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Autonomy and the internet in distance learning: Reading between the e-lines.

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Abstract

While distance learners often have to show a remarkable degree of autonomy, it is argued that this is often taken for granted by teachers, and learners either sink or swim on their own. Similarly, distance learners are often assumed to have minimum ICT skills, but even if this is the case, it does not necessarily guarantee them real autonomy in an educational context. We go on to discuss the particular case of using ICTs for reading in a foreign language.

Résumé

Les apprenants qui suivent des cours à distance doivent souvent faire preuve d'une grande autonomie, mais les processus d'autonomisation sont souvent négligés par les enseignants et c'est aux apprenants souvent à se débrouiller. De plus, on attribue souvent aux apprenants des compétences de base en TIC. Or ces dernières, quand elles existent, ne garantissent pas une réelle autonomie dans un contexte éducatif. Dans cette perspective, l'article examine l'emploi des TIC pour la lecture d'une langue étrangère et les aides à l'apprentissage qu'une telle activité nécessite.

Posted on HAL (Hyper Article en Ligne: http://hal.archives-ouvertes.fr/) by Alex Boulton.











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Introduction

No language is innocent, and conference themes and titles are no exception. The name TAAAL (TIC y Autonomia Aplicadas al Aprendizaje de Lenguas, or ICTs and Autonomy Applied to Language Learning) seems to have two important implications if we read between the lines. The first is that ICTs and autonomy are each "a good thing" insofar as they have potential to promote language learning. The second is that there is some kind of connection between them, in particular that the use of ICTs will increase autonomy or, conversely, that a degree of autonomy is necessary to use ICTs effectively.

In this paper we take a brief look in turn at issues of autonomy and ICTs in language learning in a distance education (DE) context. Two common assumptions are called into doubt: first, that such learners have considerable autonomy; secondly, that ICTs have rendered traditional methods redundant in DE. To illustrate these points, a final section discusses reading on screen in an L2.

It bears pointing out right from the start however that there is no one universal DE situation, and consequently issues of autonomy and ICT use vary considerably. For example, if autonomy is about the learner deciding what, how and when to learn, "then it would seem that highly directed learning programmes [such as at the Open University in Britain] cannot promote autonomy, as the elements of choice and decision-making on the part of the student would seem to be almost non-existent" (S. Hurd et al, 2001: 348). The situation at the Open University is indeed highly directed: regular compulsory assignments and seminars dictate the rhythm, and courses are intended to be complete and self-contained.

For this reason, we chose a DE situation with greater freedom and thus greater potential for autonomy. At the Centre de Télé-enseignement Universitaire (CTU) of the Université Nancy 2 in north-eastern France, homework assignments and seminars are voluntary, and students are expected to show initiative in going beyond the courses provided. This year there are 596 students enrolled for the standard degree courses in English (first year to master's), which they can receive either by post or on line. To gather more detailed information on certain points, a questionnaire was sent out to all those who had provided a private e-mail address on the assumption that these would be the more receptive to ICTs. In total, 404 students had an apparently working e-mail address; of these, 101 completed the questionnaire, ie just under a quarter. They are therefore not typical of our students, much less of DE students in general; furthermore, such questionnaire results are not open to rigorous statistical analysis. For both these reasons, the data are taken as being suggestive rather than conclusive.

1. Autonomy and attrition

In a relatively "free" DE situation such as at the CTU, students might be assumed to be fairly autonomous, though it is not easy to see how to assess this. If the proof of the pudding is in the eating, then one simple measure would to compare success in DE and traditional contact courses. Official university figures show that exactly 50% of students enrolled to complete an English degree on campus passed the year, compared to only 30% of DE students at the CTU. Of course, pass rates alone do not tell the whole story. One of the biggest indicators of failure is students simply giving up. Not much has changed on this front since Cookson's (1989: 23) review of distance education 25 years ago, which found that "the most often studied distance education outcome has been referred to variously as wastage, persistence, or attrition". Overall, 70% of CTU students did not even attend at least one exam they were enrolled for in the second session in September.

