Maria's Learning in teams literature

Barab, S. A., K. E. Hay, et al. (2001). "Constructing virtual worlds: Tracing the historical development of learner practices." <u>Cognition and Instruction</u> **19**(1): 47-94.
> This study explores learning and instruction within a technology-rich, collaborative, participatory learning environment by tracking the emergence of shared understanding and products through student and teacher practices. The focus is not only on the interactions among students or between students and teachers, but on student-resource interactions, especially student-technology interactions. In a I-week camp, students worked in activity groups with 3-dimensional modeling software to develop virtual worlds. Holistic accounts of 2 activity groups in the camp are presented, emphasizing the focus of the activity, group dynamics including the role of the teacher, and the historical development of learner practices. Then, a network methodology is used to trace the history of interactions accounting for the emergence, evolution, and diffusion of learner practices. The findings suggest that becoming knowledgeably skillful with respect to a particular practice or concept is a multigenerational process, evolving in terms of contextual de mands and available resources. The tracings further reveal the reciprocal nature of learning and doing, with building conceptual understanding occurring in relation to local conditions and practices, and doing practices being a part of student learning. We are so accustomed to the separation of knowledge from doing and making that we fail to recognize how it controls our conceptions of mind, of consciousness and of reflective inquiry.

Barr, S. H. and E. J. Conlon (1994). "Effects of Distribution of Feedback in Work Groups." <u>Academy of Management Journal</u> **37**(3): 641-655.
> Using a framework based on equity theory, we examined the joint effects of group feedback, individual feedback, and the distribution of feedback in a group on individuals' intentions to persist at a newly introduced behavior in a laboratory study. We proposed and found that the distribution of feedback was critical. Results were inconsistent with widely posited simple reinforcement or learning effects. Equity comparisons' mediation of group and individual performance feedback is reviewed, differences between responses to feedback received in isolation and in work groups are examined, and implications for the study of feedback in work groups are discussed.

Bartunek, J. M., K. Walsh, et al. (2000). "Dynamics and dilemmas of women leading women." <u>Organization Science</u> **11**(6): 589-610.
> While empowerment is an issue of our time, it has been particularly important in the feminist movement. This paper reports a longitudinal study of leadership successions in six- year evolution of a group designed to empower women. It particularly focuses on the polar tension between initiation and support on the part of the group leader. Over time this tension becomes a difficult challenge. In the end we learn that the very objective of an empowerment group tends to call forth ambivalence about leadership. Empowerment itself seems to require a simultaneous enactment of both sides of the polarity. When leaders attempt to reduce the tensions around the polarity, they may experience the unintended consequence of reducing the capacity of the group to act. This paper not only furthers our understanding of the dynamics of empowerment in feminist efforts but it calls our attention to the paradoxical issues of leadership and empowerment in all groups.

Baum, J. A. C. and P. Ingram (1998). "Survival-enhancing learning in the Manhattan hotel industry, 1898-1980." <u>Management Science</u> **44**(7): 996-1016.
> In this study, we examine how experience at the level of the organization, the population, andthe related group affects the failure of Manhattan hotels. We find organizational experience has a U-

shaped effect on failure; that organizations enjoy reduced failure as a function of population experience before their founding, but not after; and that related organizations provide experience that lowers failure, but it matters whether their experience is local or non-local, and if it was acquired before or after the relationship was established. These results indicate both the difficulty of applying different types of experience to reduce the risk of organizational failure, and the relevance of experience for the evolution of organizational populations.

Betsch, T., S. Haberstroh, et al. (2001). "The effects of routine strength on adaptation and information search in recurrent decision making." Organizational Behavior and Human Decision Processes **84**(1): 23-53.

