUAGA CANDIA P.; ARRIAGA JIMÉNEZ, O.; GARCIA MIRANDA, M. (2006). *Jóvenes.com. Internet en los barrios populares de Cochabamba*. La Paz: Ediciones PIEB.
- VANDERDORPE, C. (2003). *Del papiro al hipertexto. Ensayo sobre las mutaciones del texto y la lectura.*Buenos Aires: F.C.E.

University Students' Digital Reading and Writing Migration

#### About the Author

Luis Alfonso Argüello Guzmán luis.arguello@campusucc.edu.co Universidad Cooperativa de Colombia

Graduate in Linguistics and Literature, specialist in Education. Lecturer-Researcher at the Cooperative University of Colombia Research Centre (CIUCC) and Lecturer in Systems Engineering. Full-time lecturer on the Systems Engineering programme (Project Formulation Area). Researcher and Advisor to the CIUCC, Neiva campus. Advisor on curricular topics to the Academic Board of the same campus. Researcher in the ComdeHuila research group affiliated to the CIUCC and co-researcher in the GRIAUCC group affiliated to the Systems Engineering programme. He manages the "Being a University Lecturer" line of research, from which the following articles have been published:

#### RESEARCH ARTICLES IN PEER-REVIEWED JOURNALS

- ARGÜELLO, L. A. (2009b). "El oficio de profesor universitario en la era de los medios electrónicos" / "The Profession of University Lecturer in the Age of Electronic Media" [online article]. Revista de Universidad y Sociedad del Conocimiento (RUSC). Vol. 6, No 2. UOC. [Accessed: 6 August 2009]. <a href="http://www.uoc.edu/ojs/index.php/rusc/article/view/v6n2-arguello/v6n2\_argue
- ARGÜELLO, L. A. (2009a). "Cortar y pegar. La producción textual de trabajos escolares universitarios" [online article]. Revista Question. No 21. [Accessed: 30 March 2009].
  - <a href="http://www.perio.unlp.edu.ar/question/files/arguelloguzman\_1\_informes\_verano2009.htm">http://www.perio.unlp.edu.ar/question/files/arguelloguzman\_1\_informes\_verano2009.htm</a>
- ARGÜELLO, L. A. (2008c). "Aproximación a un ecosistema comunicacional y computacional" [online article]. *Revista Question*. No 17. [Accessed: 17 March 2008]. <a href="http://www.perio.unlp.edu.ar/question/nivel2/informe\_de\_investigacion.htm">http://www.perio.unlp.edu.ar/question/nivel2/informe\_de\_investigacion.htm</a>
  - <a href="http://www.perio.unlp.edu.ar/question/nivel2/informe\_de\_investigacion.htm">http://www.perio.unlp.edu.ar/question/nivel2/informe\_de\_investigacion.htm</a>
- ARGÜELLO, L. A. (2008b). "Comunidades textuales" [online article]. *Revista Question*. No 19. [Accessed: 30 August 2008].
  - <a href="http://www.perio.unlp.edu.ar/question/nivel2/informe\_de\_investigacion.htm">http://www.perio.unlp.edu.ar/question/nivel2/informe\_de\_investigacion.htm</a> ISSN 1669-6581
- ARGÜELLO, L. A. (2008a). "Trayectos informales de formación académica en educación superior / Informal lines of academic training in higher education" [online article]. Revista de Universidad y Sociedad del Conocimiento (RUSC). Vol. 5, No 2. UOC. [Accessed: 20 November 2008]. <a href="http://www.uoc.edu/rusc/5/2/dt/esp/arguello.pdf">http://www.uoc.edu/rusc/5/2/dt/esp/arguello.pdf</a>

#### PEER-REVIEWED PAPERS AT ACADEMIC MEETINGS

- ARGÜELLO, L. A. (2010). "El concepto de producción intelectual en la práctica académica del profesor universitario" [paper]. In: XXVI Congreso Nacional de Lingüística, Literatura y Semiótica. 22-24 September. Bucaramanga: Escuela de Idiomas / Universidad Industrial de Santander.
- ARGÜELLO, L. A. (2009b). "Convergencia de alfabetos: la formación de profesores en Educación Superior". [panel lecture]. X Congreso Latinoamericano de Lectura y Escritura. 29 July, 1 and 2 August. Lima: Apelec / International Reading Association / Universidad Marcelino Champagnat.

University Students' Digital Reading and Writing Migration

ARGÜELLO, L. A. (2008). "Hacia una pedagogía de la proyección social en Educación Superior". In: 1er Coloquio Internacional de Didácticas. 2, 3 and 4 April. Ibagué: Universidad del Tolima.

Universidad Cooperativa de Colombia Sede Neiva Calle 11 No. 1 G - 31 B Colombia



The texts published in this journal are – unless indicated otherwise – covered by the Creative Commons Spain Attribution 3.0 licence. You may copy, distribute, transmit and adapt the work, provided you attribute it (authorship, journal name, publisher) in the manner specified by the author(s) or licensor(s). The full text of the licence can be consulted here: http://creativecommons.org/licenses/by/3.o/es/deed.en.