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¹ As the CTU's mission is to reach as wide an audience as possible, access to internet is not a precondition for enrolment.

There are of course all sorts of explanations for high failure and attrition rates. For example, it may be that distance learning tends to attract a poorer "quality" of student (J. Rivera et al, 2002); certainly their profiles are different from those on campus, many coming to us after an unsuccessful experience with traditional programmes elsewhere. Maybe it is the teachers that are to blame: perhaps the distance courses are simply worse or ill adapted to the situation, or the marking is harsher (J. Perriault, 1996: 245). According to a DE survey in America by the National Education Association in 2000, DE teachers tend to think the quality of their teaching is lower than in contact courses, even if 72% of them remain positive about it overall. Rather than attributing blame however, it seems more profitable to assume that the situation itself contains inherent difficulties. Not the least of these is isolation: many studies of traditional courses (eg S. May & M. Bousted, 2003) have found greater drop-out rates among students who do not have networks of friends and peer support among other students, for example as the result of not living in halls of residence; the implication for DE is clear.

Given the relatively low success rate, we have to wonder why students enrol for DE courses, especially in a performance-oriented culture such as prevails in France where exam results are perceived as all-important (D. Brown, 2004). For most it is a question of logistical necessity rather than learning style preference (C. White, 1995; V. Harris, 2003): this is perhaps even the raison d'être of DE, to bring education to those who otherwise would not have the opportunity. Among our respondents, many live too far from the university (41%; some even abroad) or claim professional (73%) or family (27%) commitments. On the other hand, only 16% choose DE because they prefer this type of learning; isolation for most may therefore be perceived as something to overcome rather than to cherish.

Potential solutions to these problems seem to fall into three main categories. Firstly, we could reduce the perceived isolation of our students. This may not be an impossible task: Roblyer and Ekhaml (2000) find that DE can actually be more interactive than traditional courses in some cases. Unfortunately, not many students take advantage of the opportunities provided for student-teacher contact at the CTU: 20% of our respondents had not been in touch with teachers at all, a further 40% only once or twice.² The philosophy is that such contact should be entirely voluntary—and not just because of large class size (our average undergraduate course currently has 140 enrolled). Rather it is because many students do not have easy access to the internet, others cannot attend regular meetings; for neither reason would we wish to exclude them. Really all that is possible is for the teacher to take on a more positive, supportive role than is generally the case in traditional education in France, in some ways more akin to the counsellor relationship in one-to-one advising and self-directed learning situations. This may help the significant number of students unwilling to lose face or afraid of asking "silly questions" (A. Boulton & P. Booth, 2001).

A second solution would be to embrace the isolation, transforming it into a workable situation by fostering student independence from the teachers—the beginnings of autonomy. White (1995) considers learner autonomy the absolute key to DE success, but part of the problem may be that DE assumes learner autonomy as given rather than as something to be worked at. As Benson points out in his Teaching and Researching Autonomy (2001: 6-7), "there is no necessary relationship between self-instruction and the development of autonomy and [...], under certain conditions, self-instruction modes of learning may even inhibit autonomy." (This is reminiscent of the situation at the Open University mentioned earlier.) The question then is how to proceed, though there is as yet relatively little research on this in a DE context (V. Harris, 2003; S. Hurd et al, 2001). All teachers at the CTU provide help of various kinds in their courses (eg cognitive strategies), but their impression is that the

² Furthermore, such figures are likely to be above average, as they reflect only students with access to the internet (e-mail being the medium of choice) and sufficiently motivated to complete the questionnaire.

students tend not to read it, or, if they do, they do not manage to apply it successfully (A. Boulton & P. Booth, 2001). Additionally, there is a specific methodological course in each year of study at the CTU (including more on metacognitive strategies), but again, the feeling is that students concentrate only on the end product, dismissing the process, paradoxically, as a waste of time (C. White, 1995).

