



**U.S. Army Research Institute
for the Behavioral and Social Sciences**

Research Report 1911

**Peer-to-Peer Training Facilitator's Guide:
Development and Evaluation**

**Michele N. Costanza, Bruce C. Leibrecht,
and William Cooper**
Northrop Grumman Technical Services

William R. Sanders
U.S. Army Research Institute

September 2009

**U.S. Army Research Institute
for the Behavioral and Social Sciences**

**A Directorate of the Department of the Army
Deputy Chief of Staff, G1**

Authorized and approved for distribution:



BARBARA A. BLACK, Ph.D.
Research Program Manager
Training and Leader Development
Division



MICHELLE SAMS, Ph.D.
Director

Research accomplished under contract
for the Department of the Army

Northrop Grumman Technical Services

Technical review by

Martin L. Bink, U.S. Army Research Institute
Vincent J. Carlisle, Battle Command Knowledge System
Combined Arms Center, TRADOC

NOTICES

DISTRIBUTION: Primary distribution of this Research Report has been made by ARI. Please address correspondence concerning distribution of reports to: U.S. Army Research Institute for the Behavioral and Social Sciences, Attn: DAPE-ARI-ZXM, 2511 Jefferson Davis Highway, Arlington, Virginia 22202-3926

FINAL DISPOSITION: This Research Report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The findings in this Research Report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

Research Report 1911

**Peer-to-Peer Training Facilitator's Guide:
Development and Evaluation**

**Michele N. Costanza, Bruce C. Leibrecht,
and William Cooper**
Northrop Grumman Technical Services

William R. Sanders
U.S. Army Research Institute

Fort Knox Research Unit
James W. Lussier, Chief

U.S. Army Research Institute for the Behavioral and Social Sciences
2511 Jefferson Davis Highway, Arlington, Virginia 22202-3926

September 2009

Army Project Number
622785A790

Personnel, Performance
and Training Technology

Approved for public release; distribution is unlimited.

ACKNOWLEDGMENTS

We would like to thank the captains and lieutenants who participated in the formative evaluation sessions of the P2P Training Facilitator’s Guide. Thanks are also due to the following individuals and organizations for participating in interviews with our research team and sharing their perspectives on P2P training:

Chief Paul Berardi, Deputy Chief of Professional Development Bureau, Kansas City Fire Department, Kansas City, MO.

Dr. Allan Crawford, Director of Knowledge Management, Northrop Grumman Corporation, El Segundo, CA.

Mr. Tom Grady, Faculty Development Coordinator, Center for Teaching and Learning, Johnson County Community College, Overland Park, KS.

COL (Ret) Richard Kaiura, Director, Warrior Training & Leader Development Center – Stryker, Ft. Lewis, WA.

LTC (Ret) Michael Prevou, Ms. Sherry Happel, 1SG (Ret) Ronald Bascue, and CSM (Ret) Joe Pearson, U.S. Army Battle Command Knowledge System, Ft. Leavenworth, KS.

Dr. Kim Wilcox, Director, Supplemental Instruction, University of Missouri – Kansas City, MO.

PEER-TO-PEER TRAINING FACILITATOR'S GUIDE: DEVELOPMENT AND EVALUATION

EXECUTIVE SUMMARY

Research Requirement:

The peer-to-peer (P2P) training method involves people from similar social groupings, who are not professional teachers, helping each other to learn. The P2P training method has great potential for rapidly identifying emerging lessons learned and integrating these into wide-reaching Army training. This report describes the investigation of best practices in P2P training from academia, the military, and industry, and the application of those best practices, training principles, and facilitation methods to the design, development, and formative evaluation of a P2P Training Facilitator's Guide (referred to here as the "Facilitator's Guide").

Procedure:

The research involved 1) a review of the literature and training practices to identify best practices for P2P training 2) the development of the Facilitator's Guide which provides a framework for developing, delivering, and assessing P2P training, and 3) the formative evaluation of the Facilitator's Guide by representative Army officers. The review of training practices included interviews with experienced P2P facilitators, observations of the learning activities present in Battle Command Knowledge System (BCKS) and Stryker Symposiums, and participation in a Supplemental Instruction Workshop at the University of Missouri-Kansas City. The Facilitator's Guide was developed through a process of cross-walking P2P training principles against the requirements to develop, deliver, and assess training. A formative evaluation of the Facilitator's Guide was conducted with representative Army officers participating in peer group discussions in both face-to-face and video teleconference environments.

Findings:

Results indicated that Army officers benefited from the knowledge exchange during the P2P training sessions, with the majority commenting on the constructive value of the guide and the effectiveness of the P2P training sessions. Feedback on the guide was mostly positive with facilitators indicating that the guide provided an appropriate amount of information and a usable format and tools for structuring and promoting group discussions.

Utilization and Dissemination of Findings:

The results of the research provided evidence that the Facilitator's Guide can be a useful tool for Soldiers to employ when conducting peer group training sessions. Utilization of the structured approach and facilitation tools provided in the guide could facilitate discussions in small group sessions and in Army forums such as BCKS. The P2P Training Facilitator's Guide has been provided to managers at the U.S. Army Ft. Leavenworth Battle Command Knowledge

Center for review and consideration as a tool to support personnel serving as facilitators for web-based Army information forums. A related research effort titled “Methods and Measure Refinements for Outcomes Based Training” will apply P2P training methods and tools to the Ft. Knox Armored Reconnaissance Course. Another ongoing U.S. Army Research Institute for the Behavioral and Social Sciences research effort will apply the P2P training methods and tools to unit focused training that supports the Company Intelligence Support Team requirements for skill sustainment, new personnel integration, and leveraging new technology.

PEER-TO-PEER TRAINING FACILITATOR’S GUIDE: DEVELOPMENT AND EVALUATION

CONTENTS

	Page
Introduction.....	1
Requirement.....	1
Background.....	1
Research Objectives.....	2
Peer-to-Peer Training Principals.....	3
Approach.....	3
Theoretical Foundations of Peer-to-Peer Training	3
Principles of Peer Assisted Learning	5
Types of Peer-Assisted Learning	7
Peer-to-Peer Training Best Practices	8
Interviews	9
Observations	10
Review of Program Materials	10
Best Practices Summary	11
Development of the Peer-to-Peer Training Facilitator’s Guide.....	13
Development Approach	13
Facilitator’s Guide Design Features.....	15
Formative Evaluation of the Peer-to-Peer Training Facilitator’s Guide.....	17
Method	17
Formative Evaluation Results Summary	20
Summary and Transition.....	23
Summary	23
Transition	24
References.....	27

CONTENTS (continued)

Appendix A Acronyms and Abbreviations..... A-1
Appendix B Data Collection InstrumentsB-1
Appendix C Peer-to-Peer Training Facilitator’s GuideC-1

List of Tables

Table 1. Principles Underlying Peer Assisted Learning Design by Category6
Table 2. Peer-to-Peer Training Best Practices12
Table 3. Principles and Design Features for the Peer-to-Peer Training Facilitator’s Guide13
Table 4. Facilitator’s Guide Group Facilitation Goals and Socratic Question Stems15
Table 5. Assignment of Personnel to Discussion Sessions by Role, Rank, and Number19
Table 6. Frequency of Positive Ratings on P2P Training Procedures Effectiveness.....21

List of Figure

Figure 1. P2P Training Facilitators’ Guide Decision Tree16

PEER-TO-PEER TRAINING FACILITATOR'S GUIDE: DEVELOPMENT AND EVALUATION

Introduction

Requirement

The peer-to-peer (P2P) training method involves people from similar social groupings, who are not professional teachers, helping each other to learn (Topping, 2005). Often P2P training is led by a facilitator whose function is to move learners through problem identification, idea generation, feedback, and solution clarification. The P2P training approach thus has great potential for rapidly identifying emerging lessons learned, and integrating these into wide-reaching Army training. However, to ensure that the potential of P2P training is realized, the Army needs to identify the instructional principles and best practices supporting effective P2P training and incorporate them into a Soldier-friendly facilitator's guide. The guide must provide the tools, techniques, and procedures that support the development, delivery, and assessment of P2P training.

Background

The P2P training approach has been adopted and used extensively by industry, academia, and the military. The P2P training approach has been found to be effective for adult learners in a range of settings. Arendale (2001) demonstrated the effectiveness of peer learning in Supplemental Instruction (SI) programs at the undergraduate level, while Runy (2005) reported success in using peer learning to introduce physicians, nurses, and hospital administrators to new information systems software applications. Hewlett (2004) reported on the effectiveness of instructional techniques through quantitative program evaluations of Peer-Led Team Learning (PLTL) coupled with the Case Study Method. The City College of New York conducts PLTL workshops to train students who have successfully completed a course such as chemistry to become discussion group leaders in the course (Peer-Led Team Learning Workshop Project, 2007). Notably, others outlined strategies in a guidebook for implementing PLTL at the post-secondary level in academic settings (Grosser et al., 2001). Several general advantages can be identified for the P2P learning approach:

- P2P training appears ideal for adult learning. Adults learn best when they are working on current, real-life challenges and exchanging feedback with others in similar situations (Senge, 1990).
- P2P training supports the generation of new knowledge. Through reflection on specific events, discussion, and feedback, P2P exchanges can generate new explicit knowledge from participant's unspoken tacit understanding (Cianciolo, Antonakis, & Sternberg, 2001).
- Learners and facilitators can make gains in group cohesion, knowledge, and problem solving skills (Topping, 2005).

- P2P training can complement traditional forms of learning. The P2P training can build on traditional lecture presentations by encouraging the recurring exchange of ideas between learners, and by providing a source of feedback to institutional training managers on training needs and solutions (Woodie, 2005).
- P2P training can accommodate the flexible scheduling necessary to allow adult learners to attend professional development sessions. In P2P training programs, peers often can schedule and locate their own learning sessions which makes the sessions very accommodating to busy schedules (Authenticity Consulting, 2007).

The P2P Training approach can be employed to support the generation and integration of new tactics, techniques, and procedures (TTP) into Soldier training. The rapid tempo of change can easily outpace the traditional doctrine development and school house training approach (Woodie, 2005). Soldiers need to learn quickly from other Soldiers who have gained experience and insights in ways to counter the threat and accomplish the mission. The P2P Training approach focuses on bringing together Soldiers who need to learn how to perform tasks with Soldiers who have personal experience with the tasks. It should be noted that the P2P training approach can also support the dissemination of new TTP, particularly where the P2P Training sessions take place as part of a web-based forum. The forum can provide a link between the field and the school where lessons from the field can be quickly shared, and comments can be quickly gathered regarding new doctrine. The requirement for training pre-deployment and deployed units with lessons learned from similarly deployed units will likely fall to the small-unit leaders. The present P2P training research seeks to develop methods and tools that allow Soldiers to quickly and easily organize small group training sessions using structured tools and performance assessment techniques. Given the potential of web-based forums for P2P training it is particularly important to ensure that the P2P Training approach can be employed by Soldiers across distributed groups.

The success of P2P training requires that the interactions between people are shaped and encouraged to identify problems, point out contradictions, and arrive at consensus solutions. For these reasons, the role of the P2P training facilitator is critical for success; however, not all small-unit trainers are naturally adept at fostering the desired group processes. When faced with a lack of group participation, some facilitators might revert to the traditional role of instructor/lecturer in order to proceed. A number of practices supporting the delivery of P2P training employed in industry and academia have been identified and documented, which can support the implementation of P2P training by a facilitator. By identifying effective delivery methods through research, processes can be incorporated into a structured P2P Training Facilitator's Guide (referred to here as the "Facilitator's Guide") to help the less experienced facilitators create the desired collaborative learning environment.

Research Objectives

There were three primary objectives for this research. First, identify principles and best practices for P2P training by reviewing the academic, industry, and military literature, and conducting interviews. Second, integrate the P2P training principles and best practices into a Facilitator's Guide. Third, conduct a formative evaluation of the Facilitator's Guide with representative Army personnel and make revisions as necessary.

Peer-to-Peer Training Principles

Approach

The objective of the best practices investigation was to identify principles and best practices that support effective P2P training and to incorporate these into a P2P training facilitator's tool that lays out a comprehensive process for developing, delivering, and assessing P2P training. A review of the literature was conducted to identify principles and best practices that support effective P2P training.

Theoretical Foundations of Peer-to-Peer Training

A number of learning theories are relevant to the group learning setting and can contribute to the identification of principles and techniques that should be incorporated into the design of a Facilitator's Guide. Both cognitive and socio-cognitive learning theories appear to be directly applicable to peer learning. The cognitive perspective takes the position that the goal for educational programs is to help students learn "how to learn" and how to define and solve problems. Teaching involves helping learners encode information or skills, store them in long-term memory, and later select and retrieve them appropriately for future use (Fitch & Semb, 1993). Instruction involves the organization of material in some meaningful way to identify connections with other concepts, ideas, and images. Learning strategies can involve "reciprocal teaching" where teacher and students take turns leading a discussion that involves using specific metacognitive strategies, such as summarizing, questioning, clarifying, and predicting. The role of the teacher is to serve as a model of an expert learner (Cooper, 2002).