> The strength of decision routines was manipulated within a computer-controlled micro world simulation involving recurrent decision making. During a learning phase, participants were led to prefer a certain brand of an industrial good either about 15 times in a weak routine or about 30 times in a strong routine condition. In the test phase of Experiment 1, participants were confronted with changes in the microworld that rendered the routine obsolete. Routine maintenance over a series of repeated acquisition decisions was assessed as the major dependent variable. Although new information clearly suggested that a deviation from the routine would be beneficial, strong routine participants were more likely to maintain the routine compared to weak routine participants and a control group in which a comparable option (same outcome probabilities as the routine) carried an unfamiliar brand label. Experiment 2 investigated the effects of routine strength on information search. After having learned the routine, participants were asked to make one final decision involving the routine. The task was either framed as being similar to the learning task or as being novel. Before making the final decision, participants were asked to consider new information about the alternatives. Strong routine participants in the familiar task condition preferred information that favored the routine and avoided unfavorable information. If the task was framed as being novel, such confirmation biases disappeared completely. In contrast, weak routine participants exhibited a moderate confirmation bias in their searches independent from task framing, (C) 2000 Academic Press.

Bettenhausen, K. L. (1991). "Five Years of Groups Research: What We Have Learned and What Needs to be Addressed." Journal Of Management **17**(2): 345.

Carayannis, E. G. (1998). "The strategic management of technological learning in project/program management: the role of extranets, intranets and intelligent agents in knowledge generation, diffusion, and leveraging." Technovation **18**(11): 697-703.

> This is primarily a conceptual paper on the value-adding potential of higher order technological learning processes in virtual, intelligent, networked enterprises (VINEs). The role of learning in effectively leveraging information technology in Web-enabled enterprises is examined, especially in the case of intelligent agents, intranets, and extranets that constitute organic components of intra - and inter-organizational knowledge management networks. The strategic role of technological learning in successful project and program management is examined and presented. Moreover, the role of information technology as an enabling agent for the processes of individual, group, intra- and inter-organizational higher order technological learning is outlined. Finally, the competitive advantage in the quality, timeliness, and accuracy of information and knowledge created and disseminated by virtue of extranets, intranets, and intelligent agents is studied and lessons learned from current theory and practice identified. (C) 1998 Elsevier Science Ltd All rights reserved.

Carley, K. (1992). "Organizational learning and personnel turnover." Organization Science **3**(1): 20-46.

> The impact of personnel turnover on an organization's ability to learn, and hence on its ultimate performance, is explored for organizations with different structures and different tasks. A model of organizational decision making is presented where: (1) the organization is faced with a continuous sequence of similar but not identical problems; (2) each problem is so complex that no one person has access to all of the information nor the skill to comprehend all of the information necessary to make the decision; (3) individual decision makers base their decisions on their own previous

experience; and (4) there is personnel turnover. Using simulation the impact of turnover on the rate and level of learning for hierarchies and teams is examined. This research suggests that while teams in general learn faster and better than hierarchies, hierarchies are less affected by high turnover rates particularly when the task is nondecomposable. Institutionalized memory, as embodied in the memories of distributed individuals and in the advisory relationships between individuals, determines the consequences of personnel turnover.

Cohen, S. G. and D. E. Bailey (1997). "What makes teams work: Group effectiveness research from the shop floor to the executive suite." Journal of Management **23**(3): 239-290.
> In this article, we summarize and review the research on teams and groups in organization settings published from January 1990 to April 1996. The article focuses on studies in which the dependent variables are concerned with various dimensions of effectiveness. A heuristic framework illustrating recent trends in the literature depicts team effectiveness as a function of task, group, and organization design factors, environmental factors, internal processes, external processes, and group psychosocial traits. The review discusses four types of teams: work, parallel, project, and management. We review research findings for each type of team organized by the categories in our heuristic framework. The article concludes by comparing the variables studied for the differerent types of teams, highlighting the progress that has been made, suggesting what still needs to be done, summarizing key learning from the last six years, and suggesting areas for further research.

Cramton, C. D. (2001). "The mutual knowledge problem and its consequences for dispersed collaboration." Organization Science **12**(3): 346-371.
> This paper proposes that maintaining "mutual knowledge" is a central problem of geographically dispersed collaboration and traces the consequences of failure to do so. It presents a model of these processes which is grounded in study of thirteen geographically dispersed teams. Five types of problems constituting failures of mutual knowledge are identified: failure to communicate and retain contextual information, unevenly distributed information, difficulty communicating and understanding the salience of information, differences in speed of access to information, and difficulty interpreting the meaning of silence. The frequency of occurrence and severity of each problem in the teams are analyzed. Attribution theory, the concept of cognitive load, and feedback dynamics are harnessed to explain how dispersed partners are likely to interpret failures of mutual knowledge and the consequences of these interpretations for the integrity of the effort. In particular, it is suggested that unrecognized differences in the situations, contexts, and constraints of dispersed collaborators constitute "hidden profiles" that can increase the likelihood of dispositional rather than situational attribution, with consequences for cohesion and learning. Moderators and accelerators of these dynamics are identified, and implications for both dispersed and collocated collaboration are discussed.