2. Using ICTs in a distance education context

ICTs clearly have enormous potential in improving the situation in DE, both in improving contact and in enhancing learner autonomy. E-mail is indeed the most popular means of contact with teachers, and yet we still have the figure of 60% of students who had a maximum of 2 personal contacts in the first 7 months of the year. This may indicate that many students are less keen on ICTs than we often suppose, even if they do not reject them altogether. As enthusiasm is difficult to measure directly, we asked students first to rate themselves as users: only 13% consider themselves proficient. This is of course highly subjective, but a more concrete (if still indirect) indicator lies in the fact that 52% choose to receive their courses on paper rather than on line; of those who do receive courses on line, 80% print them out. In total then, 90% of our "ICT-receptive" sample choose to work on their courses on paper. We should therefore remember that ICTs are not an end in themselves but only a means to an end (D. Brown, 2002); they are "neutral" with regard to learning (R. Duda, 2005), or at least "not as important as other factors such as learner motivation, an understanding of the distance language learning context and of the demands it places on participants" (C. White, 2003: 8). So however tempting it may be for us to use ICTs, they have to remain a peripheral tool in our particular circumstances: a real-time chat that gathers 6 people from a group of 150 cannot form an integral part of a course. This is in fact one of the major lessons of our experience at the CTU: initially aiming to exploit ICTs to the full, we found that students simply did not see the point spending time mastering complex tools when a pencil and paper will do—quite understandably.

Students are expected to go beyond their basic courses on their own, another possible advantage of ICTs. The internet has obvious potential in learning or practising the language, yet only 4% of respondents cite this as a major use. While the majority of them may prefer the pages to be in English (66%, while 24% have no preference), the language itself is a secondary and not the primary goal. For our students, it seems clear that one of the most useful features of the internet in a DE degree is as a vast data-bank of information which can be searched rapidly and efficiently in all kinds of ways. 61% claim this as a major advantage of the internet; on the other hand, 35% (often the same ones) also claim it as a major disadvantage, while a further 27% say they waste time in digression. Good search skills are therefore essential, and must include the ability to assess the quality of apparently useful pages, as many are out-of-date, incomplete, inaccurate, biased, or in other ways unsuitable for serious work. Unfortunately, 12% of our respondents claim they have simply no idea how to distinguish the good from the bad, and many of the others have at best what we might call a "naïve" approach. Again, the feeling among many teachers is that students do not know how to make the most of the internet as a resource, yet at the same time are not prepared to invest time and effort in refining their skills, and ignore the advice provided in their courses.

3. Reading with old and new technologies

Use of ICTs is an enormous field, and we shall therefore concentrate in this final section on a single concrete use, namely, as a means of accessing information. We have already seen that this is the commonest function among students at the CTU, although they prefer to read hard copy. Surprisingly, very little work has been done to compare reading on screen and on paper in a foreign language—as late as 2003, Anderson reported that "no research has

targeted the identification of online reading strategies of L2 learners" (p4; emphasis added). The bulk of the research literature is based on children rather than adults, paper rather than screen, first rather than foreign language, language learning rather than content, and artificial rather than "authentic" texts and tasks (see eg Brantmeier, 2002, for a review). Equally surprising is that reading should also be relatively neglected in many "communicative" courses, as it remains the most efficient means of accessing information and is thus not a skill that is likely to go away. Indeed, given the heavy use of internet as a vast source of written material, it would seem that reading is now more important than ever.

One of the most obvious findings to come out of ICT research in general is that people do not like reading substantial quantities of text on screen, often preferring to print out large documents (eg P. Mercieca, 2004). This also applies to our students, as we have seen: less than 20% say they are as happy to read on screen. And yet there are a number of obvious advantages to reading on screen: printing at home is expensive and time-consuming, and printers can break down or run out of ink; with a computer document, searching for specific information can be done at the touch of the CTRL+F buttons; navigation is easy with such functions as the scrollbar and the master document format; text can be typed in quickly, moved around and edited easily, and checked automatically for spelling; text statistics are readily available; amendments can be "unamended" and documents compared; multimedia, moving graphics, fully interactive tasks and hypertext links are possible; documents can be sent out by e-mail or used by many people at once, and so on.

