Keeping Up: Shifting Access to Gateway Resources in a Cycling Community of Practice

Joel Drake and Victor R. Lee, Utah State University, Logan, Utah, jrichdrake@gmail.com, victor.lee@usu.edu

Abstract: While learning involves changes in one's participation within a community of practice, changes in participants can also change access to resources key to newcomer participation. This poster presents a case study of a recreational cycling community illustrating how community changes diminished newcomers' access to resources for drafting.

Introduction

A core tenet of sociocultural research in the learning sciences is that learning involves shifts in participation in the practices of a community (Lave & Wenger, 1991; Rogoff, 1991). In this view, newcomers begin as legitimate peripheral participants relative to an existing community. By navigating the community's pathways to acceptance, the newcomers become full participants in the community. Regardless of the nature of these paths, membership in the community, and thereby learning, requires access to the social and material resources of the community (Nasir & Cooks, 2009). Without access to these resources, newcomers remain marginal to the community or may cease participating altogether. We argue that, in some communities, access to certain "gateway" resources is essential to maintaining newcomers' access to the breadth of a community's resources.

As newcomers become full participants, their participation may help shape important aspects of the community. This can include shifting newcomers' access to gateway resources, a change that may facilitate or inhibit newcomers' participation. This poster discusses a case of a community of recreational cyclists. Cycling has recently been identified as a potentially rich area of interest for research in the learning sciences because it involves specialized knowledge and complex physical and social interactions that must be mastered (Lee, 2013; Hirsh & Levy, 2013; Taylor & Hall, 2013). In this study, we sought to understand how changes in a cycling community affected novices' access to a gateway resource.

The Focal Community of Recreational Cyclists

Recreational group cycling involves individuals who are interested in learning how to ride long distances in groups. Beyond strength and endurance, group cycling requires riders to deal with various riding conditions (e.g., steep inclines, uneven terrain, changes in wind) while maintaining contact with the group. A gateway resource for group cycling is drafting, which involves riders following another rider closely enough to reduce aerodynamic drag. By drafting, new cyclists can ride with experienced cyclists, opening their horizons of observation (Hutchins, 1996) and allowing them to see the breadth of the experienced cyclists' practice.

This study involved an adult recreational cycling group from a mid-size city in the Intermountain Region of the United States. This group was established in 2006 by a bike shop with the goal of introducing beginners to the practices of group riding. This cycling group was one of many in its local vicinity but was widely known and recommended by cyclists throughout the region as one that was well suited for novice cyclists. Like many of the other local cycling groups, it met 1-2 times per week from Spring through Fall (the typical cycling season) for group rides ranging from 20 to 100 miles in distance.

Data Sources and Analysis

The first author, a cyclist with seven years of experience riding in recreational groups, joined the focal group for a period of participant observation ranging from March through October 2013. He had no prior experience riding with the focal group and was positioned as a knowledgeable newcomer participating both as a rider and as an observer researching group dynamics and changes over time. During the period of observation, the cycling group had a core of 10 consistent riders and 40 other riders who participated less frequently. The group had roughly equal numbers of men and women, though the balance among participants varied from week to week.

The first author participated in and observed a primary group ride each week (i.e., a ride taking place regularly on a weeknight) and also participated in some secondary rides (i.e., taking place on a weekend on an ad hoc basis). Following each ride, he recorded written ethnographic field notes consistent with the recommendations of Emerson, Fretz, and Shaw (2011). He also obtained records from email lists and social networking sites associated with the cycling group. The collection of records and notes were coded by the first author following recommendations for qualitative data analysis from Saldaña (2012), then reviewed and discussed by both authors before the codes were refined, reapplied, and then reviewed for themes and patterns.

A second data source was a set of videorecorded interviews with 11 adult cyclists from the region. These interviews were collected two years prior to the observations for other research purposes (Lee & Drake, 2013) but were useful for a secondary analysis as they contained self-reports about prior experiences with the focal cycling group. In particular, these interviews included two novice female cyclists who were very articulate

about their prior experiences and were consistent attendees during the observed focal group rides. These two cyclists were treated as special cases for analysis given their continued participation in the focal cycling group.

Findings

Based on interviews and from recorded conversations with cyclists during rides, the focal group was indeed initially a very welcoming group for novices. Specifically, experienced cyclists made a point to explicitly discuss drafting technique with newcomers. For example, when Stacy joined the group as a novice cyclist, she was resistant to learning drafting. She was not pushed to learn during her first ride, but on the second ride, the ride leader insisted that she could and needed to learn how to draft so she could keep up with the group. By the time of this study, Stacy had become a capable group cyclist and a leader in the group. Opportunities for learning how to draft were typically provided in the form of one-on-one, in-ride modeling of body and bike positioning for drafting.

However, the departure of some oldtimers coupled with the sustained participation of a different class of newcomers led to changes in practices of the group. These newcomers brought more aggressive riding goals and more athletic skill than did typical newcomers to this cycling group. The new class of newcomers regularly rode with the local race-oriented groups and were taking advantage of an additional group ride to add to their training regimen. With their riding skill and consistency, they quickly gained respect in the group. However, as group practices shifted to align with the goals of these newcomers, novices found it more difficult to join.

Although this group had always included riders of many skill levels, the strong and experienced riders had previously made conscious efforts to support the participation of novices through in-the-moment, explicit drafting instruction, like in the example described earlier, so that slower riders could at least "keep up." However, as the rides sped up, supporting novices became less important even to the remaining oldtimers. For example, four months into the six-month riding season, a young, novice rider was struggling to stay with the group during a ride. An oldtimer observed that the newcomer struggled to keep up because he drafted poorly. Another rider commented to him, "Well, it's your job to teach him." To this, the oldtimer responded, "That's not my job at all," explicitly stating that the role of oldtimers as supporters of novices had indeed changed.

Discussion

The purpose of this poster is to describe, through a case study, how changes in a community's goals and practices can inhibit newcomers' access to resources necessary for their peripheral participation. For the cyclists in this study, this resource was community-supported competence in drafting. Drafting allowed novices to interact with and observe the practices of individual oldtimers and the community as a whole. When maintaining novices' access to drafting knowledge was no longer a priority, many novices were left without a means of joining the community and discontinued participation. Identifying such "gateway resources" and how they are maintained despite natural changes to a community of practice can help in understanding how a community may be more supportive of novice participants and support movement along pathways for learning.

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