Electronic communication (or e-communication) places new demands on language that leads to interesting variations in written language use (Biesenbach-Lucas & Wiesenforth, 2001). The language of e-mail, chats, Web-based discussions and SMS messages is marked by features of both informal speech and formal writing, a host of
text-based icons and acronyms for managing social interaction, and changes in spelling norms (Abdullah, 1998). In addition, the electronic medium (e-medium) provides a new context for the writing process. These phenomena have prompted research on whether students’ frequent engagement with electronic writing (e-writing) has implications for writing and writing instruction. This digest summarizes some insights gained from research on writing behavior and performance in the electronic age.

WRITING BEHAVIOR

Word processing and e-publishing have brought about interesting developments in the way writers write. In general, the malleable nature of electronic text has made the physical process of composing more 'elastic' in that writers are quicker to commit thought to writing and to reorganize content because it is simple to make changes on the electronic screen (Leibowitz, 1999). Even young children find it easy to insert and manipulate images and video or audio clips in their texts (Karchmer, 2001). In addition, writers who publish on the Web perceive it as a new rhetorical space that provides options for using non-linear, alternative structures, making it necessary for them to anticipate how audiences might physically navigate through their hypertext compositions. This consciousness creates complex perspectives and a "heightened awareness of traditional rhetorical elements" in a way that text alone never could (Mason, 2002).

There is also a tendency toward playfulness in e-communication. Danet (2001), in studying visual and multimedia aspects of digital communication in email and Internet Relay Chats (IRCs), found playful digital greetings, "jazz-like, improvisational writing," and a prevalent passion for visually extravagant digital fonts or what she calls "font frenzy." Trupe (2002) also observed the playful construction of "multiple writer identities" through linguistic techniques such as word choice and syntax. These aspects of e-communication are part of an emergent cultural diversity in written communication. Consequently, Danet points out, there is a tension between the informality of email communication and traditional norms governing the form of official letters that writers have to deal with.

Despite changing trends in e-communication, Abras (2002) found that writers in online discourse still adhere to the "principle of relevance" present in oral discourse, which presumes that when speakers say something, they will help listeners reach maximal understanding with minimal processing effort. To achieve this aim in oral discourse, speakers use visual cues provided by paralanguage, kinesics and synchrony to complement verbal language. Although these cues are unavailable to writers in online contexts, they still attempt to communicate them through text-based emoticons, punctuation and other politeness markers; and their use of these politeness markers increases once they realize that it helps to avoid misunderstandings.

WRITING PERFORMANCE
Hailed as a powerful educational resource, the e-medium has not only revolutionized the composing process but has also been found to encourage participation in writing activity. One reason for this is that e-mail and online chats provide a non-threatening atmosphere in which writers feel less inhibited about expressing themselves, encouraging even timid students who usually refuse to speak in face-to-face discussions to actively participate in online chats (Kupelian, 2001). Another reason is that the Web provides an arena for writers to present their work to a real and larger audience that extends beyond classroom and school boundaries (Karchmer, 2001). When students realize that they are going to put their work on the Web for readers in the real world, they are motivated to write (Leibowitz, 1999).

The online domain has also substantially increased opportunities for collaboration in writing. Karchmer (2001) observes that teachers are using the Internet to create complex partnerships among their students and post the results online. Online collaborative tools allow students to exchange critiques synchronously or asynchronously (Leibowitz, 1999; Kupelian, 2001). Students learn to reference each other's texts, thus developing "threading and synthesizing skills" as well as a heightened awareness of audience (Trupe, 2002). This sense of audience motivates them to write carefully and to be more accountable for their writing (Leibowitz, 1999). Collaborative writing activity has prompted researchers such as Honeycutt (2001) to compare the use of synchronous chats and asynchronous e-mail in providing peer response for aiding revision. While there was no difference in terms of the usefulness of comments, it was found that students made significantly greater use of e-mail for detailed reference to the contents and rhetoric, while they used chats for brainstorming and exploring the topic.

While the e-medium has been found to increase collaborative writing activity there are mixed views on whether it has had a similar effect on the quantity and quality of writing done by individual students. Because the e-medium reduces the intimidation factor (Leibowitz, 1999) and offers attractive features, it improves students' attitudes towards writing and practicing the target language (Kupelian, 2001) and encourages students to produce more text (Trupe, 2002; Goldberg, et al., 2003). In one study, Gonzalez and Perez (2001) found that second-language learners using e-mail for their dialogue journals generated more language than those who used pencil and paper. However, a second study, which addressed some of the limitations of the first, indicated that the e-mail group did not significantly out-perform the pen-and-pencil group in length of text, grammatical accuracy or vocabulary. Thus, there is no conclusive evidence that the use of e-mail has any advantages in terms of student performance. In addition, while some studies show that the amount of discourse increases when writing is done via e-mail, the length of "academic" writing does not seem to be affected (Kupelian, 2001).

Although some researchers claim that students proofread more given the ease with which revision can be carried out on-screen, Leibowitz (1999) found that many others rely only on software to check spelling and grammar. Students are also often unwilling to revisit words that have scrolled off their screen. Moreover, rewriting is a slow process and is in conflict with the computer culture that encourages speed. As a result, students
are more accustomed to writing in the conversational style of e-mail discussions, but not in formal prose. Even if essays are longer and immaculately word-processed, they may be poorly structured and articulated. There is an "additive style" in the writing, similar to the structure of a small child's speech: "And this happened. And then that. And so then this." While this style is acceptable in online communication, it translates into poor structure in a formal essay.

In another study, Biesenbach and Wiesenforth (2001) examined the texts of writers responding to writing prompts using different media: e-mail and word processing. While there were no obvious differences between e-mail and word-processed writing in the use of cohesive features, they differed in text length, with e-mail responses being significantly shorter than word-processed essays. In word-processed essays, writers make an effort to provide some kind of background information on the topic before responding to the essay prompt, while e-mail writers tend to begin right away by responding the prompt, doing away with contextualized information. This research reveals yet another example of how writing is being shaped by the e-medium.

CONCLUSION

Both the process and content of writing are evolving in response to the increased use of the e-medium for writing instruction and to the language of e-communication itself. Along with changes in what and how students write, peer collaboration may result in a "realignment of authority in the classroom" (Trupe, 2002), as students and teachers place increasingly greater importance on student-based opinions and decisions. Whether one views these changes as positive or negative depends on how closely one believes writing should adhere to the conventions of formal writing we have hitherto accepted, and how much one supports the goal of establishing the student's authority as a writer. Some writing instructors philosophize that since e-writing tools and e-language will continue to change, they must teach what will not change: the connection between thinking and writing and the ability to articulate what one knows (Leibowitz, 1999). This standpoint will certainly encourage teachers to continue seeking more effective ways of using the e-tools in writing instruction.

REFERENCES


Biesenbach-Lucas, S. & Wiesenforth, D. (2001). E-mail and word processing in the ESL classroom: How the medium affects the message. "Language Learning and
Technology", 5 (1), 135-165. [EJ 621 506]


-----

Digest #188 is EDO-CS-03-09, published December 2003 by the ERIC Clearinghouse on Reading, English and Communication, 2805 E 10th St. #140, Bloomington, IN 47408-2698, Tel. (800) 759-4723. Full text at: http://eric.indiana.edu. ERIC Digests are in the public domain and may be freely reproduced.

This project is funded at least in part with Federal funds from the US Dept. of Education (contract #ED-99-CO-0028). The content of this publication does not necessarily reflect the views or policies of the US Dept. of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the US Government.