In the light of this, it seems reasonable to wonder why students still prefer hard copy. A first closed question was aimed at those who choose to receive their courses on paper; a second open-ended one at those who print out their courses on line (see table below). Interestingly, the majority of respondents seem very aware of their reasons, or at least are able to justify their choice retrospectively. It thus seems to be more than a simple knee-jerk reaction to old technologies: a mere 7% of our respondents prefer the "feel" of paper, just as they might prefer fountain pens to biros, or analogue to digital watches, or chic restaurants to fast food.

REASONS FOR PREFERRING COURSES ON PAPER	REASONS FOR PRINTING ON-LINE COURSES
44% remember more	54% find paper more convenient / portable
35% read faster	29% complain about eyestrain, headaches or fatigue from working on screen
28% understand the main ideas better	27% prefer to edit the courses on paper
27% understand the details better	17% learn more easily from paper
21% locate information more quickly	12% do not trust the computer

Table 1: Top 5 reasons for preferring print to screen.

The precise figures are perhaps less important than a general overview, but we can group them into 4 main categories: problems linked with the nature of the computer, the nature of the screen, the nature of the image, and the nature of reading itself.

First of all, and quite practically, computers as machines are not always convenient: it takes time to warm them up, go on line, and find the documents required. PCs are bulky and fixed, and even laptops have their limitations for reading on a plane, while waiting for a bus, in the bath, or with only five minutes while the children are asleep. Furthermore, documents often change formatting on screen, while paper is a reassuringly fixed medium (C. Haas, 1996). Printed text will still be there tomorrow—it cannot be lost when a computer crashes, when a web site goes off line (for temporary maintenance, or is permanently deleted), becomes a paying service, or is updated to exclude the key information, and so on. There is

only so much that can go wrong with a printed page, while the user may not feel in total control of computer reading.

The physical nature of the screen imposes other limitations. Firstly, only part of a single page can usually be seen at once, while a book can be laid open, or multiple sheets of paper spread out on a large work surface (K. O'Hara & A. Sellen, 1997). It can also be more difficult to gain a global view of a long document on screen and to situate information visually in context (C. Thomas, 2003). While it is possible to have several windows open at the same time, it can be irritating to flick between them and difficult to work in two at once; with paper, however, it is easy to hold a book open at more than one page at a time, and it can be placed alongside other documents, including note paper (C. Haas, 1996). Indeed, 75% of students who expressed a preference do take their notes on paper, only 25% on computer whatever happened to the paperless office? It is also in many ways easier to annotate text on paper, switching at will between underlining with different thicknesses of stroke, straight or wavy, continuous or dashed, single or multiple; crossing out and amending; drawing arrows, circles, boxes and shading; adding asterisks and exclamation marks; writing comments in the margin or above the text; referring to earlier or later page numbers, etc. Moreover, such manual additions are clearly visible as such as the most cursory glance at any used student textbook will reveal, while computer amendments may fade into a single layer of text without mastery of complex functions.

The nature of the image on screen seems to be behind allegations of eyestrain, headaches, tiredness, and even—according to some—permanently weakened eyesight (J. Nielsen, 1997). Limited screen resolution makes details harder to see, and is one reason why many people prefer proof-reading on paper (C. Haas, 1996; K. O'Hara & A. Sellen, 1997). Perhaps more importantly, there is a significant reduction in reading speed on screen—around 30% slower according to many sources (eg N. Al-Othman, 2003; S. Kurniawan & P. Zaphiris, 2001). This is likely to be exacerbated in the L2 even for a proficient reader (N. Anderson, 2003), perhaps reducing the speed below a tolerance threshold.

Another unsurprising finding in L1 research is that documents tend to be read differently: screen texts are far less likely to be read in a straightforward linear fashion—left to right, top to bottom, front to back (M. Bullard, 2003). Horning (2002) argues that this is because print is only incidentally visual, while screen presentation is intentionally so, making far greater use of visual cues such as headings, bullet points and numbering for smaller chunks, not to mention relatively short lines, interactive links and a deliberately non-linear format, larger sans-serif font sizes, colour, visuals and sufficient blank space, etc. Where such features are absent, reading on screen is particularly difficult. Unfortunately, this includes many of the more "serious" documents appropriate for our students' studies, which are not designed with the web in mind, but are merely a copy of writing that originally appeared in print.³ Notoriously cumbersome to read on screen are long pdf (portable document format) files (J. Nielsen, 2003).

