26. Tacit Knowledge

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Definition and Background

Tacit knowledge might best be defined as knowledge that lives in action or in doing, defying the objective measures of empirical study (Moore & Elliott, 2016). Know-how (tacit) knowledge is created, maintained, and transferred differently than know-what (explicit) knowledge, challenging designers, communicators, and managers alike to capture and understand the role of tacit knowledge in design processes and organizational development (cf. Durá et al., 2019; Spinuzzi, 2002, 2005). Because tacit knowledge is often unspoken—if not unspeakable—designers involve users in nontraditional forms of explanation like demonstration, use, and performance. Explaining how to ride a bike is easier if you perform or demonstrate your know-how than if you rely on words alone.

Researchers in design thinking take particular interest in tacit knowledge, which often is embedded in the daily use of products and the development of design. This embeddedness presents researchers with few strategies for locating tacit knowledge. When asked how they prefer to use a product—say a backup camera—a user may articulate their desires in one way: "I want to be able to see all 360 degrees so that I don't have to use my rearview mirror." However, their tacit knowledge about how to parallel park may defy that explicit knowledge: When using the backup camera, the full 360-degree view proves distracting (and expensive), as the user moves between the rearview mirrors and the backup camera to effectively park or pull out. The driver may know that it's more practical to simply use the camera, but when they put their knowledge to work, they engage differently with the various technologies. For designers, then, exposing tacit knowledge requires putting the user in contexts of use, asking them to engage directly with the technologies so as to reveal their tacit knowledge and bring it to the surface.

Design Application

Tacit knowledge becomes important in multiple contexts: education, design, communication, and organizations, all of which seek the development of knowledge and attempt to assess or measure it. An industrial organization may want to understand why new members working on the floor aren't able to keep up as quickly with the production lines as others, only to find there is some unspoken, tacit knowledge about how to rotate through the line that veteran workers have

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adopted through trial and error or through watching others. Paying attention to tacit knowledge may prompt managers to integrate alternative training that focuses on *know-how* rather than *know-that*, and in doing so, begin to onboard new employees more effectively and efficiently. Technical communicators developing instructional onboarding documentation or training materials might also find themselves engaging with tacit knowledge as they design or redesign materials.

Pedagogical Integration

Tacit knowledge exists in the nooks and crannies of daily work, defying the sometimes-obsessive value of metrics and big data. Understanding the role of tacit knowledge often requires focused qualitative data collection, either in ***participatory design*** observation sessions or ethnographic research studies. In educational spaces, active and experiential learning seek to engage students with the development of know-how, but few studies of how effectively tacit knowledge is imparted in the classroom exist. More is known about how tacit knowledge emerges in organizations, though certainly more research can challenge our often-limited view of knowledge.

Within technical and scientific communication pedagogy, tacit knowledge has been observed in terms of the rhetorical notion of phronesis. This Aristotelian idea of practical rationality in professional practice can emerge from a combination of theory (episteme), craft knowledge (techne), and situational experience. A productive way to simulate this combination of virtues in the pedagogical setting is by assigning students problem-based learning projects where they apply their developing expertise (craft and theory) and contextual wisdom (tacit knowledge) in order to address the case in point. Since tacit knowledge is strengthened by social interaction, individual intuition, and relationships, students should be encouraged to pay attention not just to the cognitive application in their problem-solving but also the affective dimension. To study how tacit knowledge affects students' learning, instructors may conduct qualitative research through student interviews or ethnography as a means to inform future course design.

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