Chapter 4.1

# Case Study – "Can You See Me?"
## Writing toward Clarity in a Software Development Life Cycle

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## ABSTRACT

*This chapter presents a case study detailing how geographically dispersed software developers employ writing in the process of creating and troubleshooting products for use in the healthcare industry. It focuses particularly on their efforts to arrive at language that unambiguously reflects functional requirements and optimal design principles. After a brief history of the company and the evolution of its national and international virtual collaboration practices, the authors turn to the role of text across particular task cycles, exploring the uses of writing in generating, designing, and refining plans and products. Focusing on a series of three composing sequences, the authors highlight the incremental process by which the team moves toward a shared sense of understanding and linguistic precision. They argue that in contrast to common conceptions of texts as simple containers for preformed ideas, these episodes provide a more nuanced picture, as writing comes to play a central role in constituting and fine-tuning meaning and in maintaining strong working relationships throughout the processes of developing and refining products. They close with implications for preparing diverse virtual teams for participation in tasks that demand exacting uses of the written word.*

## INTRODUCTION

Back in the dawn of the digital era, an IBM® training film featured a classic Muppets sketch in which a wild-eyed, fang-toothed creature named

Wheel-Stealer encounters a talking computer blandly reciting its own technical manual. The hungry Muppet proceeds to eat the machine, blowing up just as the computer can be heard explaining that its purpose is to create a huge explosion (Henson, 1971/2006). Then as now,

it seems, when it comes to presenting technical information, clarity and timing matter quite a lot.

An array of technical writing handbooks has flooded the market in the years since, each imploring readers to adopt a concise, easy-to-follow, and precise prose style (for example, Alred, Brusaw, & Oliu, 2003; O'Keefe & Pringle, 2000; Van Laan, Julian, & Hackos, 2001; Young, 2002). Given the ubiquity of such admonitions, one might hope that Wheel-Stealer would enjoy a happier outcome today. Then again, perhaps the enduring market for such resources testifies to the tenacity of the problem—for despite these efforts at fostering clarity, most of us know all too well the experience of intending to communicate one thing and being understood as meaning quite another. In contemporary geographically dispersed, high-technology workplaces, efforts to develop unambiguous prose—whether to inform in-house collaboration, to share information and ideas, or to provide guidance to clients—are fraught with uncertainty and complexity. As workers collaborate across divides that are linguistic and cultural as well as spatial and national, casting shared understandings in transparently precise prose remains an often elusive goal. It is one thing for self-help writers to call for writing that defies misinterpretation, but producing such prose can be quite another. As cross-national virtual collaborative writing becomes commonplace, workers must be closely attentive to the potential for miscommunications that, if left undetected, can result in confusion, time delays, and even project, product, or enterprise failure. Such miscommunication can be alleviated in part by considering ways to address the first and third principles that ground this book, which are to develop a culture of collaboration and to establish trust among team members. This chapter further illuminates these principles through an exploration of how these principles were realized in the working dynamics of a particular collaborative team..

The question of whether written texts can stand as unambiguous representations of meaning—representations, that is, that mean the same across places and times—has been hotly debated for many years among scholars of literacy. In the latter twentieth century, several now-classic works argued that the advent of alphabetic literacy and explicit prose styles made possible new ways of thinking and reflecting. These were said to include not only the capacity to look back critically at one's own earlier words and deeds, but also to contemplate and critique history *writ large* (Goody & Watt, 1963; Havelock, 1980; Olson, 1977). In the decades since, many literacy researchers have taken issue with the notion that written texts can ever be so unambiguously explicit as to ensure stable meaning across readers and contexts (Olson, Bloome, Dyson, Gee, Nystrand, Purcell-Gates, & Wells, 2006). As writing scholars have turned to the importance of culture in shaping how texts are constructed, understood, and used, the field has come to recognize that no text—let alone drafts produced in the press of a workday—can ever be entirely safe from unintended interpretations and responses.

While the challenge of clearly communicating shared understandings has vexed writers through history, twenty-first century virtual workplaces are adding a formidable new set of wrinkles. Much remains to be learned concerning how geographically dispersed and culturally diverse collaborators use their interactions around written documents to recognize differences in their understandings, and how they go about formulating common language as they reach shared understandings. If achieving clarity in technical communication is a matter of moving incrementally toward less ambiguous language, then we need to know more about what this process entails, how collaborating writers think their way through it, and what is involved in helping new team members move into full participation.

Toward this end, this chapter presents several examples of virtual collaborative writing among members of an international software development team. We begin with a brief account of the

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