A great deal of the literature on group learning appears to follow the principles of sociocognitive learning. The sociocognitive perspective considers that learning is largely a social activity, that the way individuals think and behave to solve problems is organizationally similar to the ways that groups solve problems (Vygotsky, 1978; Johnson, Johnson, & Smith, 2007). The process of social interaction plays a central role in the learning process, allowing different methods of solving a problem and providing an opportunity to give and receive feedback on problem solving strategies. The sociocognitive approach seeks to shift the responsibility for learning from the teacher to the student through techniques such as guided participation and scaffolding. Scaffolding is an interactive process by which learners come to perform a task beyond their initial ability. The role of the teacher (or experienced peer) is to support learners by structuring activities through asking appropriate questions. The questions can serve to break a task into more manageable sub-goals, organize the task, and maintain involvement (Fitch & Semb, 1993).

Topping (2005) uses the term Peer Assisted Learning (PAL) to refer to the acquisition of knowledge and skill in a group environment. This approach to learning can be considered "sociocognitive" as activities are structured so that learning takes place through listening, explaining, questioning, and summarizing. The group learning discussions are often led by a facilitator who guides learners through problem identification, idea generation, feedback, and

solution clarification. Group members build their understanding of an ill-defined concept when required to explain it to another, transforming their thoughts into language (Topping, 2005).

Within the socio-cognitive perspective, Social Interdependence Theory is cited by the Situated Learning community as providing the basis for educational practices that support peer learning. Theorists such as Vygotsky (1978) have argued that learning is socially constructed during interaction and activity with others, and have identified corresponding educational principles for peer training. A number of peer-learning approaches have been developed that use question-asking and answering (strategic questioning) to structure interaction at a high cognitive level for a variety of learning tasks (King, 2002). A summary of these principles are provided by the Center for Academic Development (2006a):

- Social interaction causes conflict that stimulates cognitive development.
- Knowledge is actively built by learners, working together cooperatively and interdependently
- Knowledge is constructed rather than distributed.
- Knowledge and understanding are not constructed individually but in dialogue with others, and the shared understandings are “true” in that social context.
- What learners do in collaboration today, they will be able to do independently tomorrow.

Situated Learning theory (Lave & Wenger, 1991) also has roots in Social Interdependence Theory and applies to distributed group P2P exchanges in settings such as a video-teleconference (VTC) between a unit in theater and a unit stateside. Essential elements of situated group learning sessions identified by Turner & Dipinto (1996) include:

- Exploration: Instruction is problem-based, students explore solutions to real-world challenges.
- Teaching on a need-to-know basis: Students learn what they need to know to solve the problem at hand.
- Mastery-oriented help: Peers strive to help peers understand; not to solve problems for them.
- Seeking and giving help: Strategies require peers to actively seek out and provide help to each other.
- Teacher as facilitator of peer collaboration: Facilitation skills are essential.
- Student experts: Success depends on the expertise of the students and how this expertise is leveraged to benefit the group.
- Teacher as co-learner: Teachers co-learn with students, and consolidate their knowledge.
- Peer assessment: Peers must know how to assess their peers’ understanding.
- Understanding the audience: Individual student strengths and weaknesses must be understood and leveraged.
- Sense of community: Team learning experiences increase group cohesion.

The type of knowledge to be learned must also be considered when developing a training approach. Explicit knowledge can be captured in written form and conveyed through traditional means of instruction. Tacit knowledge can be ill-defined, based on personal experience, and hard to articulate, which lends itself to a collaborative group interaction training approach (Cianciolo et al., 2001). The P2P training should be useful for groups seeking to rapidly

exchange and refine tacit knowledge; however, sometimes it is not possible to bring group members together for face-to-face training sessions. Woodie (2005) has provided a review of Army collaborative online forums and concluded that they can be an effective way of sharing tacit knowledge between geographically separated learners. The collaborative forum can allow Soldiers to experience practical examples of tasks, reflect on solutions from their experience, share ideas with a community of experts, and verbalize, clarify, and record problem solutions. Woodie (2005) has suggested that 85% of leader decision-making is based on tacit knowledge. While the suggestion must be somewhat speculative there is a great need to focus on training tacit knowledge.

Principles of Peer Assisted Learning

Four key principles were identified in the review of the learning theory literature which directly address the processes and features that contribute to success in a group learning situation: (1) scaffolding, (2) the role of the peer group leader or facilitator, (3) the process of social interaction, and (4) the need for repeated knowledge assessment. The principles shaped the design of the learning process presented in the Facilitator's Guide.

Scaffolding. Scaffolding in education is a temporary support mechanism. Students receive assistance early on to complete tasks, then as their proficiency increases, that support is gradually removed. In this fashion the student takes on more and more responsibility for their own learning (Bransford, 2000). One of the principles guiding PAL is the idea that learning benefits from a scaffold-like structuring of learning events, where novices are incrementally guided through a complex task by a facilitator who models the processes and behaviors of effective learning.

The role of the facilitator. Another principle of PAL is the importance of the role of the peer leader. Attitude toward teaching, skills in tutoring (questioning, observing, listening, and diagnosing), and knowledge of the subject matter are important qualities for the peer leader, who fills the role of mentor. Peer leaders are selected based on their previous success in the courses and their status as role models for other learners (Grosser, et al., 2001; Center for Academic Development, 2006a; Capstick, 2004).

Social interaction. Social interaction is another central principle of PAL. Johnson et al., (2007) described the interaction patterns evident in successful social interdependence, where positive interdependence results in *promotive interaction*: “individuals encouraging and facilitating each other's efforts to complete tasks, achieve, or produce in order to reach the group's goals. It consists of a number of variables, including mutual help and assistance, exchange of needed resources, effective communication, mutual influence, trust, and constructive management of conflict” (p. 17). Collaborative learning techniques encourage learning through social interaction and participation (Center for Academic Development, 2006a).

Assessment of knowledge. The need for assessment of learner knowledge before, during, and after a learning session is also a guiding principle for PAL. Before a session starts, the facilitator should either formally or informally survey the group of learners to determine their background knowledge on a topic. A formal survey might involve a brief pre-test on the topic.

An informal survey might ask each participant to describe their understanding of a topic. During a session, the facilitator uses guided questioning techniques to assess and further learner understanding. After a session, the facilitator reviews not only what was learned but how the solutions were determined (Center for Academic Development, 2006b; Collison & Parcell, 2004). The U.S. Army's Interim Field Manual (FMI) 6-01 titled "Battle Command Knowledge Management Cell" (Department of the Army, 2007) describes the knowledge assessment process for peer learning: *Learning Before* is asking who has done this project before and what can we learn from them. *Learning During* is stopping at intervals during a session to check if it is on course, what has been learned, and are there any adjustments needed. *Learning After* is capturing what happened, what was learned, and how can we apply it next time."

Topping and Ehly (2001) synthesized their review of the group learning research into a single theoretical model which accommodates a number of the learning principles identified in the literature. The model identifies principles and procedures that were incorporated as design features in the Facilitator's Guide (see Table 1). The model is valuable as it provides a framework for organizing a number of learning principles within the five categories of 1) Organization and Engagement, 2) Cognitive Conflict, 3) Scaffolding, 4) Communication, and 5) Affect.

Table 1

Principles Underlying Peer Assisted Learning Design by Category

1. Organization and Engagement

- Develop specific, assessable learning goals.
- Employ structural features that promote group learning interactions.
- Adapt to constraints and opportunities present in the learning environment.

2. Cognitive Conflict

- Introduce conflict to suspend or breakdown existing beliefs.
- Address alternative solutions in real-world complex problem situations.

3. Scaffolding & Error Management

- Facilitator serves as model of expert learning process.
- Facilitator adjusts learning demands to maximize learner progress.
- Peer group is responsible for error detection, diagnosis, correction.

4. Communication Skills

- Non-traditional Socratic dialogue and group interaction skills are needed.
- Verbalizing ill-defined ideas is essential to generating new knowledge.

5. Affect

- Peer-to-peer eliminates the authority figure, fosters trust and idea sharing.
 - Facilitator models competence and group ownership of solutions.
-

Topping (2005) provides a valuable summary of the organizational and structural features of the PAL learning environment that serve to shape the learning interaction. The PAL stresses the importance of keeping learners engaged in the learning task, deciding on clear learning

objectives, and the importance of immediate feedback in the small group learning process. The group learning session typically employs cognitive conflict where competing solutions are offered or where a solution is examined in a new setting, to challenge or break down assumptions so that new ideas can be considered. Scaffolding typically refers to the process where a facilitator adjusts learning demands to the needs of each learner, assessing the initial level of learner understanding, and monitoring learner performance during the learning process. It must be noted however that in PAL the responsibilities of scaffolding are extended to all members of the group. Here, the peer group is also responsible for detecting and correcting misconceptions, which generate much of the cognitive exercise and benefit for the group. The facilitator supports the process by providing a model of non-critical questioning and feedback that is essential for the learning strategy. Group learning sessions make a heavy demand upon the communication skills of both the facilitator and learners, and serve to develop those skills. A participant might never have truly grasped a concept until having to explain it to another. The affective component of peer learning refers to the importance of building trust in discussion so that learners feel free to ask questions and resolve misunderstandings in a non-judgmental environment. A central proposition for P2P training is that peer discussions provide an environment where no one holds a position of authority that may inhibit the free flow of ideas (Topping, 2005).

Types of Peer Assisted Learning

Arendale (2001) compiled an annotated bibliography of peer cooperative learning programs at the post-secondary level, dividing the programs into six groups:

- Accelerated Learning Groups.
- Emerging Scholars Program.
- Peer-Led Team Learning.
- Structured Learning Assistance.
- Supplemental Instruction/PAL.
- Video-based Supplemental Instruction.

Of these programs, SI/PAL, and PLTL appear most frequently in the literature. Although Supplemental Instruction (SI) is considered to be the predecessor of most variants of PAL programs in higher education, the term “peer learning” has replaced “supplemental” for most programs. The SI approach began at the University of Missouri – Kansas City in 1973 as an academic support program developed to target historically difficult courses. To improve student performance and retention, the difficult courses were targeted, rather than targeting “at-risk” students. According to Arendale (2001), SI is the only PAL program validated by the U.S. Department of Education as improving student academic achievement and graduation rates. As of December 1997 faculty and staff from 719 institutions across the nation had received training to implement their own SI.

Although PAL in the United Kingdom traces its origins to the American model of SI, there is a notable difference. While SI targets historically difficult courses with the goal of improving student performance and retention, PAL in the United Kingdom focuses on the entire first year college experience. The PAL offers first year college students the opportunity to adjust

to university life, learn effective study habits, and improve their understanding of the course content through small group discussion (Capstick, 2004).

Quantitative program evaluations showed the effectiveness of PLTL coupled with the Case Study Method (Hewlett, 2004). Students who have successfully completed a historically difficult course, such as chemistry, are trained to become team leads at The City University of New York's PLTL workshops (Peer-Led Team Learning Workshop Project, 2007). Grosser et al., (2001) developed a guidebook of strategies for administrators and peer leaders to implement PLTL at the post-secondary level in academic settings.

Much like the PAL programs in academia, the corporate Team Peer Assist approach maintains that peer learning is the overarching objective. In their book, *Learning to Fly: Practical Lessons from One of the World's Leading Knowledge Companies*, Collison and Parcell (2004) outline the methods of the Team Peer Assist used by the British Petroleum corporation. The Team Peer Assist includes steps for learning before, learning during, and learning after, similar to FMI 6-01 Battle Command Knowledge Management Cell (Department of the Army, 2007). The learning during process also involves using the U.S. Army's After Action Review steps to determine if the project is on course and what the team has learned.

From the examination of the various types of peer-assisted learning programs several common themes emerge that should be incorporated into the design of the P2P Facilitator's Guide. The programs all view social interaction as playing a central role in the learning process. The programs rely on a facilitator who has the skills to structure group interactions, to use guided questioning to bring out group member ideas in a non-threatening manner, and to model an ideal learner. Questioning is also employed to identify the entry-level knowledge of each participant and the learning that occurs during the course of discussions so as to tailor learning to the needs of the individual. Some of the programs include facilitator guides with examples of questions that the facilitator can employ to encourage group members to share their ideas and personal experiences. In developing the P2P Facilitator's Guide emphasis was placed on providing a short set of guidelines, question examples, and checklist tools that make the task of organizing and conducting an effective P2P training session easier and less time consuming for the facilitator.