Darr, E. D. and T. R. Kurtzberg (2000). "An investigation of partner similarity dimensions on knowledge transfer." Organizational Behavior and Human Decision Processes **82**(1): 28-44.
> Learning from the experiences of others can provide significant benefits for an organization, but it can be difficult to know who has the most useful or applicable knowledge. Knowledge is acquired from many sources: from within the firm; from other firms; or from competitors, customers, suppliers, and channel partners. Managers must decide how to efficiently search through a universe of potential knowledge sources to select the knowledge that will be the most useful to them. This research examines the conditions under which partner similarity enhances knowledge transfer. Previous research has argued that partner similarity influences knowledge sharing through attraction. Building on past work, our research argues that attraction is only one mechanism by which partner similarity affects knowledge transfer and introduces the idea that partner similarity aids the search through a universe of potential knowledge sources. The dimensions of partner similarity that allow more efficient search will facilitate knowledge transfer, while those similarity dimensions that do not aid search will have a less important impact on transfer. Data from both quantitative and qualitative sources support these hypotheses.

Quantitative analyses show that strategic similarity emerges as a more important dimension than customer or location similarities as a significant predictor of knowledge transfer. Qualitative interview data show that businesses are conscious of the strategic similarities within their industry and choose transfer partners accordingly.

Druskat, V. U. and D. C. Kayes (2000). "Learning versus performance in short-term project teams." <u>Small Group Research</u> **31**(3): 328-353.

In this article, the authors propose and test hypotheses about the relationship between learning and performance and rite ream processes that are most predictive of learning and performance in short-term project reams. Results show a moderate but nonsignificant relationship between learning and performance. Results also reveal that team processes most predictive of ream learning include interpersonal understanding, proactivity in problem solving, and creating clear work procedures (a negative predictor). Team processes most predictive of ream performance include interpersonal understanding, proactivity in problem- solving. and confronting members who break norms (a negative predictor). Results suggest that the needs of short-term project reams differ from those of longer-term teams. They also suggest the potential for tension between learning and performance in short-term project teams. Implications for theory and practice are discussed.

Edmondson, A. (1999). "Psychological safety and learning behavior in work teams." <u>Administrative Science Quarterly</u> **44**(2): 350-383.

This paper presents a model of team learning and tests it in a multimethod field study. It introduces the construct of team psychological safety-a shared belief held by members of a team that the team is safe for interpersonal risk taking-and models the effects of team psychological safety and team efficacy together on learning and performance in organizational work teams. Results of a study of 51 work teams in a manufacturing company, measuring antecedent, process, and outcome variables, show that team psychological safety is associated with learning behavior, but team efficacy is not, when controlling for team psychological safety. As predicted, learning behavior mediates between team psychological safety and team performance. The results support an integrative perspective in which both team structures, such as context support and team leader coaching, and shared beliefs shape team outcomes.

Edmondson, A., R. Bohmer, et al. (2001). "Speeding up team learning." <u>Harvard Business Review</u> **79**(9): 125-+.

cardiac surgery is one of medicine's modem miracles. In an operating room no larger than many household kitchens, a patient is rendered functionally dead while a surgical team repairs or replaces damaged arteries or valves. Each operation requires incredible teamwork-a single error can have disastrous consequences. in other words, surgical teams are not all that different from the cross-functional teams that have become crucial to business success. The challenge of team management these days is not simply to execute existing processes efficiently. lt's to implement new processes-as quickly as possible. But adopting new technologies or new business processes is highly disruptive, regardless of industry The authors studied how surgical teams at 16 major medical centers implemented a difficult new procedure for performing cardiac surgery. The setting was ideal for rigorously focusing on how teams learn and why some learn faster than others. The authors found that the most successful teams had leaders who actively managed the groups' learning efforts. Teams that most successfully implemented the new technology shared three essential characteristics. They were designed for learning; their leaders framed the challenge so that team members were highly motivated to learn; and an environment of psychological safety fostered communication and innovation. The finding that teams learn more quickly if they are explicitly managed for learning poses a challenge in many areas of business. Team leaders in business tend to be chosen more for their technical expertise than for their management skills. Team leaders need to become adept at creating learning environments, and senior managers need to look beyond technical competence and identify leaders who can motivate and manage teams of disparate specialists.

