

## Virtual OD: Facilitating Groups Online

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*This study examined the role of facilitators in nine virtual action learning groups. A qualitative analysis of the facilitators' interventions across all groups resulted in a typology that included group management, group process, and support interventions. A model showing the relationship among these categories proposes that effective facilitation of virtual groups is built on knowledge of group theory and the skills to make these explicit in a virtual environment.*

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The way we work and learn is being shaped by technology that allows us to “open worlds of opportunity by battering down the old barriers and boundaries that . . . limited our possibilities for interaction, cooperation, and growth” (O'Hara-Devereaux & Johansen, 1994, p. xi). In today's organizations, with members of groups often physically dispersed (Ahuja & Carley, 1999), our frame of reference changes from working locally to working globally, often using technology. As we adapt to these organizational realities, our interest is to understand the ways in which we can effectively facilitate organization development (OD) activities virtually. Research in this area, however, is still in its infancy.

Action learning is one approach to organization development (McGill & Beaty, 2001) that assists individuals in developing skills to become “more self-aware . . . more cognizant of their impact, and . . . [have] a differentiated frame [of reference]” (Dixon, 1998, p. 58) through which to view themselves because “those unable to change themselves are unable to change the world around them” (Pedler, 1991, p. xxiv). In action learning, an individual begins by identifying a specific problem and then, working in a group and guided by a facilitator, engages in an experiential learning spiral of analysis, experimentation, review, and reflection to clarify and reframe it (Lessem, 1991). When group members are dispersed across time and space, collaborative technologies such as groupware, offer a dynamic means for people to participate virtually in action learning groups using dialogue, inquiry, and reflection.

As human resource development (HRD) professionals, we want to understand the skills needed to facilitate virtual OD activities (Watkins, 2001), particularly those implemented in groups separated by time and distance. This research focused on the role of the facilitator in virtual groups with the purpose of examining the interventions used by facilitators in virtual action learning groups working in an asynchronous Web-based environment.

### Literature Review

This research on facilitation interventions in virtual groups drew on the literature of group dynamics and action learning. The facilitator's role in a group is to monitor group processes and intervene as needed to help the group accomplish its goals (Wheelan, 1990); Argyris (1970) defined an intervention as coming “between or among persons, groups, or objects for the purpose of helping them” (p. 15). Primary types of interventions used in groups, summarized in Table 1, are grounded in early group theory. The three categories of interventions, task, socio-emotional, and individual, proposed by Benne and Sheats (1948) have shaped much of the subsequent thinking about group processes and the interventions used to facilitate them. Similar to this, Bales (1950, 1970) identified two types of task interventions and added a category of negative social interventions. Attention to both task and social is needed to develop high-performing groups (Yeatts & Hyten, 1998). The specific interventions named by Wheelan (1990) are based on the ideas that facilitators (1) have knowledge and experience to share with participants; (2) use interventions to observe the group's behavior; and, (3) can initiate structured activities to alter the functioning of the group. These interventions are directly relevant to the needs of small groups, but are grounded in a t-group model of facilitation in which the facilitator assumes primarily an observational role. They, however, could be very informative adapted to a virtual environment.

The interventions used in action learning become even more specific because the role of the facilitator is to

“question, confront, encourage and support . . . [to] help the group know themselves [and to] try out new approaches” (Lawlor, 1991, p. 256). The goal of the facilitator in action learning is “to help people reflect on, experiment with, and learn from experience” (Marsick, 1990, p.31) so that participants *do* rather than just *talk about* the skills involved. Action learning interventions, listed in Table 2, focus on providing the tools and structure needed for learning a set of skills (Marsick, 1990; Casey, 1991). Modeling the skills and encouraging participants to take responsibility for their own facilitation (Marsick, 1990; Casey, 1991) are also more explicit in these interventions than those formulated in group theory. Only Morgan (1988) specifically included group process interventions.