Peer-to-Peer Training Best Practices

To supplement the literature review, information was gathered from experienced P2P facilitators and coordinators from academia, military, and industry to identify best practices for P2P training. The investigation employed interviews, observations of P2P training sessions, and the examination of P2P training program materials. Interviews included facilitators and coordinators from the U.S. Army's Battle Command Knowledge System (BCKS) and Stryker Symposiums where geographically separate groups share information. To obtain an understanding of the current state of collaborative learning in industry and academia, a Supplemental Instruction Workshop held at the University of Missouri-Kansas City was attended by a member of the research team. Instructional program materials from BCKS handbooks and academic web sites were also examined.

Interviews

Interviews were conducted using a survey designed to cover the three areas of P2P training: development, delivery, and assessment (see Appendix B). The interviews were conducted either face-to-face, teleconference, or online via email. The individuals selected for the interviews were identified as founders and champions of knowledge management or peer collaboration initiatives within their organizations. They have years of experience, along with industry or academic training in the field of knowledge management or education. Many of the interviewees had authored the handbooks, guides, and doctrine on peer collaboration used within their organizations. They are the ones primarily responsible for establishing and supporting the administrative side of peer collaboration. A summary of interview sites and information gathered in interviews follows.

U.S. Army Stryker Brigade Combat Team (SBCT) Warfighters' Forum. The first interviews were conducted with a Stryker Symposium facilitator at the I Corps SBCT Warfighters' Forum at Fort Lewis, Washington. The Warfighters' Forum is a web-based information exchange and repository site designed to enhance SBCT leader, leader-team, and unit training. The SBCT Warfighters' Forum supports the goal of peer learning and collaboration through self-moderated discussions and quarterly Stryker Symposiums. Prior to the interview a Stryker Symposium was observed. From the interview and limited observations it appeared that while the symposium had the technical capability for two-way discussions, information exchanges typically took the form of a formal briefing. An interview was also conducted with the Virtual Right Seat Ride program coordinators at the I Corps Battle Command Training Center to discuss how they trained small unit leaders. The coordinators stated that they needed a facilitation guide to support the conduct of video teleconference group discussion training sessions at the small unit level.

U.S. Army Battle Command Knowledge System. The second set of interviews took place at the BCKS offices at Fort Leavenworth, KS. The BCKS provides a venue where lessons from training or combat operations can be shared via on-line collaborative professional forums. The mission of BCKS is to support the online generation, application, management and exploitation of Army knowledge to foster collaboration among Soldiers and units in order to: share experience; facilitate leader development and intuitive decision-making; and support development of organizations and teams (Summers & Costanza, 2007). The BCKS representatives stated that they needed training materials to develop forum leader facilitator skills to maintain active participation and information sharing when using the on-line forum communications medium.

Northrop Grumman Corporation, Knowledge Management, Team Peer Assist. An interview was conducted with Director of Knowledge Management at the Northrop Grumman Corporation offices at El Segundo, California, to discuss the organization's approach to peer training which is referred to as "Team Peer Assist." The Director stressed that for the method to be successful it must adapt to the culture of the organization. In practice it appears that Team Peer Assist is an effective way to transfer lessons learned from one team to another. The

organization connects the team that “knows” with the team that is encountering the same problems and “needs to know.”

Observations

Data was collected at the learning sites where the social interactions naturally occur. Four P2P collaborative learning programs were observed. Observations were conducted at a Situated Instruction workshop, a Stryker Symposium, a BCKS online forum, and a knowledge management conference sponsored by the Army.

To gather best practices from academia, a member of the research team attended the Supplemental Instruction Workshop for Supervisors at the University of Missouri-Kansas City. This provided the opportunity to observe procedures for selecting and training SI discussion leaders and methods for evaluating program effectiveness. The workshop provided a review of the theoretical frameworks underlying the SI learning model and effective learning strategies. The SI workshop provided hands-on demonstrations of learning session activities and SI simulations that demonstrate how SI principles can be implemented.

To gather best practices from the military, a member of the research team observed several U.S. Army group information exchange sessions. Observations made at Stryker Symposium IV provided real-world examples of the practices employed by Soldiers to specify peer learning and collaboration objectives. Issues regarding group preparation time were noted, along with session recording and closure techniques.

Observations made at the BCKS Non-Commissioned Officer (NCO) Net Online Professional Forum provided insights as to the practices employed in an Army knowledge exchange forum. The researcher observed the information exchanged between NCOs for the “Trouble at Checkpoint 4” discussion thread. Observation of this web-based discussion forum was valuable as it presented an example of multimedia training, specifically a video-based cultural awareness training product visited by thousands of NCOs.

A researcher also attended the Army Operational Knowledge Management Conference, Fort Leavenworth, KS. The conference had direct relevance to the development of the P2P Facilitator’s Guide because knowledge management is a discipline that promotes an integrated approach to identifying, retrieving, evaluating, and sharing tacit and explicit knowledge assets to meet mission objectives (Department of the Army, 2008). The conference provided an opportunity to observe examples of networked virtual communities designed to facilitate knowledge collaboration.

Review of Program Materials

Training program materials related to P2P training at four sites were obtained and examined to explore training principles and practices.

Supplemental Instruction at the University of Missouri – Kansas City. The research team obtained and reviewed SI Supervisor and Peer Leader Manuals (Center for Academic Development, 2006a, 2006b). The supervisor manual provides the theoretical framework and

research-based methods behind the success of the SI program at the undergraduate level. The leader manual was written for the peer leaders who facilitate the SI sessions at their colleges. The International Center for Supplemental Instruction web site <http://www.umkc.edu/cad/si/> was also examined. The site provides the history and background of the SI program, as well as links to additional resources. The SI email discussion group “SI-Net” provides an email discussion group for individuals and organizations interested in SI, where ideas and information can be exchanged (located on the web at www.umkc.edu/cad/SI/si-net.html/).

Stryker Symposium. Several products were obtained from the Stryker Symposium IV and SBCT Warfighters’ Forum. The Warrior Training and Leader Development Center – Stryker Information Brief was reviewed. This briefing describes how the center serves as a conduit for SBCT operational experience for training and doctrine, using symposium and a web forum for information sharing. The Stryker Symposium Working Group Facilitator/Scribe Responsibility briefing slides were also obtained. The briefing provides instructions and background for facilitating and capturing working group discussions to share knowledge horizontally via group discussion and vertically via structured database entry. The Memorandum of Instruction – Stryker Symposium IV, 16 August 2007 was also obtained which describes the purpose and rationale of the Stryker Symposium.

Battle Command Knowledge System documents. The research team obtained the BCKS Handbook for Building Professional Forums (April 2006) which describes the process for developing and sustaining successful professional forums. The BCKS Metrics and Reports briefing (23 July 2007) was also reviewed. The document describes the metrics and reports designed into BCKS and describes the rationale for case-based learning. The Battle Command Knowledge Management Cell interim field manual FMI 6-01 (Department of the Army, 2007) was also reviewed. The manual outlines the new Army doctrine for knowledge management, including Team Peer Assist training concepts and practices, which include the assessment of participant knowledge before, during, and after a training session.

Peer Assisted Learning, Bournemouth University, UK. In addition to the observed sites, materials from the Bournemouth University PAL program provide an overview of PAL, the principles upon which PAL is based, and information on implementing the PAL scheme (located on the web at <http://pal.bournemouth.ac.uk/>). The site provides useful links to extensive facilitator resources to include techniques, activities, and tools for PAL sessions. The site discusses the role of the P2P facilitator and how it differs from the traditional instructor role.

Best Practices Summary

Best practices identified through the review were considered for incorporation into the Facilitator’s Guide. A “best practice” was defined as “a P2P process proven effective over time and in more than one setting.” Table 2 identifies the P2P training best practices organized within three stages: Development, Delivery, and Assessment. The table also indicates the type of P2P training the best practices support. Development refers to those decisions and actions taken by a P2P training facilitator in preparation for conducting a P2P session. Delivery refers to the decisions and actions the facilitator employs during the conduct of the session. Assessment is an overarching process that occurs before, during, and after P2P learning sessions. The stages

overlap, and are not entirely sequential. While Assessment is addressed as the third separate stage, assessment must be planned for in Development and conducted during Delivery.

Table 2

Peer-to-Peer Training Best Practices

Develop

- Start with an approved measurable training objective.
 - Follow a systematic “decision tree” approach to development, to use as a memory device, and to look for options.
 - Consider facilitator and learners’ location(s), which may dictate discussion methods: face-to-face, VTC, online forum.
 - Incorporate activities that promote social interaction.
 - Select facilitators who are knowledgeable about the subject matter.
 - Ask yourself, “How will I build trust and promote the importance of P2P training?”
 - Use P2P to generate new knowledge, not to convey factual knowledge.
 - Focus on the group members’ personal knowledge for richness and accessibility.
 - Use a structured approach for rapid and comprehensive topic development.
 - Develop a clear title and objective for the discussion that will be remembered.
 - Establish an objective.
 - Use other checklist points.
 - Prepare for different modes of delivery: Face-to-face, conference call, forum, VTC.
 - Develop your skills:
 - Train and rehearse where possible.
 - Complete practical exercises in the Facilitator’s Guide.
 - Quiz yourself on key phrases.
 - Be able to explain why we use the P2P method.
 - Right seat ride a session with another facilitator or team up together.
 - Coordinate and identify constraints and opportunities that shape how you will deliver and organize the training.
-

Deliver

- Select the delivery method as either face-to-face or mediated by a technology platform, synchronously or asynchronously.
 - Deliver the P2P training between a peer leader and a small group of no more than 8 to 12 learners.
 - Deliver the sessions within no more than one to two hours.
 - Appoint a scribe to capture TTPs and push for resolution.
 - Actively avoid falling into traditional “Instructor – Student” roles.
 - Understand how the P2P delivery includes assessment of learning before and learning during the P2P session.
 - Assess Learning Before:
 - Determine initial level of understanding of learners.
 - Adjust for group and individuals accordingly (teaming, tasking, role assignment, topic generality/specificity).
 - Assess Learning During:
 - Observe and query to estimate understanding and target individuals.
 - Use P2P collaborative group techniques to encourage participation.
 - Use Socratic dialogue questioning techniques to lead learners to come up with ideas and solutions.
 - Employ different group configurations to generate exchanges given group characteristics and topic structure opportunities.
 - Employ different group tasks to generate active involvement and responsibility for ideas.
-

(Table Continues)

Assess

- Learning Before: Assessment of the understanding each student brings to the discussion session.
 - Establish performance measures, such as meeting training objectives.
 - Develop formative and summative evaluation methods.
 - Learning During: The facilitator's assessment of individual student understanding of the subject matter during the session in order to adjust to student needs.
 - Generate products such as TTPs and standing operating procedures as appropriate.
 - Assess whether any generated product can be posted and shared as improving the knowledge base.
 - Learning After: Assessment of both student learning and program success in meeting the course training objectives. Compare to Learning Before to estimate participant knowledge gains.
 - Measure whether the desired training objectives are achieved and adjust as necessary.
 - Estimate the return on investment compared to the most likely alternative training approach in terms of cost, time, or other factors.
 - Compare Learning Before to Learning After to identify knowledge gain (delta) achieved using the P2P approach.
 - Identify whether changes are needed in the P2P approach or techniques.
 - Use interviews, observations, and self-reports comparative studies.
 - Pre- and post-training surveys.
 - Practical exercises.
-

Development of the Peer-to-Peer Training Facilitator's Guide

Development Approach

The design of the Facilitator's Guide was based on the analysis and synthesis of instructional principles from the literature and best practices garnered from P2P web sites and facilitators. Table 3 provides an overview of how the P2P training principles were cross-walked with design features of the Facilitator's Guide. A concept map was developed with three main headings to fit the sequential P2P stages of Development, Delivery, and Assessment. As the content for the guide developed, the concept map was annotated to include the steps a facilitator would most likely take when facilitating a session, regardless of whether the training sessions were for co-located or distributed groups. The guide was designed for a target audience of Soldiers, facilitators, and training developers to provide a framework for developing, delivering, and assessing P2P training. To aid the training of new facilitators, the guide incorporates short practical exercises demonstrating how P2P training techniques and procedures can be applied to address a wide range of training needs.

