This paper presents tips for educators to integrate and facilitate virtual learning teams within online courses. The techniques are grounded in current research and theoretical foundations of systems theory and group dynamics. Tips emphasize facilitation of virtual learning teams, assembled for the purpose of formal education and supported by computer-mediated communication tools. Critical elements of virtual team learning are defined, including task/problem, team dynamics and interaction, team member roles, mediated communication, and facilitation. Tips are categorized as facilitating motivation and efficacy, problem-solving, skill building, knowledge construction, and conflict resolution. The ten techniques are: (1) help team members manage "cyberstress" by helping them feel connected to the facilitator and other team members; (2) plan frequent e-mail prompts to help team members overcome procrastination; (3) provide a variety of tools to support the different phases of problem solving; (4) assist team members when they struggle with achieving consensus; (5) assemble teams strategically based on task and talent; (6) provide timely and meaningful feedback; (7) scaffold topical discussions using a threaded discussion (asynchronous) tool; (8) encourage elaboration through questioning and hypertext linking; (9) discourage judgment, criticism, and personal attacks; and (10) intervene to highlight areas of common ground among conflicting team members. (DLS)
Ten Great Tips for Facilitating Virtual Learning Teams

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The Challenge of Virtual Learning Teams

Exceedingly, today's educators are expected to adapt teaching and facilitation techniques to new and emerging delivery systems. The number of educational courses and training programs migrating to the World-Wide-Web, the Internet, and corporate intranets is astounding (see for example Bassi, Benson, and Cheney, 1996). For most educators, the migration to computer-mediated distance education does not come easily. Although at first glance, it seems that traditional teaching methods such as presentation, discussion, and team-based learning can be easily adapted to on-line delivery systems, in reality research is showing that teaching and learning in on-line environments is very different from face-to-face instruction (Luetkehans, 1998; Sherry, 1996). Of particular interest to educators is the effective facilitation of collaborative team learning in on-line environments.

From a student perspective, participating in a virtual learning team (VLT) is a new, and perhaps frightening, experience. Mary Lou Crouch and Virginia Montecino (1997) note a phenomenon experienced by on-line learners called "cyberstress." The asynchronous nature of many on-line courses and communication tools, and the perceived distance between learners and other team members contributes to fears of contributions and assignments left unnoticed and "lost in cyberspace." Students have not developed sufficient experiences for dealing with delayed communications, the generative nature of on-line learning, nor the ability to express themselves effectively to team members through written communication.

The purpose of this paper is to present tips for educators who would like to successfully integrate and facilitate virtual learning teams within their on-line courses. The techniques are grounded in current research and the theoretical foundations of systems theory and group dynamics. Tips emphasize facilitation of virtual learning teams assembled for the purpose of formal education who are supported by computer-mediated communication tools.

Critical Elements of Virtual Team Learning

Task or Problem

A team is defined as "a number of persons associated in some joint action" (Webster's Unabridged Dictionary, 1992). However, all virtual teams are not created equal. The VLT process is affected by the type of task or problem it is given (Straus and McGrath, 1994). As with other instructional strategies, virtual learning team activities can be classified by learning domain (Bannan and Milheim, 1997). Specifically, team activities can be classified as those designed for a.) motivation or attitude development, b.) problem-solving, c.) skill
building, and d.) knowledge construction. The instructional goal and the type of team activity has a direct impact on how the team members explore and define team objectives, plan a course of action, and their perceptions of success. A clearly communicated instructional goal and desired performance outcomes of the team are essential no matter the delivery system.

**Team Dynamics and Interaction**

As with face-to-face teams, VLTs are governed, in part, by the dynamics of group communication. Group dynamics is concerned with both the productive (task) communication of members as well as the development of roles and relationships among team members (maintenance). All teams, whether on-line or face-to-face, will develop and enforce group norms (e.g., acceptable and unacceptable communicative behaviors) and methods for leading, stimulating, rewarding and punishing team member contributions. Often, on-line educators overlook these elements of VLT interaction because they are focused solely on content (task) learning and interaction. Taking a more systems view of team interactions may help avoid so-called “internet pitfalls” (Boettcher, 1997) of on-line communication.