Table 1. *Facilitation Interventions in Group Theory*

	Benne & Sheats (1948)	Bales (1950, 1970)	Wheelan (1990)	
Types of Facilitation Interventions	<ul style="list-style-type: none"> <li>• Task interventions to facilitate accomplishment of group task</li> <li>• Group-building/ maintenance interventions to help interpersonal functioning of group</li> <li>• Individual interventions for personal needs</li> </ul>	<ul style="list-style-type: none"> <li>• Socio-emotional positive reactions</li> <li>• Task – gives answers/ information</li> <li>• Task – asks questions</li> <li>• Socio-emotional negative reactions</li> </ul>	<ul style="list-style-type: none"> <li>• Theory</li> <li>• Perspective</li> <li>• Societal</li> <li>• Group Process</li> <li>• Inconsistency</li> <li>• Impasse</li> <li>• Organizational Process</li> <li>• Relationship</li> <li>• Activity</li> </ul>	<ul style="list-style-type: none"> <li>• Paradoxical Self-disclosure</li> <li>• Silence</li> <li>• Goal check</li> <li>• Restatement</li> <li>• Behavior experiment</li> <li>• Executive</li> <li>• Supportive</li> </ul>

Table 2. *Facilitation Interventions in Action Learning Groups*

	Morgan (1988)	Marsick (1990)	Casey (1991)
Types of Facilitation Interventions	<ul style="list-style-type: none"> <li>• Manage group process</li> <li>• Adopt a reflective, synthesizing approach to group discussion</li> <li>• Make interventions that ‘frame’ and ‘reframe’ the issues</li> <li>• Make an unobtrusive record of the group discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Model the process</li> <li>• Integrate personal and professional development</li> <li>• Provide flexible structure</li> <li>• Provide tools to identify and reevaluate frames of reference</li> <li>• Encourage action and reflection on action</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitate giving</li> <li>• Facilitate receiving</li> <li>• Clarify processes of Action Learning</li> <li>• Help others take over responsibility for first 3</li> </ul>

As technology plays an increasing role in supporting group work, do interventions used in small groups need to be redefined (Tubbs, 2004)? Experience tells us that facilitation takes on a different perspective and offers new challenges when participants and facilitators interact without being bound by time or place. In this research, virtual groups are defined as those whose members are geographically dispersed and use mediated communication technology to accomplish their work (Lipnack & Stamps, 2000). In these groups, some tasks, such as listening and ensuring adequate talk-time, are not an issue, while exploring silence is. Responding to text rather than verbal cues creates a need to make explicit those nuances which may be implied in face-to-face settings. Establishing *presence* as the facilitator requires a different perspective of self and others, as does helping group members distinguish themselves while building a climate of trust and support. Inquiry, asking the right questions, becomes an important tool for a facilitator to accomplish these tasks. Despite the growing prevalence of virtual groups, research on them is still in its early stages and is often focused on a narrow issue, such as communication structures (e.g., Kraut, Steinfield, Chan, Butler & Hoag, 1999), trust (e.g., Jarvenpaa & Leidner, 1999), or socialization (e.g., Ahuja & Galvin, 2003). Other research has focused on the effects of technology on group problem-solving or decision-making (e.g., Whitworth, Gallupe, & McQueen 2001) or the roles of the facilitator in these groups (e.g., Miranda & Bostrom, 1999). Tasks such as observing, monitoring, providing information (Harasim, Hiltz, Teles, & Turoff, 1995), creating structure and focus, and addressing group dynamics (Duarte & Snyder, 1999) have also been identified. However, we are only beginning to learn about the interventions that facilitators use in virtual groups to accomplish these tasks.

## Research Methodology

To examine the types of interventions used by the facilitators in these virtual action learning groups, two research questions guided this study:

- (1) What types of interventions did the facilitators use in the virtual groups?