Table 3

Principles and Design Features for the Peer-to-Peer Training Facilitator's Guide

Principle	Design Feature	Section in Facilitator's Guide
Organization and Structure		
Develop specific, assessable learning goals.	Measurable training objective. Tools and techniques to assess baseline	1.1 2.1, 3.1, Pre-Training

	knowledge before the session.	Survey
<i>(Table Continues)</i>		
	Tools and techniques to assess learning during the session.	2.2 and 3.2
	Tools and techniques to assess learning after the session.	3.3, Post-Training Survey
Employ structural features that promote group learning interactions.	Decision tree.	Figure 1
	Scenario of a real-world event.	2.1
	Discussion formats.	2.2.3 and Figure 2
	Structured session: 1) Training objective, 2) Title, 3) Agenda, 4) Rules, 5) Intro, 6) Discussion format, 7) Tech support.	1.1 - 1.9
	Facilitator training supported.	Practical Exercises, Best Practice Solutions.
	Facilitator structuring of training supported by job aids.	Training Steps Checklist, Facilitator Planning Worksheet
Adapt to constraints and opportunities present in the learning environments.	Decision tree; Check for tech support.	1.7 and Figure 1
Cognitive Conflict		
Introduce conflict to breakdown/suspend existing beliefs.	Discussion formats, Guided questioning Techniques, and “If/Then” examples of facilitation techniques.	2.2
Address alternative solutions in complex real-world problem situations.	Delivery, focus on Soldier personal experiences.	2.2
Scaffolding and Error Management		
Model expert learning process.	Model behavior. Gather feedback.	2.2, Facilitator Session Assessment Form
Adjust learning demands to maximize learner progress.	Tools and techniques to assess baseline knowledge before the session. Tools/techniques to assess learning during session.	2.1, 2.2, 3.1, 3.2, Pre-Training Survey
Make peer group detect, diagnosis, and correct errors.	“If/Then” techniques.	2.2.2
Communication Skills		
Socratic dialogue and group interaction skills.	Guided questioning techniques.	2.2.2
Verbalize ill-defined ideas essential to generating new knowledge.	Techniques for getting learners beyond “yes/no” responses and transforming ideas into their own words.	2.2.2
Affect		

Eliminate authority figure, foster trust, and share ideas. Techniques for avoiding “instructor” role used by a peer leader who is not a full time trainer. 2.2

Facilitator’s Guide Design Features

The entire Facilitator’s Guide is available at Appendix C. The Facilitator’s Guide provides a structure and process that helps a facilitator to quickly and easily develop, deliver, and assess a P2P training session (Costanza, Leibrecht, Cooper, & Sanders, 2009). The guide provides a description of the P2P process and practical exercises. The practical exercises present problem-based scenarios that the facilitator might encounter in a group P2P training session. The guide provides examples of group facilitation goals and Socratic question stems that the facilitator can become familiar with and use to support and foster discussions in small group sessions (see Table 4). The guide is formatted for both hard-copy and digital delivery. The theoretical and practical exercise sections of the guide are hyperlinked to make navigating through the guide easier. Several job aids were included in the appendices of the guide:

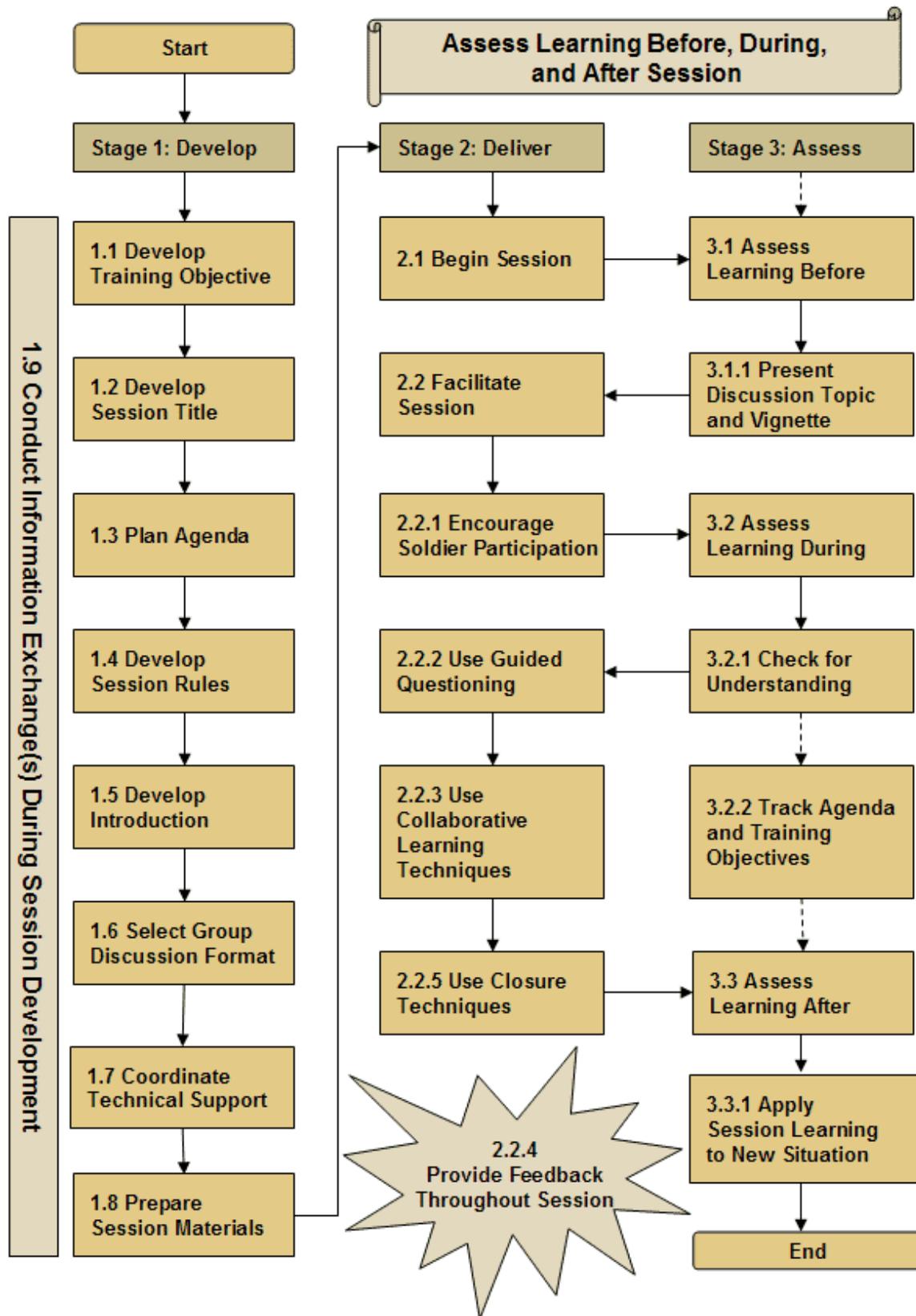
- P2P Training Steps and Procedures Checklist.
- Facilitator Planning Worksheet.
- Pre- and Post-Training Participant Surveys.
- Facilitator Session Assessment Form.
- Facilitator Socratic Questions.

Table 4

Facilitator’s Guide Group Facilitation Goals and Socratic Question Stems

Facilitate the Session	Example Facilitator Questions
<ul style="list-style-type: none"> • Keep the Soldiers involved in the discussions. • Use questions to encourage group discussion that makes the Soldiers do the thinking and talking. • Enable Soldiers to process information rather than looking for a single “correct” answer. • Stimulate the internalization of new information by causing Soldiers to employ critical thinking. • Require Soldiers to clarify the information, put the information in their own words, and relate it to their own knowledge base and experience. • The facilitator must follow the discussions closely in order to recognize when he needs to engage in the dialog. 	<ul style="list-style-type: none"> • What are the key considerations in planning...? • What experiences have you had that led you to that conclusion? • How would you do that? • What are some pitfalls to watch for when conducting ... • What are some situations in which that has worked? • Can anyone else elaborate on that more?

The guide includes a decision tree following the three stages of Development, Delivery, and Assessment; detailed guidance on how to accomplish each of the three stages; practical exercises and best practice solutions; resources; and job aids. Figure 1 presents the Facilitators’ Guide decision tree.



1. P2P Training Facilitators' Guide Decision Tree.

Figure

Formative Evaluation of the Peer-to-Peer Training Facilitator's Guide

Method

The P2P training approach has been adopted and used extensively by industry academia, and the military, and has been found to be effective for adult learners in a range of settings. The goal of the formative evaluation was not to provide an additional assessment of the P2P training approach. Instead, the evaluation explored whether the stand-alone Facilitator's Guide could be used effectively by representative U.S. Army personnel to develop, deliver, and assess group training that employs group participation, idea generation, and timely feedback as elements of the learning strategy. The formative evaluation specifically targeted ill-defined, non-doctrinal subject matter that reflect the evolving TTPs necessary to meet the challenges of common tasks present in current Counter Insurgency (COIN) operations. Data collection tools included pre- and post-training surveys, interview guides, and researcher observation forms. Based on the results of the formative evaluation, the Facilitator's Guide was finalized and published (Costanza et al., 2009).

Participants. Participants were five captains (CPT), one first lieutenant (1LT), and five second lieutenants (2LT) from one U.S. Army installation. For the CPTs, one was a Troop Commander, one was a Squadron Operations Officer, and three were enrolled in institutional training. The 1LT was a Troop Executive Officer. The five 2LTs were all enrolled in institutional training. The five CPTs had prior deployment experience to either Iraq or Afghanistan. The one 1LT did not have prior deployment experience. Only one of the five 2LTs had prior deployment experience. All 11 belonged to the Armor branch with a 19A Army Occupation Code /Military Occupational Specialty on active duty status. All five CPTs reviewed the Facilitator's Guide materials, however only three of the CPTs actually served as the facilitator for a training session. When not serving as a facilitator, the CPTs participated in sessions as learners. All five 2LTs and the one 1LT served as inexperienced learners for the discussion sessions.

Apparatus. Facilitators were allowed to use the Facilitator's Guide during group discussions. Butcher paper mounted on an easel was made available. Both the facilitators and learners had note tablets and pencils available. Audio and video recorders captured the discussions during both exercises. A single conference room served as the site for the co-located group discussion sessions. For the distributed group discussion sessions the conference room was connected via VTC equipment to a second conference room located in a separate building. A Polycom 7000 video teleconferencing system provided an audio and video link between the facilitator and learners at the two locations. The Polycom camera could be slewed and zoomed to focus on the butcher paper graphics. For the distributed group a laptop computer with a graphics program was available to share graphic images between locations.

Data collection instruments. Pre-training survey and post-training survey instruments for facilitators and learners were provided in hardcopy form. Facilitators used a comments sheet to record their reactions and opinions as they prepared for the P2P session. Evaluators from the research team used a demographic form, observation guide, hG13otwash guide, and feedback

questionnaires to capture assessment data. Data collection instruments used in the formative evaluation were as follows:

- *Demographic Survey.* The survey gathered information about rank/grade, military education, assignment history, deployment experience. Questions also addressed experience with peer training, VTCs, and online discussion forums (Appendix B).
- *Facilitator Comments Sheet.* Facilitators used the Comments Sheet to record their impressions of the Facilitator's Guide and recorded the amount of time spent using each section of the Facilitator's Guide to prepare for their discussion session (Appendix B).
- *Pre-Training Survey.* The survey asked learners to rate their knowledge on the session topic before the training session. The Pre-Training Survey is included in the Facilitator's Guide for the facilitator to administer before a P2P training session (Appendix C).
- *Post-Training Survey.* The survey asked learners to rate their knowledge on the session topic after the training session. The questions also asked for feedback about the parts of the session the learners liked best and least. The survey is included in the Facilitator's Guide (Appendix C).
- *P2P Feedback Survey.* The survey (facilitator and learner versions) contains nine questions that address key phases of the training session and solicit suggestions for improvement. The facilitator's version also includes questions regarding the Facilitator's Guide procedures (Appendix B).
- *Observation Guide.* Used by the research team, the guide contains 53 questions regarding the group training sessions (Appendix B).
- *Hotwash Guide.* The guide was used to structure interviews with both the facilitator and learners held immediately after the group discussion sessions (Appendix B).

Procedure. The research plan called for eight 1LT/CPTs, and eight 2LTs to participate in the research. While 16 personnel were requested only 11 (five CPTs, one 1LT, and five 2LTs) were provided. The five CPTs first attended an orientation session at which time they were given the Facilitator's Guide to plan and structure a discussion session to be held approximately five days later. Researchers gathered feedback on the usability of the Facilitator's Guide for preparing a discussion from all six, however, only three CPTs actually led sessions.

The formative evaluation investigated the utility of the Facilitator's Guide in leading both face-to-face (i.e., co-located) group discussions as well as discussions between groups that were geographically separate (i.e., distributed). One example of distributed groups would be video teleconference discussions. The co-located and distributed discussion sessions were held on two separate days and it was not possible to rearrange dates of participation to balance the numbers of personnel assigned to the co-located and distributed discussion sessions. Data collection instruments were administered before the discussion sessions to gather information about the inexperienced learner groups' knowledge of the subject, and after the discussions to gather information about the effectiveness of the training approach.