Ely, R. J. and D. A. Thomas (2001). "Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes." Administrative Science Quarterly **46**(2): 229-273.

> This paper develops theory about the conditions under which cultural diversity enhances or detracts from work group functioning. From qualitative research in three culturally diverse organizations, we identified three different perspectives on workforce diversity: the integration-and learning perspective, the access-and-legitimacy perspective, and the discrimination-and-fairness perspective. The perspective on diversity a work group held influenced how people expressed and managed tensions related to diversity, whether those who had been traditionally. underrepresented in the organization felt respected and valued by their colleagues, and how people interpreted the meaning of their racial identity at work. These, in turn, had implications for how well the work group and its members functioned. All three perspectives on diversity had been successful in motivating managers to diversify their staffs, but only the integration-and-learning perspective provided the rationale and guidance needed to achieve sustained benefits from diversity. By identifying the conditions that intervene between the demographic composition of a work group and its functioning, our research helps to explain mixed results on the relationship between cultural diversity and work group outcomes.

Flache, A. (2002). "The rational weakness of strong ties: Failure of group solidarity in a highly cohesive group of rational agents." Journal of Mathematical Sociology **26**(3): 189-216.

> Recent research (Flache, 1996; Flache and Macy, 1996) suggests a "weakness of strong ties." Cohesive social networks may undermine group solidarity, rather than sustain it. In the original analysis, simulations showed that adaptive actors learn cooperation in bilateral exchanges faster than cooperation in more complex group exchanges, favoring ties at the expense of the common good. This article uses game theory to demonstrate that cognitive simplicity is not a scope condition for the result. The game theoretical analysis identifies a new condition for the failure of group solidarity in a cohesive group. Task uncertainty may make rational cooperation increasingly inefficient in common good production. Accordingly, rational actors may increasingly sacrifice benefits from common good production in order to maintain social ties, as their dependence on peer approval rises.

Gruenfeld, D. H., P. V. Martorana, et al. (2000). "What do groups learn from their worldliest members? Direct and indirect influence in dynamic teams." Organizational Behavior and Human Decision Processes **82**(1): 45-59.

> This study investigated the consequences of temporary membership changes for itinerant members (who leave their group of origin temporarily to visit a foreign work group) and indigenous members of those origin and foreign groups, We tested the hypothesis that itinerant members' unique knowledge and experience can be transferred from the group where it originated to another group engaged in the same activities. Results showed that all members produced more unique ideas after itinerant members returned to their group of origin than before they left or while they were away; however, the ideas of itinerant members were significantly less likely to be utilized by the group in an essay on group work. After their return, itinerant members were perceived as highly involved in group activity, but also more argumentative, and although they produced more unique ideas than indigenous members, their essay contributions were perceived as less valuable. As a result, itinerant group members had less direct influence after changing groups than they did prior to the membership change. (C) 2000 Academic Press.

Harmon, J. and J. Rohrbaugh (1990). "Social Judgment Analysis and Small-Group Decision-Making Cognitive Feedback Effects on Individual and Collective Performance." Organizational Behavior and Human Decision Processes **46**(1): 34-54.

> A study was conducted to determine what aspects of cognitive feedback to small groups account for their level of performance on cognitive conflict tasks. Initially, 275 undergraduates enrolled in management courses at the State University of New York at Albany participated in the study during regularly scheduled classes. Also, 32 separate sessions were conducted that were attended by over 50% of the original set of participants. The participants made judgments about the

outcomes of selected horse races based on 5 pieces of information. The findings suggested that significantly greater individual learning and group consensus occurred as a result of the full exchange of cognitive feedback. However, all conditions produced a marked reduction in disagreement among members. Overall task performance by all 3 sets of groups was at a level of achievement equivalent to the work of the 2nd most proficient group member. In groups using the social judgment analysis approach, cognitive feedback was provided to each individual member but also was mutually shared within the group.