- (2) What was the relationship of the interventions used in virtual groups to the those that have been identified in traditional face-to-face groups

The context of this study was an 8-week Web-based action learning course that was part of adult education and HRD graduate courses taught in five English-speaking universities on three continents. The 46 adult students (35 women and 11 men) in these five courses were assigned to nine small virtual groups of 5-6 people that reflected both cross-institutional and cross-cultural diversity (English, Australian, North American, Asian, and Middle Eastern). Each group was facilitated by one of the 5 faculty members (3 women and 2 men from the U.S., United Kingdom, and Australia). Group members were provided background readings on group dynamics, action learning, communication and questioning techniques, and reframing problems. Each week a group member presented a problematic case from his or her own professional practice and, with the help of the group, used data-based inquiry (Marsick & Watkins, 1999) to understand and improve interpersonal communication skills. In the other weeks, the individual participated as a group member in the discussion of other participants' cases in the same small group with the role of the facilitator as a co-participant in the group. All group interactions took place online.

In this study permission was obtained from participants to use the verbatim transcripts of the Web dialogue from the nine small groups. The Facilitate.com groupware archived all interactions, including the chat rooms used by some groups. The qualitative analysis of the online data (650 pages) allowed us to examine all of the facilitators' interventions. The unit of analysis was the facilitator intervention (312 incidents). First, constant comparative analysis (Merriam, 1998) was used to develop descriptive codes (Miles & Huberman, 1994) for all of the facilitator interventions that were congruent, mutually exclusive, and exhaustive (Merriam, 1998). The codes for each facilitator were collapsed into categories and sub-categories that were peer-reviewed (Glesne & Peskin, 1992) for consistency and agreement. Second, the codes developed from each facilitator's interventions were compared across all groups to identify categories that were discrete and parsimonious. Similarities and differences in the number and types of interventions used by the facilitators across groups were noted for comparative purposes. A typology of interventions emerged from the common categories that were named *group management*, *group process*, and *support*. Additional data from a separate facilitators' online discussion and from participants' reflection papers served as supporting documentation for the trustworthiness of the findings (Lincoln & Guba, 1985).

This analysis focused specifically on the facilitators' interventions in the group and, as such, it may not account for other aspects of group dynamics in a virtual environment. Other factors that appeared to have an effect on the development of action learning skills were the nature of the case presented by the individual and the willingness of the case writer to participate fully in the discussion. While some specific interventions used for action learning may not apply to other OD activities, the main categories of interventions do provide an understanding of a facilitator's role in helping virtual groups achieve a high level of group performance.

## Findings

Two broad categories of group interventions were found across the data: group management and group process. Underlying both of these categories was a third category of support interventions. Negative interventions were also identified in each of the categories. Some negative interventions were the opposite of an intended one, such as making assumptions rather than checking assumptions; in other instances, it was the lack of an intervention, such as being absent from the group. It is noted that, while every intervention was not used by each of the facilitators, there were commonalities in the types of interventions used by all facilitators. Each facilitator had his or her own style of interacting with the participants, resulting in a range of specific interventions used and in the total number of interventions made by a facilitator, both of which contributed to distinctive dynamics in each group. The categories and the interventions found in each of them are listed in Table 3. These categories are discussed below with representative examples of interventions.

### *Group Management Interventions*

The first category was group management interventions which focused on the action learning tasks of the group. These included ones that attended to management of the online work and those that facilitated the participants' development of action learning skills. Particularly relevant to the development of action learning skills were a variety of questioning interventions, such as checking assumptions, clarifying, and probing.

A fundamental aspect of online facilitation was providing structure for the group work. This was sometimes done by suggesting a timeframe for the case work, such as when Eric wrote:

After we have had a chance to talk around the case a bit for a couple of days, I would like to try and sum up by about Thursday where we seem to be at, then get some final responses to that, and hopefully some clearer direction for [case writer] on Friday, Saturday.

At particular points, some interventions served to focus the group on specific content or skills, as when Rebecca suggested, “this week our goal is to clarify and analyze assumptions.”