Table 5 summarizes the assignment of personnel to discussion sessions by participant role, rank, and number assigned. Four CPTs, the 1LT, and two 2LTs participated in the two co-located discussion sessions. Two CPTs took turns facilitating a session, so that one would serve

as the facilitator while the other served as a learner. Due to troop support constraints only one CPT was initially scheduled to participate in the distributed discussion sessions, along with three 2LTs. Two CPTs who participated in the co-located discussion sessions volunteered to participate in the distributed discussion session. While two distributed discussion sessions were originally called for in the research plan, the second session was canceled due to troop support constraints.

Table 5

Assignment of Personnel to Discussion Sessions by Role, Rank, and Number

Session	Co-located Discussion Session 1	Co-located Discussion Session 2	Distributed Discussion Session 3
Participant Role	Number of personnel participating		
CPT Facilitator	1	1	1
CPT Learner	3	3	2*
1LT Learner	1	1	0
2LT Learner	2	2	3

* Note: The two CPTs who served as co-located session facilitators also served as learners for the distributed discussion session.

Co-located condition. A single group of four CPTs, one 1LT, and two 2LTs participated in both discussion sessions. All participants were seated in a conference room setting around a single table for the co-located session. A video-camera and a digital voice recorder were used to capture the dialogue. An easel with butcher paper was provided for use as a visual aid. Two observers sat at the end of the room opposite the facilitator. One CPT served as the facilitator for Discussion Session 1 which addressed TTPs and decision-making for route clearance operations. The facilitator first described several TTPs that apply to route clearance operations and then described a hypothetical route clearance operation in detail based on his own experience. As the facilitator described the operation he would stop at decision points and have group members offer their own suggestions as to the proper course of action to take. As an example, one facilitator asked the group whether they should stop their mounted platoon to engage and clear an enemy ambush, or push through the attack and radio back to follow-on units to engage the enemy. The facilitator used Socratic dialogue to probe and bring out the rational underlying participant responses. The learners were encouraged to identify solutions based on their training, and to direct questions to other group members. The duration of Discussion Session 1 was 40 minutes. After a short break a different CPT served as the facilitator for Discussion Session 2 which addressed TTPs and decision-making for combat outpost operations. The discussion followed the same pattern of discussion activities as Discussion Session 1, with the facilitator first describing a detailed vignette based on his own experience, and then leading a group discussion of decision-making in response to a variety of events. The duration of Discussion Session 2 was 49 minutes.

Distributed condition. A CPT who had not participated in co-located Discussion Session 1 or 2 served as the facilitator for Distributed Discussion Session 3. The facilitator and two other CPTs serving as learners were located in the ARI Fort Knox VTC conference room. Three 2LTs (who had not participated in Discussion Sessions 1 or 2) were located in a VTC conference room at a different building at Fort Knox. One observer was assigned to each of the two VTC rooms. The facilitator led a discussion of TTPs and decision-making for route clearance operations. The discussion followed the pattern where the facilitator would first present a few TTPs associated with route clearance, and then describe a detailed vignette based on his own experience. The facilitator employed techniques presented in the Facilitator’s Guide to bring each group member into the discussion of decision-making in response to realistic events. The duration of the single discussion session was 59 minutes. Distributed Discussion Session 4 was not conducted due to troop support constraints.

Formative Evaluation Results Summary

The objective for the research effort was to produce a Facilitator’s Guide that can be used to quickly develop, deliver, and assess group training sessions. Reactions to the Facilitator’s Guide tended to be positive. Personnel serving as facilitators and learners viewed the facilitation processes described in the Facilitator’s Guide as sound and indicated that the sessions were beneficial for the 2LT learners.

Ease of use of the Facilitator’s Guide. Overall, the five CPTs who reviewed the Facilitator’s Guide indicated that it was easy to use, and that the recommended discussion structure proved effective in the actual discussion sessions. The reviewers responded to a series of usability questions in the P2P Participant Feedback Survey (Appendix B) using a Likert-scale rating format (1=strongly disagree, 4=strongly agree). The reviewers all provided positive ratings (“agree” or “strongly agree”) for the Facilitator’s Guide with respect to the following “ease of use” survey items:

- Well organized and easy to follow.
- Made it easy for me to get ready for the session.
- Gives all the information needed.
- Includes sufficient how-to information and job-aids.
- Contains practical exercises that are useful.

Effectiveness of the P2P approach for group discussions. The P2P Participant Feedback Survey (facilitator version) was used to gather participant feedback from the CPTs as to whether the P2P method was effective in conducting the group discussions. One CPT was unable to participate in the group discussions. Each of the four remaining CPTs indicated agreement with the following “effective discussion structure” survey items based on Likert-scale ratings:

- Allocated about the right amount of time for each topic.
- Provided enough time for everyone to state their views.
- Included enough time to answer all questions.
- Allocated about the right amount of time for each topic.
- Organized the group’s activities in the right sequence.

All 11 of the participants used the P2P Participant Feedback Survey to rate the effectiveness of the P2P discussion session procedures. Table 6 presents a frequency count of participant positive ratings (3=agree and 4=strongly agree) for the P2P training process for both the co-located and distributed discussion conditions. All seven of the participants from the co-located sessions indicated that the P2P training procedures maintained an active level of engagement and participation while keeping the discussion on track and focused. In contrast, two of the six participants in the distributed session indicated that the P2P approach was not successful in this regard. Three of the six participants in the distributed session indicated that the P2P training procedures did not give an adequate sense of how much participants learned from the session.

Table 6

Frequency of Positive Ratings on P2P Training Procedures Effectiveness

P2P Training Procedures	Co-located Session “Agree” Ratings	Distributed Session “Agree” Ratings
Kept learners engaged and maintained their attention.	7 of 7	4 of 6
Encouraged everyone to share their thoughts and questions.	7 of 7	4 of 6
Conveyed enough detail on each topic.	6 of 7	3 of 6
Kept the group on track and focused.	7 of 7	4 of 6
Gave adequate sense of how much learners gained.	7 of 7	3 of 6

Note: Positive ratings include 3=“agree” and 4=“strongly agree.”

Feedback from the 2LTs provides some evidence that the structure for discussion presented in the Facilitator’s Guide was effective in getting less experienced personnel involved in discussions. In responding to the P2P Participant Feedback Survey questions the majority of the lieutenants agreed (“agree” or “strongly agree”) that the P2P training session structure:

- Facilitated the exchange of information.
- Encouraged participants to explore all aspects of the topic.
- Achieved a good balance of speaking and listening.
- Enabled them to learn effectively with a clear focus.
- Acknowledged their thoughts and insights accurately.
- Answered all their questions satisfactorily.
- Created good group interaction.

Knowledge gains resulting from the P2P training sessions. For the formative evaluation, the five second lieutenants and one first lieutenant served as inexperienced learners. The

inexperienced learners responded to questions in the Pre- and Post-Training Surveys included in the Facilitator's Guide to rate their knowledge of the discussion session topic both before and after the discussion session. The five-point rating scale provided the anchors (1=Inadequate), (3=Good), and (5=Superior). Only two of the six inexperienced learners rated their prior knowledge on the topic covered as "Good" or better before the P2P training session. Following the P2P training session, four out of six rated their knowledge of the topic as "good" or better. Learners provided the following comments regarding knowledge gains after the training sessions:

- "Learned a great deal about the subject of route clearance, including the decision-making process from mission assignment through mission execution. The importance of having a sound process that can consider various changing factors (terrain, threat, resources, capabilities of personnel) to make an adequate "Learned decision."
- "Learned about some of the things that need to be thought about when preparing to accomplish or perform a certain objective (combat outpost building or route clearing). Also learned that I have a great deal more to learn."
- "Options to consider before, during, and after route clearance missions. Capabilities of the different vehicles used during suburban operation. Decisions that will have to be made and generally who would make them in regards to different situations faced in route clearance."

Facilitator's guide could support some unit training needs. The 11 participants responded to a P2P Participant Feedback Survey question which asked them to indicate the types of unit training programs where P2P training could be employed. All of the participants selected "Pre-Deployment Training" as a unit training program where the P2P training method could be used. Eight of the participants also indicated that P2P could be used for "Tactical Training," and six indicated that P2P could be used for "Standard Operating Procedure Updating." The participants also identified training areas they felt were not amenable to P2P training. Only two participants indicated that P2P could be used for "Combat Center Training," and only one participant indicated that P2P could be used for "Technical Training" and for "Doctrinal Training."

Informal discussion format facilitates learning. One question presented in the hotwash discussion session for all 11 participants was "How well did the training techniques work?" Feedback indicated that the informal small group discussion format outlined in the Facilitator's Guide promoted knowledge exchange:

- "This was an extremely productive session – the P2P method is very effective because of interactions with small groups. I also liked how the discussion was clearly bounded to route clearance and its components – this is important to get into the subject in depth."
- "Very positive form of interaction – will be very welcome prior to deployment."
- "The round table idea of discussion . . . promoted great dialog."
- "I liked the open forum kind of environment. The ability to have discussion stopped to answer questions helps key ideas to be better communicated."
- "I loved the immediacy of experience brought to the table. The discussion didn't feel like memorizing doctrine – it felt like experience, urgent and real."

The P2P Training Approach Supports Scaffolding from Experts to Novices. Scaffolding refers to the process where a facilitator adjusts learning demands to the needs of each learner. In the Hotwash interview participants suggested that the discussion group format would be particularly valuable for the less-experienced second lieutenants, and that the format would support having a large proportion of less experienced participants in discussion with a small group of subject matter experts. As one second lieutenant commented, “Very useful but would be better with larger inexperienced group either equal or greater to experienced group.” A captain who served as a facilitator commented, “Overall, this was a great idea. I just wish we had more second lieutenants present. A five to one ratio would be a good balance.”

Integrating Graphics and Simulation into P2P Training. In hotwash interviews, some participants expressed an interest in having graphics and/or simulation technology available to support the training sessions. One participant explained, “Would like to have had a way to simulate the event learned both before discussion and after to judge what was learned [and] what needed to be learned and [the] experience level of learners.” Some participants suggested that the P2P training could include secret or classified level briefings using secure internet technology. Participants also noted the advantages of using a computer whiteboard for drawing, and even the butcher paper chart. It should be noted that during the distributed session the facilitator choose to focus the camera on the butcher paper chart rather than developing and sharing graphics using the laptop computer.

Summary and Transition

Summary

The objectives of this research were to identify principles and best practices for P2P training and incorporate these into the design and development of the Facilitator’s Guide. The design of the Facilitator’s Guide was based on the analysis and synthesis of instructional principles from the literature and best practices garnered from expert facilitators. The P2P strategy applies methods and techniques that systematically move learners through problem identification, idea generation, feedback, and solution clarification. During development of the Facilitator’s Guide a concept map was created with three main headings to fit the sequential P2P stages of development, delivery, and assessment. As the content for the guide was developed, the concept map was annotated to include the steps a facilitator would most likely take when facilitating a session, regardless of whether the training sessions were co-located or distributed.

The Facilitator’s Guide was designed to enable Soldiers selected to facilitate a P2P training session to understand the purpose of P2P training and their role as a facilitator. The Facilitator’s Guide provides a decision tree flowchart that graphically depicts the sequence of tasks required to develop, deliver, and assess a P2P training session. The Facilitator’s Guide provides detailed guidance, practical exercises, best practice solutions, resources, and job aids which should make the task of facilitating a P2P training session easier and less time consuming.

The formative evaluation results provide evidence that the Facilitator’s Guide can be a useful tool for Soldiers to employ when conducting group training sessions. The ratings and

comments obtained from the facilitator and learner feedback forms tended to be positive. Soldiers serving as facilitators for the formative evaluation perceived the Facilitator's Guide as providing useful structure within the informal small group discussion format. They also viewed the training sessions as beneficial to the learners. Lieutenants serving as learners also viewed the P2P sessions as a positive learning experience. Given those results, utilization of the structured approach and facilitation tools provided in the guide could facilitate discussions in small group training sessions. Overall, the results of the research provided evidence that the Facilitator's Guide can be a useful tool for Soldiers to employ when conducting group training sessions.

Transition

The potential of P2P training is being increasingly realized in a range of business and academic environments, as reviewed. This section briefly examines how the transition of P2P methods, and particularly the Facilitator's Guide, may improve learning in the Army.

Utilization of the structured approach and facilitation tools provided in the Facilitator's Guide could support and foster discussions in small group sessions and in Army forums such as BCKS. The P2P Training Facilitator's Guide (Costanza, Leibrecht, Cooper, & Sanders, 2009) has been provided to managers at the U.S. Army Ft. Leavenworth Battle Command Knowledge Center for review and consideration as a tool to support personnel serving as facilitators for web-based Army information forums.