Given the sheer quantity of information available, the reader is reluctant to spend too long on one document, and feels unproductive sticking with a single text. Furthermore, screen reading sessions tend to be of limited duration, so the reader tries to cover as much ground as possible, leaving many documents half-finished with little intention of returning to them—comparatively rare with printed books. As a result, screen reading tends to involve skimming rather than depth: we read books but browse the web (A. Bodomo et al, 2003). Again, the problems may be greater in the L2: skim reading does not transfer easily and tends to be one of the more difficult skills to master in a foreign language. This is no doubt partly because

³ In any case, we know that using documents for other than their original purposes can be problematic: we tend to fight shy of using, say, a newspaper article for listening comprehension in class.

learners are generally taught in a "bottom-up" manner, focusing first on letters and words, then phrases and sentences, only gradually building up to paragraphs, longer texts and groups of documents (J. Reinhardt & K. Isbell, 2002). Additionally, Anderson (2003) finds L2 readers losing concentration more easily on screen than on paper, resulting in considerable rereading.

Differences in the two reading processes should perhaps not be overstated (D. Leu, 2002): most obviously, Horning (2002) reminds us that readers are still using human brains, vision, language, memory, world knowledge etc to read. Less trivially, reading even on paper is not a passive experience, can be non-linear and interactive, skim reading is possible, etc (J. Coiro, 2003). Some studies (eg C. Thomas, 2003) find no difference in retention rates for print and screen reading presentation, and Schmar-Dobler (2003) finds similar if not identical strategies in both situations. The differences are thus not absolute, but they do exist.

In the light of all this, it seems clear that most solutions fall near one of two poles. On the one hand, we can accept that the vast majority of students will want to print out courses and make sure the documents are appropriate for this, for example with a print-friendly version such as Adobe Acrobat or Microsoft Word. Alternatively, we can try to encourage our students to read on screen by making our documents more appropriate, with better use of visual clues. An intermediate solution may be to have some documents (perhaps the core content) in print-friendly format, with others (particularly more interactive tasks) suitable for use on screen. What is *not* a solution is to confuse the two: we need to resist the temptation to have the best of both worlds by trying to create a single course for both screen and print with minimal adaptations: print and ICT versions need radically different structuring and presentation to exploit their own medium and reading styles.

Whatever we choose for our own courses, students using the web will still need to read other documents on line, which implies a certain autonomy. While they may be comfortable with the internet in their own language, it is not obvious that such skills transfer easily to the L2 (D. Leu, 2002). Strategy training in finding, assessing and reading L2 documents on screen ought to be beneficial: as Anderson (2003) reports, skilled readers are more cognitively and metacognitively aware. Reinhardt and Isbell (2002: 1) go further: "As educators, we are not being fair to our students if we expect them to read, comprehend, and extract information from the web without first providing explicit instruction in the unique skills needed for these tasks." Such training ought to be doubly useful in on-line reading, as it can be applied beyond the scope of our courses, and even of language learning. As we have seen, the problem lies in encouraging students to read and apply such techniques of their own accord.

Conclusion

While DE university students are undoubtedly a special case of language learner, some conclusions here may be of wider import: they are, after all, mature L2 learners using ICTs in what may be considered—at least partially—an autonomous situation. However, such autonomy should not be assumed to exist at the start and we should not leave students to sink or swim—this is not the same thing as preparing them to swim alone. ICTs have an enormous potential in this field, and are no doubt under-exploited in distance education as a whole. However, we should be careful not to see them as a solution to every problem: we should use them when they bring something to the learning process, but avoid the temptation to use them indiscriminately merely to "sex up" our courses. This means teachers need the autonomy to decide when *not* to use ICTs, based on learners' needs rather than our own desires to experiment, or indeed peer and administrative pressures.