Table 3. *Facilitation Interventions in Virtual Groups*

	Group management	Group process	Support	Negative
Types of facilitation interventions	<ul style="list-style-type: none"> <li>• Providing structure</li> <li>• Setting expectations</li> <li>• Focusing</li> <li>• Negotiating technology</li> <li>• Housekeeping</li> <li>• Informing</li> <li>• Summarizing</li> <li>• Asking for feedback</li> <li>• Problematizing</li> <li>• Hypothesizing</li> <li>• Diagnosing</li> <li>• Strategizing</li> <li>• Reflecting</li> <li>• <i>Questioning Interventions</i></li> <li>• Checking assumptions</li> <li>• Inquiring</li> <li>• Clarifying</li> <li>• Probing</li> <li>• Suggesting</li> </ul>	<ul style="list-style-type: none"> <li>• Getting started</li> <li>• Creating a presence</li> <li>• Taking stock</li> <li>• Checking in</li> <li>• Creating space</li> <li>• Mediating</li> <li>• Inviting feedback</li> <li>• Social chatting</li> <li>• Having fun</li> <li>• Making connections</li> <li>• Personal learning</li> </ul>	<ul style="list-style-type: none"> <li>• Acknowledging</li> <li>• Admonishing</li> <li>• Affirming</li> <li>• Appreciating</li> <li>• Applauding</li> <li>• Confirming</li> <li>• Empathizing</li> <li>• Prompting</li> <li>• Recognizing others</li> </ul>	<ul style="list-style-type: none"> <li>• Preaching</li> <li>• Justifying</li> <li>• Demanding</li> <li>• Making assumptions</li> <li>• Telling</li> <li>• Prescribing</li> <li>• Discouraging</li> <li>• Short-circuiting</li> </ul>

Negotiating the technology was an important element in helping establish the flow of the group dialogue. In most cases, it involved an effort to find the most useful or logical ways for organizing the discussion. For example, Eric made the suggestion, “Let’s try to keep this section limited to the discussion of this case. If you have other comments or queries, please put them in the appropriate box.” Other than some problems with Internet provider connections and computer hardware, there were few comments that suggested the technology was a hindrance to the participation of group members.

The majority of the group management interventions address the case work and the learning of action learning skills. Providing participants with information about these skills was important as when John talked about the process of reframing:

Reframing was behind my attempt to encourage Lily and the rest of you to explore the opportunity costs. One way of thinking of reframing is to subject it to that sort of analysis and by trying to make the familiar strange. One of the disadvantages of having a relatively homogeneous group (in terms of work) is that there is a tendency to take assumptions for granted. That is what groups of professionals do.

However, there was little direct instruction, as the facilitators’ actual use of the interventions provided a better learning opportunity for group members than any amount of explanation might offer.

Facilitators also used other interventions effectively to guide the learning. Some facilitators sought feedback from the group by asking, “Comments from the rest of the group? What do you think? Am I off base here?” At some points, it was useful to summarize the group’s work, as when Allison reviewed a discussion, “So far in [this] case we have discussed the issue of difficult colleagues, interceding with a student and colleague difficulty, politics of higher education, curriculum change, and empowering learners.” As groups developed their own skills, some facilitators encouraged them to assume responsibility for some facilitation functions as when Eric noted: “Wow, what a discussion! Actually I am not going to provide a summary tonight . . . because I think the group members have shown you are really experienced enough to provide your own summing up.” Facilitators also personalized the learning process, speaking from their own experience, such as when Rebecca responded to a group member,

I continue to agree with your definition of acceptance vs. empowerment. I think that women and other minorities accept their life will be harder, but deal with the acceptance in different ways. Because I accept something does not mean that I will not work hard to become empowered.

Hypothesizing, diagnosing, and strategizing were interventions used to further the process of reframing the problem and redesigning the action. In one case Maria offered, “One thing I have been struck with is the need for more explicit behavioral initial contracting – anticipating implementation difficulties and positioning your group to partner with the key agency personnel in the implementation phase.” Allison used an exploratory question to propose a diagnosis, “I wonder if this is a behavioral issue?” In making these interventions, the facilitators were not

directing or informing the group, but rather presenting their opinion or point of view as one possibility for discussion. Their use of advocacy and inquiry was essential in creating a productive dialogue and encouraging similar participation from others in the group.