**Team Member Roles**

The greatest value of team learning may also be its greatest challenge. That is, a group is made up people with a diversity of talents, strengths and experiences. This brings with it the foundation for stimulating discussion, creativity, and effective problem solving. However, it also means that each member of the team comes into it with established habits, learning styles, and preferred team roles. Most of the current literature agrees that effective teams are able to represent a balance between task roles (goal accomplishment) and maintenance roles (process satisfaction and efficiency). Task roles and maintenance roles take on new character in on-line environments. Task roles dominate and are performed both on-line and off-line. Maintenance roles, although critical to team connectivity, may not be performed until conflict arises or inefficiency is felt. The maintenance role of leading consensus is more difficult to achieve on-line (Harasim, 1993).

**Mediated Communication**

Two factors differentiate a VLT from a face-to-face team: 1.) team members who are “out of sight” and unless a face-to-face introduction has occurred, who are based on an impression established by text and description, and 2.) a reliance on connections between team members made through electronic or computer-mediated technology. Both facilitators and team members must rely on virtual (as opposed to tangible, touchable) connections in order to achieve goals. The result may be a perceived loss of control and security for both the facilitator and the team member. Members fear a loss of productivity if that connection is not reliable or effective.

**Facilitation**

To facilitate is “to free from difficulties or obstacles; to make easier; to aid; to assist” (Bailey, 1996). VLTs are generally facilitated both from the outside (by the educator) and within (by team members). The role of the outside facilitator (the educator) in on-line environments is changed from that of face-to-face instruction. The role of the outside facilitator, because of
the nature of VLTs, entails 1.) ensuring that no barriers (technical, informational or motivational) exist to team learning, 2.) ensuring essential elements for learning are accessible (such as interaction, task information, and feedback), and 3.) aiding team members in times of conflict or confusion.

**Ten Proven Techniques for Virtual Learning Team Facilitators**

**Tips for Facilitating Motivation and Efficacy**

**Tip #1**—Help team members manage “cyberstress” by helping them feel connected to the facilitator and other team members. Help learners overcome initial stress by sending a detailed advance e-mail at the onset of the team activity. Include a welcome, a description of the team goals and desired outcomes, and tips on being a successful team member in an online course. Ask members to contribute personal information about themselves as a first communication to the VLT. Ask them to include their background, familiarity with the task/problem, and talents/contributions they will be bringing to the team. As the course continues, manage the stress resulting from delayed communications by sending “receipt” messages. A receipt message is a short feedback message indicating that, although you cannot immediately respond to the learner’s message or review the assignment, you received it. Encourage team members to do the same. Help teams establish ground rules for frequency of checking computer-mediated communications.

**Tip #2**—Plan frequent e-mail prompts to help team members overcome procrastination. It is important to help team members sustain participation. “The major reason for disappearance has to do with a student’s feelings of not being connected” (Crouch and Montecino, 1997). E-mail reminders are useful in helping to keep the team activity in the forefront of learner’s thoughts. E-mails should not be nagging, but serve as friendly reminders to log-on to the site, ask if assistance is required or for reports on team progress.

**Tips for Facilitating Problem-Solving**

VLT activities for problem solving typically require methods that encourage both creativity and decision making. Activities which integrate knowledge and skill sets with real problems and contexts may include case scenarios, simulations, team research and reporting, negotiation, and decision making. The facilitator of problem solving must be skilled at supporting the phases of problem solving and in helping teams achieve consensus.

**Tip #3**—Provide a variety of tools to support the different phases of problem solving. Provide each team an exclusive area on the course website for posting team resources and strawman solutions. Because problem solving requires both exploration and consensus, VLTs should have the ability to access and post hypertext resources for information searching and sharing, as well as tools to develop and debate solutions. Provide a combination of tools for different stages of problem solving. If the problem or case study will take several sessions to solve, teams will benefit from access to an asynchronous tool that can be used to keep the history of the team’s discussions and negotiations. If the problem can be resolved in a single sitting, a synchronous tool for discussing and defending individual perspectives or even voting can be useful. Asynchronous problem solving is best supplemented with a synchronous tool during stages of negotiation and decision making.
Tip #4—Assist team members when they struggle with achieving consensus. Teams often appreciate the intervention of a neutral facilitator when it comes time to make critical decisions or select among alternatives. Explore methods for polling team members, and for conducting on-line voting. The summary is an effective tool for leading to consensus. Often team members are too busy looking forward to see where they have been. Review team progress, and summarize it as you see it. For example, “I see you are developing two pretty distinct alternatives. The first appears to focus on the navigation needs of the learner. The second focuses on the simplicity of design. Which do you feel are priority given the goal of immediate access?”

Tips for Facilitating Skill Building

Activities that allow for the development of skills may include small group projects and expert modeling. The facilitator of skill development must be expert at designing authentic projects, offering timely and meaningful feedback, modeling, and leading effective reflection and debriefs of skill activities.