Learner training should provide substantial benefits for encouraging autonomy and for using ICTs in general, but more research is needed in particular on how to encourage students

to see that time so spent is worth while. Of course, such research is logistically difficult with DE learners as they are by definition not readily available on site, and it is therefore difficult to know how to use such technology effectively in their case. At the CTU, the specific conditions make many uses difficult from the start: our aim to provide education for as wide an audience as possible means that we cannot for example insist on access to internet, so all essential elements of the courses must be available in print too. Large class sizes further rule out certain activities as impractical, while lack of student participation makes others less worthwhile.

As regards reading on screen, students could also benefit from strategies for coping with the vast amounts of "authentic language" (J. Reinhardt & K. Isbell, 2002: 1). At the same time, we need to recognise that many students—indeed, virtually all at the CTU—prefer a print-out of longer texts for a number of quite justifiable reasons. While we may lament this as ecologically unsound, or a waste of time and effort, or at best a missed opportunity, the appeal of a hard copy is obvious: in this, the printer is little more than a modern equivalent of that staple student resource, the photocopier. Where longer texts are needed, we should ensure they are print-friendly and suited for study on paper. Dressing them up in a pseudo-interactive style is only a poor imitation of what paper can do anyway—a case of new technologies hiding old methodologies.

To be sure, ICTs can make a substantial contribution to learner autonomy in distance education, as they allow enormous scope for individual variation. But the whole point of autonomy is to provide greater freedom of choice, not to straitjacket the learning process. One corollary of this is that teachers cede some power of decision-making to the learners. If, given sufficient training, they make an informed decision not to take advantage of ICTs, such as by preferring hard copy to screen text, then we should respect this as a valid choice: forcing autonomy upon learners is clearly an oxymoron.

References

Al-Othman, N.M.A. 2003. The relationship between online reading rates and performance on proficiency tests. *The Reading Matrix*, 3/3. (http://www.readingmatrix.com/articles/othman/article.pdf), page consulted

May 2004.

- Anderson, N.J. 2003. Scrolling, clicking, and reading English: Online reading strategies in a second/foreign language. *The Reading Matrix*, 3/3.
 - (http://www.readingmatrix.com/articles/anderson/article.pdf), page consulted May 2004.
- Benson, P. 2001. *Teaching and Researching Autonomy in Language Learning*. London: Longman.
- Bodomo, A., Lam, M-L. & Lee, C. 2003. Some students still read books in the 21st century: A study of user preferences for print and electronic libraries. *The Reading Matrix*, 3/3. (http://www.readingmatrix.com/articles/bodomo_lam_lee/article.pdf), page consulted May 2004.
- Boulton, A. & Booth, P. 2001. Communication in the void and communication avoided: A case study of on-line language teaching. *Asp*, 31/33, p. 89-102.
- Brantmeier, C. 2002. Second language reading strategy research at the secondary and university levels: Variations, disparities, and generalizability. *The Reading Matrix*, 2/3. (http://www.readingmatrix.com/articles/brantmeier/article.pdf), page consulted May 2004.
- Brown, D. 2002. Of men and mice: Computer-based learning, choice and intrinsic motivation. *Actes du 4^e Colloque UNTELE*.
- Brown, D. 2004. L'exception française: L'orientation envers la performance dans l'apprentissage des langues étrangères. 26^e Congrès APLIUT. Aix-en-Provence. Bullard, M. 2003. Even with the internet providing numerous on-line resources and