An ARI-sponsored research effort was initiated in FY09 to apply P2P training and measurement methods to improve the ability of the Ft. Knox Army Reconnaissance Course (ARC) instructors to develop, deliver, and assess training. The ARC instructors employ an Outcomes Based Training (OBT) approach that addresses intangible attributes to include confidence, accountability, and initiative that are essential for Soldier development and operational performance. The desired outcomes for OBT are Soldiers, leaders, and units who have learned to teach themselves. The P2P focus on peer-assisted learning supports the OBT goal of developing problem solving skills by teaching Soldiers to "learn for themselves." A core principle of P2P is the idea that learning occurs best when facilitated, with novices guided through a complex task by a facilitator who models the processes and behaviors of effective learning. The new research effort calls for the development of P2P training methods and measures to improve the performance of ARC instructors. The P2P training principles and Facilitator's Guide approach appears to have great potential for equipping OBT instructors with the methods and tools needed to guide ARC students through the process of identifying, sharing, and evaluating potential lessons learned. The application of the P2P training principles and methods should be effective in preparing the ARC Soldiers to learn and act independently in complex environments.

The U.S. Army has recently recognized the need for the Company Intelligence Support Team (CoIST) within the company-sized maneuver force. In FY09 the Commanding General, Joint Readiness Training Center (JRTC) and Fort Polk requested a joint study supported by JRTC Operations Group and ARI to address CoIST activities at JRTC. The research effort presents an opportunity to transfer the P2P Facilitator's Guide methods and products to address this critical Army training requirement. The joint study investigates the optimal manning

configuration of the CoIST team and the adequacy with which current CoIST team training supports Soldier training needs. At present the company must man and train an intelligence section with available personnel and limited training resources. The research effort includes an examination of several critical CoIST training issues that might be addressed through P2P training methods and products:

- Skills sustainment: Units need training methods and tools to sustain CoIST skills after receiving initial training from a Mobile Training Team.
- Unit training of replacement personnel: Given the high levels of personnel turbulence, training methods and tools are needed that facilitate the integration of new personnel into the CoIST.
- Training for new technology insertion: The CoIST will often encounter new technology upon deployment. Training methods and techniques are needed that facilitate the rapid adaptation to new technologies.

In conclusion, the P2P training approach has great potential for rapidly identifying emerging lessons learned and integrating them into wide-reaching Army training. To demonstrate how the potential of P2P training can be realized, the present research identified the instructional principles and best practices supporting effective P2P training and incorporated them into a Soldier-friendly Facilitator's Guide. Training development, delivery, and assessment methods are provided in the Facilitator's Guide (Appendix C) that can be used by inexperienced facilitators to create an effective and efficient collaborative learning environment. The P2P training methods and tools developed in this research are being transferred, adapted, and applied to meet real-world Army training needs driven by the rapidly changing COIN environment.

Leave blank

References

- Arendale, D. R. (2001). *Review of research concerning the effectiveness of Supplemental Instruction from the University of Missouri-Kansas City and other institutions from across the United States*. Retrieved September 16, 2007 from the University of Minnesota Web site: <http://www.tc.umn.edu/Earend011/SIresearchreview01.pdf>
- Authenticity Consulting. (2007). Retrieved March 20, 2007 from the World Wide Web at <http://www.authenticityconsulting.com>
- Bransford, J. D. (2000). *How People Learn: Brain, Mind, Experience, and School*. National Research Council, National Academy Press Washington, DC. Retrieved from web site Designing Principles for Creating Effective Web-Based Learning Resources in the Geosciences <http://serc.carleton.edu/NAGTWorkshops/webdesign/Scaffolding/>
- Capstick, S. (2004). *Benefits and shortcoming in peer-assisted learning in higher education: Appraisals by students*. Retrieved September 16, 2007 from Bournemouth University, Peer Assisted Learning Web site: <http://pal.bournemouth.ac.uk/documents/BnftsShrtcmngsofPAL3.pdf>
- Center for Academic Development. (2006a). *Supplemental Instruction supervisor manual*. Kansas City: The Curators of the University of Missouri.
- Center for Academic Development. (2006b). *Supplemental Instruction leader manual*. Kansas City: The Curators of the University of Missouri.
- Cianciolo, A. T., Antonakis, J., & Sternberg, R. J. (2001). *Developing effective military leaders: Facilitating the acquisition of experience-based, tacit knowledge* (ARI Research Note 2001-11). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Collison, C. & Parcell, G. (2004). *Learning to fly: Practical knowledge management from leading and learning organizations*. West Sussex: Capstone Publishing Limited.
- Cooper, S. M. (2002). Classroom choices for enabling peer learning. *Theory into Practice*, 41 (1), 53-57.
- Costanza, M., Leibrecht, B., Cooper, W., & Sanders, W. (2009) *Peer-to-Peer Training Facilitator's Guide* (ARI Research Product 2009-03). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Department of the Army. (2007). *Battle command knowledge management cell* (FMI 6-01). Washington, DC: Author.

- Department of the Army. (2008). *4th Annual Army operational knowledge management conference*. Retrieved from the US Army Combined Arms Center web site: usacac.army.mil/CAC2/BCKS/aokm2008/aokmConf2008.htm
- Fitch, M. A., & Semb, G. B. (1993). *The ASK model of peer tutoring: Theory and research* (Office of Naval Research Report NPRDC-TN-93-7). San Diego, CA: U.S. Navy Personnel Research and Development Center.
- Grosser, D. K., Cracolice, M. S., Kampmeier, J. A., Roth, V., Strozak, V. & Varma-Nelson, P. (2001). *Peer-led team learning: A guidebook*. Upper Saddle River, NJ: Prentice Hall.
- Hewlett, J. A. (February 2004). In search of synergy. *Journal of College Science Teaching*, 33 (4), 28-31.
- Johnson, D. W., Johnson, R. T., & Smith, K. (2007). The state of cooperative learning in postsecondary and professional settings. *Education Psychology Review*, 19, 15-29.
- King, A. (2002). Structuring peer interaction to promote high-level cognitive processing. *Theory Into Practice*. Vol 41, No. 1, Winter 2002. College of Education. The Ohio State University.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press.
- Peer-Led Team Learning Workshop Project (2007). Retrieved from the World Wide Web at <http://www.sci.ccnycuniversity.edu/~chemwksp/pltl-ccny.html>
- Runy, L. A. (2005). Physician and nurse training: Involving clinicians in planning, teaching eases skepticism. *Hospitals and Health Networks*, 4 (2), 30-33.
- Senge, P.M. (1990). *The fifth discipline*. New York: Doubleday.
- Summers, K. L., & Costanza, M. (2007). The next gunpowder: The power of BCKS and the Command Net forum. *Military Review*, 87 (2), 70-73.
- Topping, K. J. (2005). Trends in peer learning. *Educational Psychology*, 25 (6), 631-645.
- Topping, K. J. & Ehly, S. W. (2001). Peer Assisted Learning: A framework for consultation. *Journal of Educational and Psychological Consultation*, 12 (2), 113-132.
- Turner, S. V. & Dipinto, V. M. (1996). Peer collaboration in a hypermedia learning environment. *Journal of Research on Technology in Education*, 28 (5).
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, Massachusetts: Harvard University Press.

Woodie, T. E. (2005). *Learning together: The role of the online community in Army professional education*. Fort Leavenworth, KS: School of Advanced Military Studies (DTIC No. ADA436308)

Appendix A

Acronyms and Abbreviations

1LT	First Lieutenant
2LT	Second Lieutenant
ARC	Armored Reconnaissance Course
BCKS	Battle Command Knowledge System
COIN	Counter Insurgency
CoIST	Company Intelligence Support Team
CPT	Captain
FMI	Interim Field Manual
JRTC	Joint Readiness Training Center
NCO	Non-Commissioned Officer
OBT	Outcomes Based Training
P2P	Peer-to-Peer
PAL	Peer-Assisted Learning
PLTL	Peer-Led Team Learning
SBCT	Stryker Brigade Combat Team
SI	Supplemental Instruction
TTP	Tactics, Techniques, and Procedures
VTC	Video-teleconference

Appendix B

Data Collection Instruments

PRIVACY AND INFORMED CONSENT STATEMENT

NAME _____
(Please Print)

DATE _____

About this document: *This form advises you, as a participant in a research project, of the purpose of the information you provide and the privacy rights you have.*

PRIVACY ACT STATEMENT

AUTHORITY: Title 10, USC, Sec 4503

PRINCIPAL PURPOSE: The data collected under the terms of this form are to be used for research purposes only.

ROUTINE USE: The research data are being collected by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI). Audio-video recordings will be used for research purposes only. Full confidentiality of your responses and audio-video recordings will be maintained in the processing of these data.

DISCLOSURE: Your participation in this data collection is voluntary. We encourage you to provide complete and accurate information in the interests of research, but there will be no effect on you for not providing any or all of the information.

All of the data we collect will be used for research purposes only. Your individual confidentiality will be maintained.

By signing below, I am indicating that I have read the above privacy act statement and understand the privacy rights it guarantees me.

INFORMED CONSENT

Scientists in ARI are conducting research to develop training support tools. The present research aims to develop guidelines for unit Soldiers who are using peer-to-peer methods to meet critical training requirements. Peer-to-peer training might be used to transfer tactical information from experienced to inexperienced Soldiers, to develop up-to-date standing operating procedures, and so on. We want to test a guide that we've developed for facilitators of peer-to-peer sessions, and gather your feedback about the guidelines it contains.

Your role in this project involves four stages. In the first stage selected leaders will prepare for a peer-to-peer training session. Second, all members of a group will complete two questionnaires on their background and expectations. Third, the group will participate in a collaborative session to fully implement the peer-to-peer techniques. Finally, we'll ask you to fill out a questionnaire addressing your reactions and opinions, and to participate in a hotwash. We will be making an audio-video recording of the collaborative session for research purposes only. By signing the form below you are consenting to the audio-video recording for the purpose of this research project.

Your participation in this project is voluntary. You may choose not to participate. However, the information you share will be extremely valuable in helping units conduct effective peer-to-peer training sessions. The data in this experiment are for research purposes only and will not be attributed to you.

If you have questions about the use or confidentiality of the data, please contact Mr. William R. Sanders at ARI, (502) 624-2613 or william.r.sanders@us.army.mil.

Signature

Print Name



INTERVIEW PROTOCOL

Administrative information:

Organization:

Location

Date

Point of contact

Develop:

When was the program developed?

Why was the P2P program developed?

Who is the target audience?

How was the program developed? Is their program based on published P2P research or model? If so, what etc...

How are the facilitators selected (based on previous experience and/or availability)?

How many facilitators are used and how are they allocated?

Do facilitators receive facilitation training? What facilitation training do they receive?

How is facilitation guidance provided to facilitators? If written or electronic, may we have a copy?

Are learning or training objectives established prior to the sessions? If yes, how are they determined?

What preparation and coordination is required? What are the support requirements (equipment, facilities, recorders, other support personnel)?

Deliver:

Describe the target audience

participants, and how they're organized

of subgroups or # of stations participating

What type of facility is use for the P2P training?

What is their delivery method (large group, small group, 1-1; VTC, in-person, on-line, ...)

What are the support requirements used? (equipment, recorders, ...)

How long are the sessions?

What type of interactions occur between the facilitators and the participants, as well as between the participants themselves?

Assess:

What is their assessment of how well the P2P training is working?

How has it benefited the organization?

How has the program changed over time?

What would they change to make it better?

What is the cornerstone of their P2P program (best practice)?

FACILITATOR COMMENTS SHEET

Name: _____ Topic: _____

Please use this sheet to record your activities and reactions as you prepare for the tryout session in ARI's peer-to-peer training research project.

What problems do you encounter in using the *Facilitator's Guide*?

What questions or issues does the *Facilitator's Guide* fail to resolve for you?

By the end of your preparation, how much time did you spend on the following?

- a. Studying the Facilitator's Guide _____ hrs
- b. Working on practical exercises _____ hrs
- c. Deciding how to deliver my information _____ hrs
- d. Preparing slides, props, handouts, etc. _____ hrs
- e. Deciding how to assess participant learning _____ hrs
- f. Coordinating with ARI researchers _____ hrs
- g. Rehearsing for the P2P session _____ hrs
- h. Other (describe): _____ hrs
- i. Other (describe): _____ hrs

How much more time would you need to fully prepare for the session?

As your preparation ends, how confident are you of the following?