Hoegl, M. and H. G. Gemuenden (2001). "Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence." <u>Organization Science</u> **12**(4): 435-449.

An extensive body of literature indicates the importance of teamwork to the success of innovative projects. This growing awareness, that "good teamwork" increases the success of innovative projects, raises new questions: What is teamwork. and how can it be measured? Why and how is teamwork related to the success of innovative projects? How strong is the relationship between teamwork and various measures of project success such as performance or team member satisfaction? This article develops a comprehensive concept of the collaboration in teams, called Teamwork Quality (TWQ). The six facets of the TWQ construct, i.e., communication, coordination, balance of member contributions, mutual support, effort, and cohesion, are specified. Hypotheses regarding the relationship between TWQ and project success are tested using data from 575 team members, team leaders, and managers of 145 German software teams. The results of the structural equation models estimated show that TWQ (as rated by team members) is significantly associated with team performance as rated by team members, team leaders, and team-external managers. However, the magnitude of the relationship between TWQ and team performance varies by the perspective of the performance rater, i.e., manager vs. team leader vs. team members. Furthermore, TWQ shows a strong association with team members' personal success (i.e., work satisfaction and learning).

Jones, C., W. S. Hesterly, et al. (1998). "Professional service constellations: How strategies and capabilities influence collaborative stability and change." <u>Organization Science</u> **9**(3): 396-410.

Constellations-alliances among multiple firms-are used to perform complex, customized work in professional service. We examine two tensions inherent in multi-party collaborative work: managing hybrid systems, which are composed of individual and group tasks and outcomes, and aligning partners' logics of action. These two tensions provide firms the strategic choice with emphasizing individual or collective advantage. When constellation members pursue an individualist strategy, they employ an entrepreneurial logic. Constellations are a vehicle for honing their firm-distinctive expertise and enhancing their own opportunities. Given these firms' need for exposure to new learning and new markets from different partners and clients, the stability of the constellation is not of primary importance. This strategy promotes membership shifts in constellations and requires governance mechanisms for coordinating interactions among relative strangers. When constellation members pursue a collectivist strategy, they focus on their mutual benefits and employ a relational logic. Given these firms' need for intensifying relations with partners and clients, constellation members restrict interactions to certain select partners and clients and intensify their interactions. This strategy promotes stability in constellation membership and allows governance mechanisms specific to partners to develop. Due to positive feedback, these strategies develop certain capabilities and create specific relational patterns, which reinforce prior choices.

Kogut, B. and U. Zander (1992). "Knowledge of the firm, combinative capabilities, and the replication of technology." <u>Organization Science</u> **3**(3): 383-397.

How should we understand why firms exist? A prevailing view has been that they serve to keep in check the transaction costs arising from the self-interested motivations of individuals. We develop in this article the argument that what firms do better than markets is the sharing and transfer of the knowledge of individuals and groups within an organization. This knowledge consists of information (e.g., who knows what) and of know-how (e.g., how to organize a research team).

What is central to our argument is that knowledge is held by individuals, but is also expressed in regularities by which members cooperate in a social community (i.e., group, organization, or network). If knowledge is only held at the individual level, then firms could change simply by employee turnover. Because we know that hiring new workers is not equivalent to changing the skills of a firm, an analysis of what firms can do must understand knowledge as embedded in the organizing principles by which people cooperate within organizations. Based on this discussion, a paradox is identified: efforts by a firm to grow by the replication of its technology enhances the potential for imitation. By considering how firms can deter imitation by innovation, we develop a more dynamic view of how firms create new knowledge. We build up this dynamic perspective by suggesting that firms learn new skills by recombining their current capabilities. Because new ways of cooperating cannot be easily acquired, growth occurs by building on the social relationships that currently exist in a firm. What a firm has done before tends to predict what it can do in the future. In this sense, the cumulative knowledge of the firm provides options to expand in new but uncertain markets in the future. We discuss at length the example of the make/buy decision and propose several testable hypotheses regarding the boundaries of the firm, without appealing to the notion of "opportunism."

