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DISSERTATION ABSTRACT

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**Web-based Instruction and Students with Learning Disabilities:
Examination of Strategies and Limitations**

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This qualitative study examines Web-based Instruction (WBI) and students with learning disabilities (LD). It investigates the strategies and limitations students with LD face in a WBI environment and the accommodations instructors who teach WBI make for students with learning disabilities in their courses. It also looks at the contribution of WBI course designers and their impact on Web course design. This research was grounded in constructivist theory in order to understand how students with learning disabilities created their own meaning in this learning environment. To explore these multi-dimensional phenomena, this study employed in-depth interviews which allowed the participants to tell their own stories and describe how they negotiated meaning in a Web-based learning context to acquire knowledge. The participants included 18 college students, four instructors, and two course designers who were engaged in courses that had a significant portion of instruction delivered via the Web. Students reported three types of learning disabilities, namely dyslexia, dysgraphia, and dyscalculia. The findings suggest that learning via the Web helps increase students' motivation, self-esteem, and sense of autonomy. Students are able to accomplish more complex tasks and develop greater learning skills. On the other hand, students report frustration in WBI stemming from three sources, namely technological problems, lack of timely feedback from instructors and among students, and ambiguous messages on the Web site as well as through e-mail. Learning strategies that lead to positive academic participation include clear instructor directions, proofreading help from family and friends, and asynchronous rather than synchronous online discussions. The results have implications for instructors and course designers to take individual differences into account.

There is the need to create a more inclusive Web-based environment as technology advances and more and more students with LD join Web-based classes. The study concludes with recommendations for improving Web-based instruction for students with LD.