	No Confidence	Slight Confidence	Moderate Confidence	Strong Confidence
a. My knowledge of the assigned topic	1	2	3	4
b. My understanding of the P2P method	1	2	3	4
c. The materials I've prepared for the session	1	2	3	4
d. The capabilities of the training environment	1	2	3	4
e. The time available to cover my topic	1	2	3	4
f. My readiness to serve as a facilitator	1	2	3	4

How would you improve the *Facilitator's Guide*?

Other comments?

OBSERVATION GUIDE

Peer-to-Peer Facilitator's Guide Tryout

About this document: This guide serves as a job aid for researchers observing P2P sessions (delivery and assessment) during evaluation tryouts.

Issues of Interest:

- What evidence is there that the facilitators prepared in advance?
- What instructional and learning processes are at work during the session?
- What types of interaction occur – facilitator-to-learners and learners-to-learners?
- How does the environment foster or impede interaction and knowledge exchange?
- What problems occur and how are they resolved?

Guidelines for Data Collection:

- Take along a copy of the *Peer-to-Peer Training Facilitator's Guide*.
- Gather detailed data regarding the questions contained in the main body of this guide.
- Record your own reactions and thoughts, marking them clearly as your own.
- Monitor audio-video recording to ensure a complete record is captured.
- Compile your notes promptly after the session ends, while the information is still fresh.

Rules of the Road:

- Avoid influencing, participating in, or assisting in the conduct of training.
- Remember we're not evaluating the skills or performance of the facilitators.
- When co-located with participants, stay quietly in the background and take notes discreetly.
- Keep your opinions and comments about the training private.

Expected Schedule for a Session		
0830-0900	Pre-Exercise Readyng	Researchers verify readiness of equipment and materials
0900-0915	Participant Orientation	Exercise Director conducts introductions and briefing
0915-0925	Pre-Training Survey	Observers administer Demographic Survey + Pre-Training Survey
0925-1000	P2P Delivery, Topic 1	Facilitator(s) lead training/assessment IAW Facilitator's Guide
1000-1005	Break	Researchers get ready for delivery of next topic
1005-1040	P2P Delivery, Topic 2	Facilitator(s) lead training/assessment IAW Facilitator's Guide
1040-1050	Break	Researchers get ready for remaining data collection
1050-1100	Post-Training Survey	Observers administer Post-Training Survey (facilitators, participants)
1100-1115	Feedback Questionnaire	Observers administer questionnaire to facilitators and participants
1115-1155	Hotwash	Observers lead discussion of P2P process and lessons learned
1155-1200	Wrap-up	Exercise Director makes closing statements and releases troops

Comments:

Part III: Orientation

9. What questions did the facilitators ask?

10. What questions did the learners ask?

11. Did the orientation slides provide sufficient information?

12. What signs of misunderstanding or confusion did you see?

13. Are the facilitators and learners ready to participate constructively in a P2P session?

Part IV: Topic #1

14. How well did the facilitator appear to be prepared for his topic? What materials did he bring (notes, slides, props, handouts, etc.)?

15. What training/learning objectives did the facilitator present?

16. What techniques did the facilitator use to promote learning and manage the session?

17. What visual tools did the facilitator use (slides, whiteboard, butcher paper, etc.)?

18. How did the facilitator encourage all group members to participate?

19. To what extent did the learners participate and how?

20. How would you summarize the interactions between the facilitator and the learners?

21. How would you summarize the interactions among the learners?

22. How did the facilitator assess learning on the part of the learners?

23. What role did the other facilitators play during Topic #1?

24. What problems did you see? Why did they occur? How were they resolved?

Part V: Impression of Effectiveness (Topic #1)

25. How well were the training/learning objectives achieved?

26. How well did the learners engage and participate?

27. How well was the facilitator able to apply the procedures in the Facilitator's Guide?

28. How well did the facilitator answer learners' questions?

29. Did the time allow for sufficient detail to be covered?

30. Did the time allow for all questions to be answered fully?

31. How well did the physical setup and collaborative tools facilitate learning?

32. Which of the facilitator's techniques or activities worked extremely well?

33. Which procedures or arrangements were especially troublesome?

Part VI: Topic #2

34. How well did the facilitator appear to be prepared for his topic? What materials did he bring (notes, slides, props, handouts, etc.)?

35. What training/learning objectives did the facilitator present?

36. What techniques did the facilitator use to promote learning and manage the session?

37. What visual tools did the facilitator use (slides, whiteboard, butcher paper, etc.)?

38. How did the facilitator encourage all group members to participate?

39. To what extent did the learners participate and how?

40. How would you summarize the interactions between the facilitator and the learners?

41. How would you summarize the interactions among the learners?

42. How did the facilitator assess learning on the part of the learners?

43. What role did the other facilitators play during Topic #1?

44. What problems did you see? Why did they occur? How were they resolved?

Part VII: Impression of Effectiveness (Topic #2)

45. How well were the training/learning objectives achieved?

46. How well did the learners engage and participate?

47. How well was the facilitator able to apply the procedures in the Facilitator's Guide?

48. How well did the facilitator answer learners' questions?

49. Did the time allow for sufficient detail to be covered?

50. Did the time allow for all questions to be answered fully?

51. How well did the physical setup and collaborative tools facilitate learning?

52. Which of the facilitator's techniques or activities worked extremely well?

53. Which procedures or arrangements were especially troublesome?

HOTWASH GUIDE

Peer-to-Peer Facilitator’s Guide Tryout

About this document: This guide serves as a job aid for researchers moderating hotwashes at the end of evaluation tryouts.

Hotwash Goals:

- Discuss, clarify and amplify issues and themes the emerged during the session.
- Address points and issues of special concern to participants and researchers.
- Encourage participants to reflect interactively about P2P guidelines and procedures.
- Enable researchers to obtain interactive feedback directly from facilitators or learners.

Guidelines for Moderators:

- Explain the purpose of the hotwash and the general rules of the session.
- Cover as many of the questions appearing on pages 2-3 as you can in about 40 minutes.
- Pursue points of special interest to the facilitators and learners.
- Have available a copy of the *Peer-to-Peer Training Facilitator’s Guide*.
- Take reasonably detailed notes of the discussions occurring during the hotwash.
- Compile your notes promptly after the session ends, while the information is still fresh.

Special Considerations:

- Stay objective – avoid leading the participants with your own views or opinions.
- Remember that the facilitator’s skills and performance are not of interest.
- Encourage every participant to share his/her thoughts and opinions.
- Allow participants to express their thoughts fully without taking excessive time.
- Keep track of the clock so you can end the hotwash on time.

Administrative Information

1. Moderator: _____ 2. Date: _____

3. P2P method: _____ 4. Location: _____

5. Number of facilitators or learners present for the hotwash: _____

6. Hotwash start time: _____ 7. Hotwash stop time: _____

8. Other:

HOTWASH QUESTIONS

Development of Training (Facilitators Only)

- How well did the *Facilitator's Guide* help you prepare for your topic?
- How did you decide what P2P techniques to use?
- How did you decide what materials to prepare (notes, slides, props, handouts, etc.)?
- What problems did you encounter in preparing for the session?
- How would you improve the development features of the *Facilitator's Guide*?

Delivery of Training

- (Facilitators only) How well were you able to implement the delivery procedures from the *Facilitator's Guide*?
- How well did the training techniques work? How would you improve them?
- Was the session controlled well enough? How could things work better?
- How did you feel about the physical environment and group arrangement?
- Was everyone able to participate effectively? How would you improve participation?
- How well did the training aids work (slides, whiteboard, butcher paper, etc.)? What might work better?
- What do you think about the group interactions that took place?
- Did you have enough time to cover topic-1 adequately? How about topic-2?
- How well did learning take place during topic-1? During topic-2?
- What problems did facilitators (or learners) encounter? How did they impact learning? How could they be avoided?

Assessment of Learning

- (Facilitators only) Did the *Facilitator's Guide* provide useful assessment procedures? What else would you recommend?
- How well did the pre-training and post-training surveys work? How would you improve them?
- Did you have enough feedback as the session unfolded? What other feedback would you like?

General Issues

- (Facilitators only) How useful is the *Facilitator's Guide*? How could it be improved?
- Which procedures or features did you like best in today's training session?
- What are the two greatest challenges in conducting P2P training such as this?
- When do you think P2P training would be especially useful for unit training?
- What tools or resources would units need to conduct P2P training successfully?
- What other thoughts do you have about P2P training techniques and procedures?

DEMOGRAPHIC SURVEY

1. Name: _____ 2. Today's Date: _____
3. Rank/Grade: _____ 4. Branch: _____ 5. AOC/MOS _____
- Time in Service as: 6a. Officer ___ yrs ___ mos 6b. Enlisted ___ yrs ___ mos
7. Status (circle one): Active Duty Army Reserve National Guard
8. Unit: _____ 9. Current Duty Position: _____
10. Time in Current Duty Position: ___ mos

11. Military Education (Check all that apply)

OES	
OBC/BOLC III	
PLDC/WLC	
OAC/CPTs Career Course	
PCC	
Other _____	

NCOES	
BNCOC	
ANCOC	
1SG Course	
USASMA	
Other _____	

12. Military Experience (Write in total months for each that applies)

Officer	
PLT LDR	mos
CO/TRP XO	mos
CO/TRP CDR	mos
BN/SQDN Staff Ofcr	mos

NCO	
Vehicle Commander	mos
Section SGT	mos
PLT SGT	mos
CO/TRP 1SG	mos

13. Deployment Experience (Provide information for all that apply)

	Position(s)	Unit(s)	Time (mos)
OIF			
OEF			
Kuwait			
Bosnia			
Kosovo			
S. Amer			
Other			

14. Assignment History (Cover last three positions held, beginning with the most current one)

Position	Unit	Time (mos)
1.		
2.		
3.		

15. Do you have prior experience with peer-to-peer training? (Circle one and please describe)

3-Much Experience 2-Some Experience 1-Little Experience 0-None

16. Do you have prior experience with video conferencing (VTC)? (Circle one and please explain)

3-Much Experience 2-Some Experience 1-Little Experience 0-None

17. Do you have prior experience using online discussion forums such as Company Command.com? (Circle one and please explain)

3-Much Experience 2-Some Experience 1-Little Experience 0-None

18. Do you have prior experience using digital collaborative tools such as NetMeeting or Maneuver Control System? (Circle one and please explain)

3-Much Experience 2-Some Experience 1-Little Experience 0-None

P2P PARTICIPANT FEEDBACK (FACILITATORS)

Name: _____

Date: _____

Instructions: Please give your frank opinions about the materials and procedures used for today’s peer-to-peer (P2P) training. Write-in comments, both positive and negative, are encouraged. Use the back of this form if you need additional space.

It should take about 15 minutes to complete all questions, but there is no time limit. Your candid responses will help ARI improve the guidelines for P2P training.

1. How much do you agree/disagree that your <u>Preparation</u> (before today):	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Focused on a topic with which I was comfortable?	1	2	3	4	NA
b. Was doable in the time I had available?	1	2	3	4	NA
c. Took more effort than most Soldiers would spend?	1	2	3	4	NA
d. Required me to resolve a lot of issues and questions?	1	2	3	4	NA
e. Prompted me to coordinate with ARI researchers?	1	2	3	4	NA
f. Involved a lot of work on training materials (slides, charts, etc.)?	1	2	3	4	NA
g. Was complete and sufficient?	1	2	3	4	NA
h. Resulted in my being well prepared to serve as facilitator?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

2. How much do you agree/disagree that today’s <u>Orientation</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Set the stage well for the session?	1	2	3	4	NA
b. Provided a sufficient understanding of the P2P method?	1	2	3	4	NA
c. Was clearly presented and easy to understand?	1	2	3	4	NA
d. Got the group ready for the P2P session?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

3. How much do you agree/disagree that today's <u>Procedures</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Were clearly appropriate, given the training objectives?	1	2	3	4	NA
b. Kept participants engaged and maintained their attention?	1	2	3	4	NA
c. Encouraged everyone to share their thoughts and questions?	1	2	3	4	NA
d. Led participants to understand my information and ideas?	1	2	3	4	NA
e. Used the right mix of training aids (slides, whiteboard, etc.)?	1	2	3	4	NA
f. Conveyed enough detail on each topic?	1	2	3	4	NA
g. Made me feel like the group was interacting constructively?	1	2	3	4	NA
h. Kept the group on track and focused?	1	2	3	4	NA
i. Gave me an adequate sense of how much participants learned?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

4. How much do you agree/disagree that today's <u>Environment</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Provided adequate space for the group we had?	1	2	3	4	NA
b. Made the group feel comfortable and at ease?	1	2	3	4	NA
c. Enabled me to see and hear other members of the group clearly?	1	2	3	4	NA
d. Allowed good interaction among all members of the group?	1	2	3	4	NA
e. Enabled me to share my materials with the other participants?	1	2	3	4	NA
f. Provided all of the tools we needed for group interaction?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