Kogut, B. and U. Zander (1996). "What firms do? Coordination, identity, and learning." Organization Science **7**(5): 502-518.

Firms are organizations that represent social knowledge of coordination and learning. But why should their boundaries demarcate quantitative shifts in the knowledge and capability of their members? Should not knowledge reside also in a network of interacting firms? This line of questioning presents the challenge to state an alternative view to the "theory of the firm," a theory that has moved from Cease's early treatment of what firms do to a concern with ownership, incentives, and self-interest. We return to Cease's original insight in understanding the cost and benefits of a hrm but based on a view that individuals are characterized by an "unsocial sociality." Does the perception of opportunism generate the need to integrate market transactions into the fimi, or do boundaries of the firm lead to the attribution of opportunism? This basic dichotomy between self-interest and the longing to belong is the behavioral underpinning to the superiority of firms over markets in resolving a fundamental dilemma: productivity grows with the division of labor but specialization increases the costs of communication and coordination The knowledge of the firm has an economic value over market transactions when identity leads to social knowledge that supports coordination and communication. Through identification, procedural rules are learned, and coordination and communication are facilitated across individuals and groups of diverse specialized competence. A firm is distinct from a market because coordination, communication, and learning are situated not only physically in locality, but also mentally in an identity. Since identity implies a moral order as well as rules of exclusion, there are limitations and costs to relying upon a firm for exchange as opposed to the market. These costs are not necessarily those traditionally assigned to the category of decreasing returns to hierarchy. For example, an identity implies that some practices, and business, may be notionally inconsistent with each other. Norms of procedural justice that are identified with a firm imply that not all technically feasible complements are permissible within the logic of a shared identity. There is consequently a cost to an identity that offsets the benefits. Because the assemblage of elements that compose an organization are subject to requirements of consistency, identities rule out potentially interesting avenues of innovation and creativity. We illustrate these ideas by returning to the original prisoners' dilemma game and by an analysis of the coherence of a firm as a search for complements that are consistent with norms of procedural justice. We argue that the underlying dynamic of a prisoners' dilemma game reveals the problems of coordination, communication, and conflicts in norms of justice when players are deprived of social knowledge and shared identity. Similarly, the determination of a firm's coherence arises out of the demand for a moral and notional consistency in the "categorization" of its activities, as opposed to a technological necessity. These ideas are illustrated through an empirical examination of logical complements in high performance work systems.

Linchevski, L. and B. Kutscher (1998). "Tell me with whom you're learning, and I'll tell you how much you've learned: Mixed-ability versus same-ability grouping in mathematics." Journal for Research in Mathematics Education **29**(5): 533-554.

> In this article we report on 3 studies in which we investigated the effects of teaching mathematics in a mixed-ability setting on students' achievements and teachers' attitudes. The findings of the first 2 studies indicate that the achievements of students need not be compromised in a heterogeneous setting; on the contrary, the achievements of our average and less able students proved to be significantly higher when compared to their peers in the same-ability classes, whereas highly able students performed about the same. In the 3rd study we show that participating in the project workshops had a positive effect on teachers' attitudes toward teaching in mixed-ability mathematics classes.

Lou, Y. P., P. C. Abrami, et al. (1996). "Within-class grouping: A meta-analysis." Review of Educational Research **66**(4): 423-458.

> The effects of within-class grouping on student achievement and other outcomes were quantitatively integrated using two sets of study findings. The first set included 145 effect sizes and explored the effects of grouping versus no grouping on several outcomes. Overall, the average achievement effect size was +0.17, favoring small-group learning. The second set included 20 effect sizes which directly compared the achievement effects of homogeneous versus heterogeneous ability grouping. Overall, the results favored homogeneous grouping; the average effect size was +0.12. The variability in both sets of study findings was heterogeneous, and the effects were explored further. To be maximally effective, within-class grouping practices require the adaptation of instruction methods and materials for small- group learning.

Miller, D. and J. Shamsie (2001). "Learning across the life cycle: Experimentation and performance among the Hollywood studio heads." Strategic Management Journal **22**(8): 725-745.