Reflection was an ongoing part of the case work in each group, as when Eric asked his group to “respond to the theme: ‘What I have learned’ – this can be from the case itself, from the process, about your professional practice, etc. No limits.” Reflection was also part of the learning about the online experience, as John told one of his groups,

I think I was there to try to help the discussion along, but this is our first experience of this kind of course and we were all feeling our way, trying to create the space for the participants to develop their skills.

Questioning interventions are integral to action learning and were used frequently by the facilitators. Checking assumptions was the starting point for identifying the problem in a case, with facilitators working along side the other group members in asking the case writer questions such as Maria asking:

I assume that You still view [his] actions as incorrect and not prompted in any way by you. I assume that Others in our group question that frame. I assume that the nature of your work created problematic boundary situations in which interpersonal skills and a certain protective vigilance may be required on your part . . . How am I doing?

Facilitators continued to inquire and clarify, as when Allison inquired, “Can you tell me more about the people who were coming to your training? How were they identified to attend, how were they informed of the training? Also, what do they need to know about the national standards?” Or when Eric needed to clarify previous information, “I printed off the comments to date because that was the way I felt I could reflect on them best. And that led to a couple of more questions.” However, demanding responses such as this one by Rebecca, “Could you please respond to my questions!!” did little to encourage further dialogue or inquiry from other group members.

The hard work of action learning often came with the probing questions that sometimes pushed the boundaries for the case writer and the group. For example, John asked, “Robert, I wonder why you are resisting answering the questions below? What would you like to learn from the case?” and in another group, Allison asked, “You indicate you want to effect changes in [the other person]? But what do you want to learn about yourself?” Eliciting honest answers to these questions depended in part on the facilitator using these interventions thoughtfully and in part on the feelings of safety and trust that existed in the group – a result related to facilitator’s work in addressing group process. Not using these questioning interventions could also limit group learning, as when one facilitator asked group members to offer solutions before asking for information from the case writer:

What would you say is the actual problem? Did she try anything that worked? What did it work or not work? . . . if you had to give [the case writer] one piece of advice for this case, what would it be?

#### *Group Process Interventions*

The second category was group process interventions that addressed issues related to the integrity of the group itself. This set of interventions focused on the development of group practices and the social relationships among group members, and included interventions for initiating and addressing group process as well as those for the facilitator participating as a member of the group. In the beginning, facilitators took the lead in bringing group members into the process through planned introductions and sharing of information about the course and themselves. As the groups began their case work, many of the facilitators asked directly about group process. An intervention frequently used by several facilitators was to “check in” with the group, such as when Maria wrote, “It might be helpful at this point [to] ask how each of you are feeling with this process.” In another group, Eric responded to a participant’s concerns about group participation, writing “Janice, I’m not too concerned about the number of postings – I think quality here is the key.” In some cases, the facilitator expressed the ambivalence being felt, as when John wrote, “This is part of my interest and I think we made some big steps, even if I am not sure in what direction. I hope we can continue to learn how to learn from one another.” Participants were also asked to reflect on the group, with questions such as, “How has the process worked for you? Have you found this reflection helpful? How about others – any comments on our work so far?”

Most facilitators encouraged groups to integrate social aspects into their online space with the use of chat rooms and having participants create their own topics in the discussion area. In the first week, Eric suggested, “just one more thing, I was thinking during the week how serious we all were being and how I like to have humor in my f2f classes. That’s why I put the comment in the Chat Room . . . short jokes and one-liners are invited! Or some poetry or . . .” Yet, group process was not something that could be forced as demonstrated in one group after Rebecca said, “We still need to chat . . . We still need to chat. We must work around the hours.” The group never used the chat room. And sometimes it was a matter of letting the group know how they were doing as when Allison told them, “just wanted to say that I am very pleased to see how this group offers questions, identifies assumptions and helps each other think through the case.”

