Chapter 2
Building Awareness of Language Structures with Visual–Syntactic Text Formatting

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ABSTRACT
The recently adopted Common Core State Standards emphasize the importance of language forms and structure in learning to write. Yet most language arts teachers have either downplayed the linguistic structure of writing in favor of process approaches or emphasized the teaching of grammatical structures outside of the context of authentic writing. Technology-supported writing activities tend to mimic these two approaches, with teachers using technology for either process-based writing or for grammar drills. Most teachers are not well prepared to teach linguistic structures in context or to deploy technology for that purpose. This chapter introduces a new tool called Visual-Syntactic Text Formatting (VSTF) that has powerful affordances for teaching linguistic and textual structures in the context of authentic written genres. Drawing on an empirical study and an action research project conducted by the authors, they share evidence for the value of using VSTF and point to ways that it can be used in the classroom to help students master language structures and employ them in their composition.

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On a recent nationwide writing assessment in the United States, only 25 percent of eighth and twelfth grade students performed at or above the proficient level (National Center for Education Statistics (NCES), 2012d). This statistic is disappointing compared to the percentage of students at or above proficient level on other subjects, such as reading, mathematics, or science, which ranges from 32 to 35 percent (NCES, 2012a, 2012b, 2012c). Potential causes for this phenomenon may lie in inadequate instructional time devoted to writing or low quality instruction. Even though more time is given to writing instruction now than decades ago, typical secondary students are asked to produce less than four pages a week for the main four subjects—English, science, social studies, and mathematics—combined (Applebee & Langer, 2011). Besides, most of writing instruction consists of writing without composing, such as filling in the blank or short answer exercises. A challenge to solving this problem in writing instruction is the complexity of the language structures required to be successful.

High quality writing instruction addresses the issues of writing structure, supporting the development of genre awareness, linguistic norms, and stylistic flexibility in order to help students effectively write for diverse purposes and audiences (Rijlaarsdam et al., 2012). Building structural awareness in writing instruction is consistent with the goals of the recently developed Common Core State Standards (CCSS). The CCSS not only aims to increase the emphasis on writing in schools, but also propose a shift from a heavy focus on narrative texts to a greater focus on informational texts (Common Core State Standards Initiative, 2010). According to the CCSS, students across all grade levels are expected to write for a variety of audiences and purposes, such as explaining a perspective or arguing a point of view. These changes in the curriculum standards have prompted a renewed emphasis on forms and structures of writing (Roberts, 2012) under the belief that attention to particular linguistic structures of academic genres is required for students to succeed in higher education and their careers.

However, current instructional practice does not seem to effectively address writing structures. The models frequently employed in classroom developed and modified by Flower and Hayes (1977, 1980, 2006) shifted the focus of teachers and researchers toward the processes by which good writers plan their tasks, translate their ideas, and review their texts. According to them, writing is a recursive process that incorporates mental operations throughout these processes. The planning phase includes goal-setting and idea generation. Writers translate their ideas into sentence generation in the translating phase. This phase is followed by the reviewing phase where writers monitor, evaluate, and revise texts. Writing instruction enlightened by Flower and Hayes’ models has facilitated students’ learning how to write. Similarly, technological advancements continue to enrich the writing process, as tools, such as word processing, discussion forums, wikis, Google docs, and blogs, are frequently used in classroom to provide students with more opportunities to engage in the iterative process of writing. While these writing models provide framework for understanding expert writers’ processes and while technological scaffolding may facilitate these processes, these models and tools do not effectively provide students with guidance on how to craft the language or structure their text. This lack may explain in part why process writing is criticized (Scarcella, 2003) and why technology use does not necessarily enhance the quality of writing (Daiute, 1986; Grejda & Hannafin, 1992).

This chapter aims to explore potential conditions under which using technology in writing instruction may facilitate students’ development of such structural expertise in terms of linguistic