- information, there is still a need to read. *MACUL Journal*, 24/2. (http://www.macul.org/newsletter/2003/winter2003/bullard.html), consulted May 2004.
- Coiro, J. 2003. Reading comprehension on the internet: Expanding our understanding of reading comprehension to encompass new literacies. *The Reading Teacher*, 56/5, p. 458-464.
- Cookson, P.S. 1989. Research on learners and learning in distance education: A review. *The American Journal of Distance Education*, 3/2, p. 22-34.
- Duda, R. 2005. Assumptions and hidden agendas in ICT materials: How does autonomization come in? In this volume.
- Haas, C. 1996. Writing Technology: Studies on the Materiality of Literacy. Mahwah, NJ: Lawrence Erlbaum Associates.
- Harris, V. 2003. Adapting classroom-based strategy instruction to a distance learning context. *TESL-EJ*, 7/2, A1. (http://www-writing.berkeley.edu/TESL-EJ/ej26/a1.html), page consulted May 2004.
- Horning, A.S. 2002. Reading the world wide web: Critical literacy for the new century. *The Reading Matrix*, 2/2. (http://www.readingmatrix.com/articles/horning/), page consulted May 2004.
- Hurd, S., Beaven, T. & Ortega, A. 2001. Developing autonomy in a distance learning context: Issues and dilemmas for course writers. *System*, 29/3, p. 341-355.
- Kurniawan, S.H. & Zaphiris, P. 2001. Reading online or on paper: Which is faster? Proceedings of the 9th International Conference on Human Computer Interaction. New Orleans, LA.
- Leu, D.J. 2002. The new literacies: Research on reading instruction with the internet and other digital technologies. In Farstrup, A.E. & Samuels, S.J. (eds). *What Research has to Say about Reading Instruction* (3rd ed). Newark, DE: International Reading Association, p. 310–336.
- May, S. & Bousted, M. 2003. *University Retention Report*. Kingston, UK: Kingston University (unpublished report).
- Mercieca, P. 2004. E-book acceptance: What will make users read on screen? *12th VALA Biennial Conference*. Melbourne, Australia.
 - (http://www.vala.org.au/vala2004/2004pdfs/32Merci.PDF), page consulted May 2004.
- National Education Association, 2000. A Survey of Traditional and Distance Learning Higher Education Members. Washington DC: National Education Association. (http://www.nea.org/he/abouthe/dlstudy.pdf), page consulted May 2004.
- Nielsen, J. 1997. How readers read on the web. *Alertbox*, 1 October. (http://www.useit.com/alertbox/9710a.html), page consulted May 2004.
- Nielsen, J. 2003. PDF: Unfit for human consumption. *Alertbox*, 14 July. (http://www.useit.com/alertbox/20030714.html), page consulted May 2004.
- O'Hara, K. & Sellen, A. 1997. A comparison of reading paper and on-line documents. *Proceedings of CHI 97 Conference on Human Factors in Computing Systems*. Atlanta, GA. (http://www.appliancestudio.com/publications/external/reading_CHI.pdf), page consulted May 2004.
- Perriault, J. 1996. La Communication du Savoir à Distance. Paris: L'Harmattan.
- Reinhardt, J. & Isbell, K. 2002. Building web literacy skill. *The Reading Matrix*, 2/2. (http://www.readingmatrix.com/articles/isbell_reinhardt/), page consulted May 2004.
- Rivera, J.C., McAlister, M.K. & Rice, M.L. 2002. A comparison of student outcomes and satisfaction between traditional and web based course offerings. *Online Journal of Distance Learning Administration*, 5/3.
 - (http://www.westga.edu/%7Edistance/ojdla/fall53/rivera53.html), page consulted May 2004.

- Roblyer, M.D. & Ekhaml, L. 2000. How interactive are YOUR distance courses? A rubric for assessing interaction in distance learning. *DLA Proceedings*, Callaway, GA. (http://www.westga.edu/~distance/roblyer32.html), page consulted May 2004.
- Schmar-Dobler, E. 2003. Reading on the internet: The link between literacy and technology. *Reading Online / Journal of Adolescent and Adult Literacy*, 47/1.
 - (http://www.readingonline.org/newliteracies/lit_index.asp?HREF=/newliteracies/jaal/9-03_column/), page consulted May 2004.
- Thomas, C. 2003. Reading and navigation of documents: Digital versus paper. (http://www.cs.umd.edu/class/spring2003/cmsc838g-
 - <u>0101/StudentPapers/ReadingStudy.pdf</u>), page consulted May 2004.
- White, C. 1995. Autonomy and strategy use in distance foreign language learning: Research findings. *System*, 23/2, p. 207-222.
- White, C. 2003. *Language Learning in Distance Education*. Cambridge: Cambridge University Press.