Facilitators also contributed to the group process by creating a social presence through their own comments, such as when Eric told about a terrible flight that delayed his return to the group. Some shared their own experiences, as when John wrote “This can be very painful for all! I once lost a good friend over the notion of “altruism” and I still struggle about people’s motivations to help, especially when the helpers have much more power.” Allison shared her own learning with her group, commenting:

I like the metaphor about holding the mirror up to ourselves. It is something I need to do a lot more of in my practice, and I think that has been a significant piece of learning for me in this case.

These efforts as a co-participant in the group had a part in shaping the social dynamics of the group and the learning experience of all group members.

#### *Support Interventions*

These interventions addressed both group management and process on a personal level and included a range of interventions, including acknowledgement, prompting, appreciating, affirming, and applauding. Acknowledgement was often expressed in the very simple words of saying “thank you” in response to a comment or information that has been shared. At times these also took a more admonishing tone, such as when Eric prompted his group, “If you have not yet joined the discussion, please do so now . . . please don’t just sit on the sidelines.” And there were occasions when actions counteracted the idea of support, as when Rebecca was absent from her group’s online reflections.

This type of intervention also served to further support the learning process. For example, at the end of a particularly difficult case, Allison wrote to the case writer, “I very much appreciate Nick, your telling us how vulnerable you felt in this group with this discussion. I respect and appreciate that.” In affirming the work of the other group members, she wrote, “Anna, thanks for your comments, and I agree I thought Nicks [sic] case opened up for us a whole different level of communication [sic].” After the first case in one of his groups, Eric applauded their work, writing “Congratulations to this group for the quality of the questions and discussion the past week . . . thanks to all of you for persisting.”

### **Discussion**

We think that it is important to locate the experiences of virtual groups in the theoretical and empirical research on small groups in order to understand how they relate to traditional group processes and how they differ. This research focused on the work of the facilitator in virtual action learning groups, finding three major categories of group management, group process, and support interventions. The first two categories are closely related to the task and maintenance roles identified by Benne and Sheats (1948), classifications often referred to in the group literature (e.g., Tubbs, 2004). Support interventions, some of which were identified by Wheelan (1990), are (at their best) the opposite of the individual roles (Benne & Sheats, 1948), addressing the personal needs of others in the group. A facilitator’s use of all three types of interventions tended to result in the use of similar interventions by group members. Negative interventions, similar to those identified by Bales (1950, 1970), usually resulted in lower group participation, rather than a replication of negative actions.

It did not surprise us that the majority of the interventions focused on group management. This is the role that facilitators are most accustomed to in face-to-face groups. Questioning in various forms was the predominant type of intervention, often used to push the group’s learning. This should be expected as this type of intervention is indicative of the facilitative or “guide on the side” approach to group discussion which was the intended design of the action learning groups (Weinstein, 1999) and consistent with the literature (Morgan, 1988; Marsick, 1990; Casey, 1991). This made it more obvious when these interventions were not used. Virtual facilitation also added new dimensions to group management interventions, particularly in how interventions such as providing structure, focusing, and negotiating technology were used to guide the group through the learning process.

Group process interventions were the least common, though they were used strategically by some facilitators in the early weeks of the online work to surface and resolve initial problems. How they chose to use them, or not, was an important means for the facilitator to establish their presence online and create an environment for group learning. Most of the groups in which group process was addressed chose to use chat rooms and made the effort to meet synchronously, even with the extreme differences in time zones, enhancing the performance of the group (Yeatts & Hyten, 1998). Using this type of intervention, however, did not guarantee a productive group. This indicates that facilitator interventions are only one facet in the performance of online groups and an area for further research.