> Guided by notions from the literature on organizational learning, this paper investigates how product line experimentation and organizational performance change across the careers of top managers. Its subjects are the studio heads who ran all the major Hollywood film studios from 1936 to 1965. The study found first, that product line experimentation declines over the course of executive tenures; second, that there is an inverse U-shaped relationship between top executive tenure and an organization's financial performance; and third, that product line experimentation is more likely to benefit financial performance late in top executives' tenures. These findings are consistent with a three-stage 'executive life cycle'. During the early years of their tenures, top managers experiment intensively with their product lines to learn about their business, later on their accumulated knowledge allows them to reduce experimentation and increase performance; finally, in their last years, executives reduce experimentation still further, and performance declines.

Peteraf, M. A. and M. Shanley (1997). "Getting to know you: A theory of strategic group identity." Strategic Management Journal **18**: 165-186.

> This paper develops a theory of strategic group identity that explains how strategic groups emerge in an industry and how they can affect firm behaviors and outcomes. In so doing, it provides a theoretical basis for the existence of strategic groups. We argue that managers cognitively partition their industry environment to reduce uncertainty and to cope with bounded rationality. Social learning theory and social identification theory are used to describe how cognitive groups coalesce into meaningful substructures and how a group-level identity emerges. We describe the ways in which macro level factors condition the development of groups and their identities. We introduce the notion of a strong identity, which characterizes any group sufficiently recognized and attended to by members to affect individual action. Groups with 'weak identities' are no more than transient agglomerations of firms and do nor exist in any meaningful sense. These ideas are developed into propositions that describe the conditions under which groups with strong identities are likely to emerge. A second set of propositions describes their transformation over time. Identity strength is linked to both positive and negative outcomes in a final set of propositions. We show how

strategic groups with strong identities can affect firm performance resolving a longstanding problem which has plagued strategic groups research and conclude by suggesting some approaches for measurement and future research. (C) 1997 by John Wiley & Sons, Ltd.

Reagans, R. and E. W. Zuckerman (2001). "Networks, diversity, and productivity: The social capital of corporate R&D teams." Organization Science **12**(4): 502-517.

> We argue that the debate regarding the performance implications of demographic diversity can be usefully reframed in terms of the network variables that reflect distinct forms of social capital. Scholars who are pessimistic about the performance of diverse teams base their view on the hypothesis that decreased network density-the average strength of the relationship among team members-lowers a team's capacity for coordination. The optimistic view is founded on the hypothesis that teams that are characterized by high network heterogeneity, whereby relationships on the team cut across salient demographic boundaries. enjoy an enhanced learning capability. We test each of these hypotheses directly and thereby avoid the problematic assumption that they contradict one another. Our analysis of data on the social networks, organizational tenure, and productivity of 224 corporate R&D teams indicates that both network variables help account for team productivity. These findings support a recasting of the diversity-performance debate in terms of the network processes that are more proximate to outcomes of interest.

Roth, W. M. and G. M. Bowen (1995). "Knowing and Interacting - a Study of Culture, Practices, and Resources in a Grade 8 Open-Inquiry Science Classroom Guided by a Cognitive Apprenticeship Metaphor." Cognition and Instruction **13**(1): 73-128.

> In this investigation, we analyzed the processes of knowing and interacting in an open-inquiry learning environment that was planned and implemented by teachers who used the metaphor of cognitive apprenticeship as a referent. Based on detailed analyses of students' conversations, we documented the construction of and changes in Grade 8 students' understandings as they engaged in inquiries for which they planned focus questions, designed data collection procedures, and interpreted the findings. Through their interactions, the students also arrived at private meanings that they did not report in their findings and that were often overlooked by teachers who used static end-of-unit tests to measure student learning. In conducting their inquiries, students successfully negotiated courses of actions and established group structures through which they organized their interactions. Formal and informal interactions between students and research groups facilitated the formation of networks that contributed to the quick diffusion of knowledge necessary in the construction of a community of knowers. Each of these analytic dimensions is amply documented by data from the observed classrooms. Classroom implications of the findings are discussed.

Simonin, B. L. (1997). "The importance of collaborative know-how: An empirical test of the learning organization." Academy of Management Journal **40**(5): 1150-1174.