Tip #5—Assemble teams strategically based on task and talent. In online environments, larger groups are less productive and have more difficulty arriving at consensus, so consider 3–4 members per team as a target (Dennis & Galuppo, 1993). If possible, teams can be balanced on talent and experience (e.g., with HTML) so that an “expert” in the team is able to provide modeling of the skills and scaffolding for other team members. Assess the skills targeted for development. Design tasks around the targeted skills, and communicate them through clearly stated objectives. Focus tasks on the development of a single competency area, or a small number of skills.

Tip #6—Provide timely and meaningful feedback. Skill building depends on frequent practice and feedback. The facilitator can use semi-private and private communications for feedback. Semi-private communications can be established by providing “exclusive” threaded discussions, chat rooms or Listservs accessible only by team members. Individual feedback should be conducted via e-mail. The facilitator should plan and use process checks as part of project activities. A process check is a planned “check point” for communication, reporting, and questioning on a project’s progress. Synchronous tools are effective for conducting process checks. When the activity is complete, conduct an asynchronous debrief discussion. The facilitator should use questioning techniques that stimulate reflection and processing. Modeling difficult tasks and behaviors is another form of feedback, allowing students to compare their outcomes to a benchmark or standard. Use hyperlinks to show learners examples of completed projects, forms, or reports on the course website or in threaded discussion.

Tips for Facilitating Knowledge Construction

Activities that develop new concepts, contexts, and meaning may include reading, information searching and sharing, discussion, inquiry, and reflection. The facilitator of knowledge construction must be skilled at scaffolding discussion, and encouraging exploration and elaboration.
Tip #7—Scaffold topical discussions using a threaded discussion (asynchronous) tool. An effective scaffolded discussion involves a.) providing an initial structure and b.) facilitating concept construction through questioning. The structure can be minimal. If the discussion topic is new to learners, post a topic name along with 1-2 open-ended questions to initiate thinking. This allows students to construct the concepts and detail. Facilitators should avoid dominating discussions by using relay questioning techniques and only participating when necessary. To encourage continued contributions, reward participants’ thoughtful responses with short affirmations. Finally, when discussion objectives have been met, the facilitator can quickly “point to” the learning with a brief summary. Summaries provide both rewards and reinforcement.

Tip #8—Encourage elaboration through questioning and hypertext linking. As in face-to-face facilitation, effective questioning techniques are useful to encourage elaboration. Use open-ended questions to stimulate a response that builds on prior concepts. For example, “Jack, you indicated ‘a survey as one way to gather information for a needs assessment.’ What other techniques could you employ?” Hyperlinks to additional information or expertise can also be used for stimulating elaboration. Many Internet communication tools accept HTML links within the message body. The facilitator should model the use of hypertext in her responses. In addition, e-mail links can be included as a way to access outside experts willing to participate in discussions or private e-mail exchanges.

Tips for Resolving Conflict

Teams will rely on the facilitator to intervene in times of dysfunction. It is the facilitator’s primary function to remove these obstacles to learning.

Tip #9—Discourage judgment, criticism and personal attacks. Carefully phrase retributions to comments that are clearly not constructive. For example, “While I realize that we will not always agree with all point of view expressed on this forum, this is a reminder to reflect and build on ideas, not judge the person.” This type of conflict can be avoided if teams adopt ground rules that encourage members to suspend judgment and accept diverse views. Post the rules at the beginning of a team activity or on the course website. Monitor the interaction and remind members when a contribution is outside of the accepted rules.

Tip #10—Intervene to highlight areas of common ground among conflicting team members. Team members will expect the facilitator to intervene when conflicts get personal or unproductive. Start by helping team members see areas within their conflict that they agree upon. For example, “Sara and Tom, you seem to be at a stand still. In reviewing your discussion, it appears that you are both concerned that the end product be visually appealing. Is that correct?” Encourage the use of synchronous tools to resolve heated conflict in a timely fashion. Phone conferences may be more effective than computer-mediated communication to resolve personal conflict.

Drawing on a theoretical framework emergent from constructivism, systems theory and group dynamics, this paper presented ten proven tips for facilitators of virtual learning teams (VLTs). An on-line facilitator’s required skills range from selecting and designing appropriate on-line tasks to assembling teams and removing obstacles to team task and maintenance roles. Of greatest importance is to intervene on any matter that deters a team’s technical, informational, or motivational needs. As more courses migrate to computer-
mediated environments, on-line facilitation skills will become increasingly critical to educators.

References


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