Support interventions were quite prevalent, particularly among facilitators who attended to group process. These interventions are often implied through non-verbal cues in traditional groups, but in virtual groups need to be made explicit (DeSanctis & Monge, 1999). These interventions did not address management or social processes

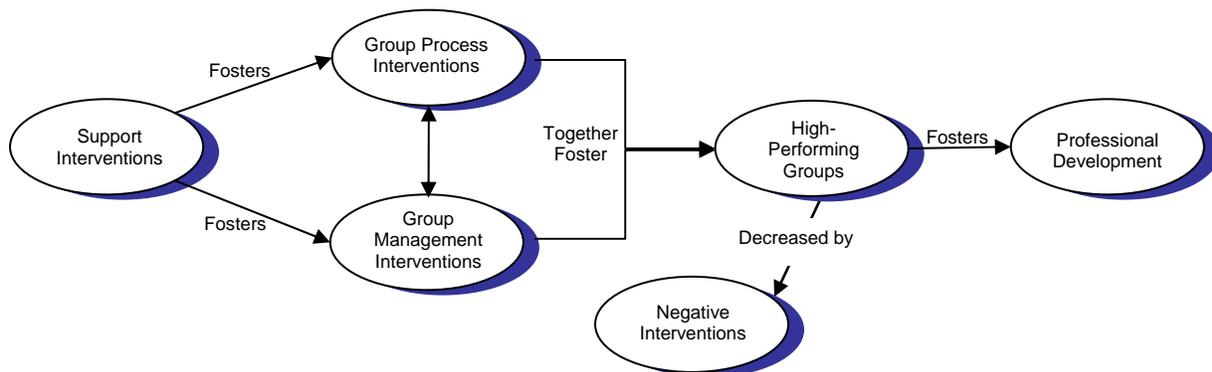
directly, but they did help establish the norms for trust, safety, and value of participation. Often simple acknowledgments, these interventions demonstrated the facilitator's respect for and attention to the participants, which have a critical role in creating the dynamics for a high performing group (Kayworth & Leidner, 2001).

### Contribution to HRD Theory and Practice

In facilitating virtual groups, without the tacit cues that many facilitators rely on, it is important for us to understand the dimensions of this task. Mapping the interventions used by these facilitators adds to HRD theory by dimensionalizing the integral nature of group dynamics. The power of this data set is that the work of multiple facilitators over time was captured in print. Our ability to analyze and compare across groups makes it particularly useful in understanding the relationship of facilitator interventions and group performance.

Figure 1 represents the hypothesized dynamic relationships of our categories, with each one integral to the facilitation of virtual groups. Support interventions are needed to sustain both group management and group process interventions. The integration of group process and group management interventions leads to high-performing groups. This model suggests that none of the categories or specific interventions in and of themselves result in high performance; rather it is the combination of interventions that facilitates group learning and performance. In some cases, negative interventions may lead to a decrease in group learning and performance. This model offers a framework for promoting high performance in virtual groups, while the interventions identified provide practical guidance for achieving intended results. Further research is needed to confirm this model in other contexts.

Figure 1. Model for facilitation of virtual groups



Our experience has shown that the online environment provides a unique opportunity for facilitators to be deliberate in how they intervene in a group, reflect on the results, and respond with flexibility to the group's needs. The Web-based technology is also a powerful tool for modeling interventions (Marsick, 1990), giving participants the opportunity to see, review, and then practice specific skills for their own professional development. One future research interest is in the facilitation undertaken by members in a group. One goal of a facilitator, as a guide and co-participant, is to have a group take responsibility for facilitating its own learning and performance (Casey, 1991). The ability of the group to do this may be one indicator of the facilitator's success in fostering group performance.

This study examined the types of interventions that facilitators used in virtual action learning groups, generating a model that integrates group management, group process, and support interventions. This model focuses on the role of facilitators in making the group process, as well as the task process, a conscious part of their work. These components do not appear to exist independently of one another indicating that facilitators need to be proactive in using appropriate interventions that address all needs of a group. This suggests that for virtual groups to achieve a high level of performance, facilitators need knowledge of and experience in group dynamics in order to balance task goals with process needs, being explicit in the ways that they create presence, support group development, and negotiate technology. Building on a theoretical framework of group dynamics, this research begins to inform our understanding and practice of facilitating virtual groups.

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