> In this research, I proposed and tested a model of how firms learn from their strategic alliances. Based on a survey of 151 firms, the results suggest that experience alone is insufficient for the achievement of the greatest benefits from collaboration. Experience must be internalized first, and collaborative know-how must be developed for this experience to contribute to future collaborative benefits.

Storck, J. and P. A. Hill (2000). "Knowledge diffusion through "strategic communities"." Sloan Management Review **41**(2): 63-+.

> When faced with a global IT infrastructure transition project, Xerox managers decided to launch a knowledge-sharing initiative called the Transition Alliance. When fully functional, the Alliance comprised fifty If professionals responsible for managing 70,000 desktop workstations, nearly 1,200 servers, and networking hardware on five continents. Storck and Hili observed that community members provided high-quality, validated solutions, handled unstructured problems well, and dealt effectively with new developments in hardware and software. The authors also point out that the motivation for learning and developing at an individual level seemed greater in

this community structure than in other organizational forms, which has important implications for the longer-term job performance of the participants. The Alliance was more than simply a group that mel occasionally to discuss common issues related to a single functional or professional area, it had a defined relationship to formal organizational objectives yet was not formally required to report back to headquarters on its activities. Within the Alliance, the communication repertoire was built upon the leadership training required for all Xerox employees. Work processes that developed within the Alliance supplemented those used elsewhere in the organization. Handling action items, creating meeting agendas, and developing other processes were evidence of the self-directed nature of the group and provided a context for communication. Storck and Hill identified six guiding principles that were instrumental to Alliance success and are applicable whenever circumstances require organizational learning: Design an interaction format that promotes openness and allows for serendipity. Build upon a common organizational culture. Demonstrate the existence of mutual interests after the initial success at resolving issues and achieving corporate goals. Leverage those aspects of the organizational culture that respect the value of collective learning. Embed knowledge-sharing practices into the work precesses of the group. Establish an environment in which knowledge sharing is based on processes and cultural norms that are defined by the community rather than other parts of the organization.

Thong, J. Y. L., C. S. Yap, et al. (2000). "Business Process Reengineering in the Public Sector: The Case of the Housing Development Board in Singapore." Journal of Management Information Systems **17**(1): 245-270.

Our existing knowledge of business process reengineering (BPR) is mainly derived from the experiences of private sector organizations, which have fundamentally different characteristics from public organizations. This paper represents a first step in understanding how BPR may be different in public organizations. Drawing on the public administration literature, it examines the differences between public and private organizations and their implications for BPR. Following that, it examines the BPR experience of a large public organization through an intensive case study. The case analysis shows that while there are similarities in the BPR experiences of public and private organizations, there are also notable differences. In this specific case, there were social and political pressures to reengineer, press publicity to promote BPR, a reengineering team comprised mainly of neutral staff, performance benchmarks adapted from the private sector, high-level approval for

redesigned processes, and a pilot site implementation to secure further funding. It concludes with lessons learned for implementing BPR in public organizations.

Turner, M. E. and A. R. Pratkanis (1998). "A social identity maintenance model of groupthink." Organizational Behavior and Human Decision Processes **73**(2-3): 210-235.

We present a social identity maintenance model of groupthink that (a) defines groupthink as a collective attempt to maintain a positive image of the group, (b) identifies conditions under which this form of concurrence seeking is likely to occur, (c) parsimoniously explains the equivocal empirical findings on groupthink, and (d) specifies intervention tactics that can mitigate the detrimental consequences of groupthink for group decision outcomes.

Yamaguchi, R. (2001). "Children's learning groups - A study of emergent leadership, dominance, and group effectiveness." Small Group Research **32**(6): 671-697.

This study explores the importance of the group context in the emergence of leadership, dominance, and group effectiveness in children's cooperative learning groups. Using achievement goal orientation as a framework, six groups performed a math task under a mastery condition, whereas four groups performed a math task under a performance condition. Under the performance condition, group members exhibited more dominance and negative behaviors, whereas under the mastery condition, group members exhibited more leadership and positive behaviors. Also, under the performance condition, groups were not as effective in cooperatively completing the math task because of negative communication, member dissonance, and isolation, whereas under the mastery condition, groups were more effective, demonstrating positive

communication, group cohesion, and a shared responsibility in completing the math task. Implications for classroom practice are discussed.