5. How much do you agree/disagree that today's <u>Schedule</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Allocated about the right amount of time for each topic?	1	2	3	4	NA
b. Allowed the group to proceed at a comfortable pace?	1	2	3	4	NA
c. Provided enough time for everyone to state their views?	1	2	3	4	NA
d. Included enough time to answer all questions?	1	2	3	4	NA
e. Organized the group's activities in the right sequence?	1	2	3	4	NA
f. Gave me enough break time when I needed it?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

6. How much do you agree/disagree that today's <u>Session</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Set positive conditions for efficient training?	1	2	3	4	NA
b. Resulted in the group achieving its training objectives?	1	2	3	4	NA
c. Encouraged the group to explore all aspects of each topic?	1	2	3	4	NA
d. Enabled participants to learn a lot in a short period of time?	1	2	3	4	NA
e. Gave inexperienced officers a clear understanding of each topic?	1	2	3	4	NA
f. Answered all questions raised by the participants?	1	2	3	4	NA
g. Provided good payoff for the effort invested?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

7. How much do you agree/disagree that the <u>Facilitator's Guide</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Is easy to use?	1	2	3	4	NA
b. Is well organized and easy to follow?	1	2	3	4	NA
c. Gives all the information needed?	1	2	3	4	NA
d. Contains no unnecessary information or fluff?	1	2	3	4	NA
e. Is well written and easy to understand?	1	2	3	4	NA
f. Includes sufficient how-to information?	1	2	3	4	NA
g. Provides the right job aids?	1	2	3	4	NA
h. Contains practical exercises that are useful?	1	2	3	4	NA
i. Helped me resolve issues and questions?	1	2	3	4	NA
j. Made it easier for me to get ready for the session?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

8. What are your general impressions of the P2P method used today?

9. Considering unit training programs, where do you think P2P training could play a valuable role? (Circle all that apply)

Technical Training Tactical Training CTC Training Pre-Deployment Training SOP Updating

Other (please specify) _____

10. How would you change the preparation procedures you used before today?

11. How would you improve the delivery and assessment procedures used today?

12. How would you improve the <i>Facilitator's Guide</i> ?

P2P PARTICIPANT FEEDBACK (LEARNERS)

Name: _____

Date: _____

Instructions: Please give your frank opinions about the materials and procedures used in today’s peer-to-peer (P2P) training. Write-in comments, both positive and negative, are encouraged. Use the back of this form if you need additional space.

It should take about 15 minutes to complete all questions, but there is no time limit. Your candid responses will help ARI improve the guidelines for P2P training.

1. How much do you agree or disagree that the <u>Orientation</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Set the stage well for the session?	1	2	3	4	NA
b. Provided everything I needed to know about the P2P method?	1	2	3	4	NA
c. Was clearly presented and easy to understand?	1	2	3	4	NA
d. Made me feel ready to participate in the P2P session?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

2. How much do you agree or disagree that the <u>Procedures</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Were clearly appropriate, given the training objectives?	1	2	3	4	NA
b. Kept me engaged and maintained my attention?	1	2	3	4	NA
c. Encouraged me to share my thoughts and questions?	1	2	3	4	NA
d. Enabled me to understand others’ ideas and opinions?	1	2	3	4	NA
e. Used the right mix of training aids (slides, whiteboard, etc.)?	1	2	3	4	NA
f. Conveyed enough detail on each topic?	1	2	3	4	NA
g. Made me feel like a constructive member of the group?	1	2	3	4	NA
h. Kept the group on track and focused?	1	2	3	4	NA
i. Gave me adequate feedback on how much I learned?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

3. How much do you agree or disagree that the <u>Environment</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Provided adequate space for the group we had?	1	2	3	4	NA
b. Made me feel comfortable and at ease?	1	2	3	4	NA
c. Enabled me to see and hear other members of the group clearly?	1	2	3	4	NA
d. Allowed good interaction among all members of the group?	1	2	3	4	NA
e. Gave me a good view of the materials presented by the facilitator?	1	2	3	4	NA
f. Included all of the tools we needed for group interaction?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

4. How much do you agree or disagree that the <u>Schedule</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Allocated about the right amount of time for each topic?	1	2	3	4	NA
b. Allowed the group to proceed at a comfortable pace?	1	2	3	4	NA
c. Provided enough time for everyone to state their views?	1	2	3	4	NA
d. Included enough time for me to get all my questions answered?	1	2	3	4	NA
e. Organized the group's activities in the right sequence?	1	2	3	4	NA
f. Gave me enough break time when I needed it?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

5. How much do you agree or disagree that the <u>Session</u> :	Circle One for Each Item				
	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Appl
a. Set positive conditions for efficient training?	1	2	3	4	NA
b. Resulted in the group achieving its training objectives?	1	2	3	4	NA
c. Encouraged me to explore all aspects of each topic?	1	2	3	4	NA
d. Enabled me to learn a lot in a short period of time?	1	2	3	4	NA
e. Gave me a clear understanding of each topic?	1	2	3	4	NA
f. Ended with all my questions answered?	1	2	3	4	NA
g. Provided good payoff for the effort invested?	1	2	3	4	NA
<i>Comments and Suggestions:</i>					

Appendix C

Peer-to-Peer Training Facilitator's Guide

Peer-to-Peer Training Facilitator's Guide

A Knowledge Exchange Tool for Soldiers

1LT Garcia's Success: Countdown to a VTC

0600 hours, Forward Operating Base (FOB) Gold Sun, Iraq, First Lieutenant (1LT) Garcia is assigned the responsibility to facilitate a video-teleconference (VTC) between his unit's platoon leaders and the platoon leaders from a unit that will be deploying to his area of operations (AO) in a month. He must conduct his first session in 3 hours due to the availability of participants and the time zone differences. He will lead the group discussion to gather tactics, techniques, and procedures (TTPs) and lessons learned, but with such short notice, where should he start?

0700 hours, 1LT Garcia reads the *Peer-to-Peer Training Facilitator's Guide*. Working through the [decision tree](#), he learns about the three stages of peer-to-peer (P2P) training: [development](#), [delivery](#), and [assessment](#).

0800 hours, 1LT Garcia reflects on his deployment experiences. He asks himself several questions, such as "What do these Soldiers most need to know?" and "How will I know if they have learned it?" He writes out a [measurable training objective](#), a [session title](#), an [agenda](#), and [session rules](#). Based on the number of Soldiers participating, he selects a [group discussion format](#).

0900 hours, VTC, 1LT Garcia introduces himself and starts the session. He uses the sample [introduction](#) in the *P2P Training Facilitator's Guide* to explain the purpose of P2P training. He tracks and follows the agenda. He gives a [pre-training survey](#) and assesses [learning before](#) the session, presenting the group with a situation based on his experiences.

1000 hours, 1LT Garcia checks for understanding and assesses [learning during](#) the session with [guided questions](#). Soldiers are fully participating as 1LT Garcia uses [collaborative learning techniques](#).

1100 hours, 1LT Garcia ends a successful P2P training session with [closure techniques](#) and gives a short [post-training survey](#).

What is P2P training?

P2P training is a method for Soldiers with experience to share their knowledge and lessons learned with other Soldiers. The purpose of P2P training is to obtain good ideas, evaluate the ideas, and record them as emerging TTPs, Lessons Learned, or Standing Operating Procedures (SOPs). The P2P training is led by a P2P training facilitator in an informal setting among peers.

This guide will help you:

- Develop P2P training
- Deliver P2P training
- Assess P2P training
- Choose session strategies
- Use collaborative learning techniques

What is a P2P training facilitator?

A P2P facilitator develops, delivers, and assesses the training. Their job is to help other Soldiers think about the topic, express and evaluate ideas, and record good ideas. The P2P facilitators do not lecture. The tools and techniques in P2P training are designed to take the facilitator out of the "expert lecturer" role. The P2P process places responsibility on the Soldiers to share ideas, resolve differences, and generate effective TTPs based on real-world experience that can be shared with others.

Who should use this guide?

This guide is intended to enable Soldiers selected to facilitate a P2P training session to understand the purpose of P2P training and their role as a facilitator. This guide may also be used by Soldiers who will participate in P2P training to understand the P2P process and expected outcomes.

Inside this guide:	
Decision Tree	2
Stage 1: Develop	3
Stage 2: Deliver	5
Stage 3: Assess	9
Practical Exercises	10
Job Aids	18
Acronyms and Abbreviations	25
Resources	26
References	27



This guide will help you be a better facilitator.

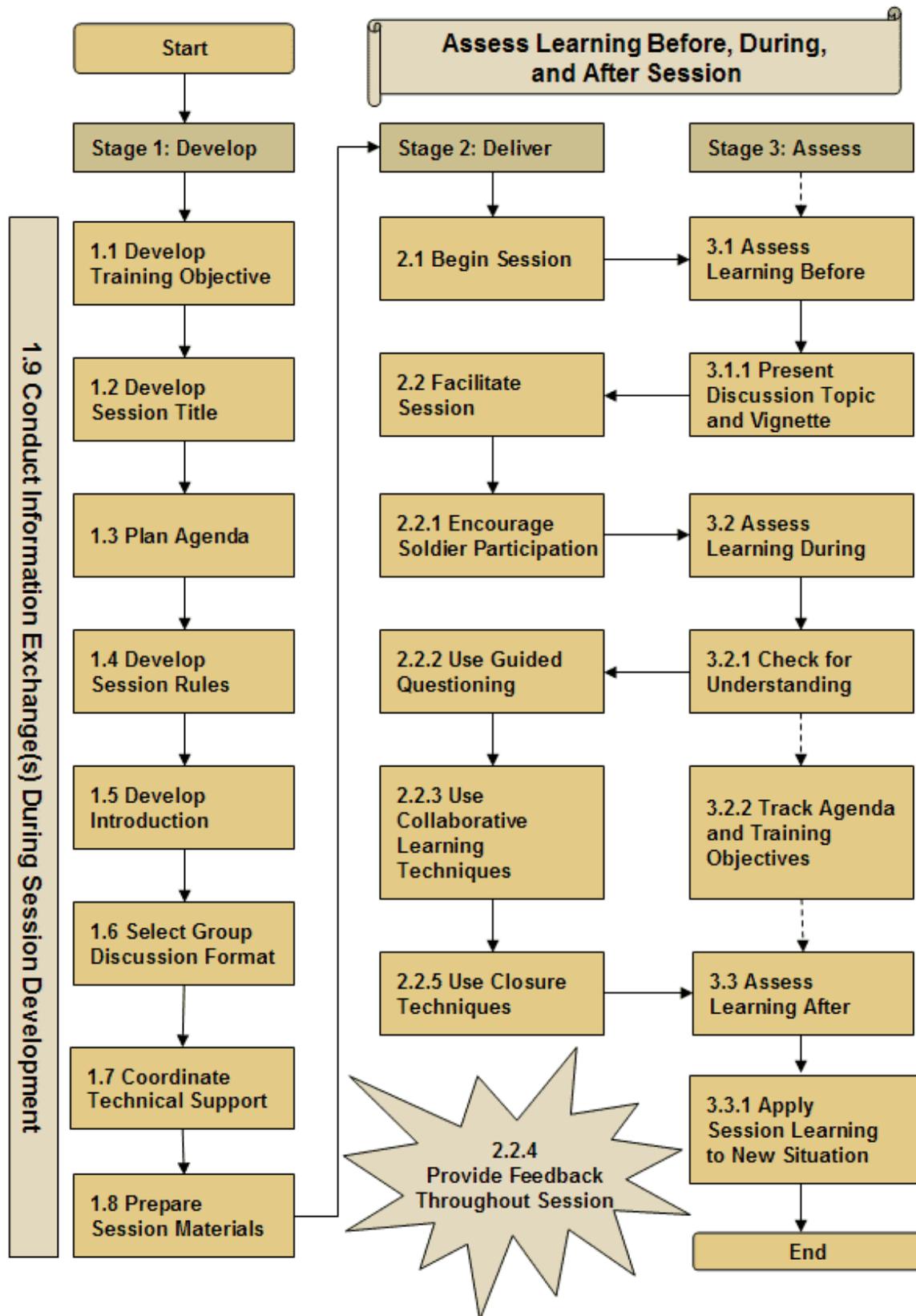


Figure 1. P2P Training Facilitator’s Guide Decision Tree.

Stage 1: Develop P2P Training

(See [Facilitator Planning Worksheet](#) in Job Aids for a blank outline to use while you develop P2P training.)

- 1.1 Develop a measurable training objective.** Training objectives may already be developed for the session. However, you may be required to develop them yourself. If so, ask yourself “What do these Soldiers most need to learn, and how will I measure that they learned it?” Incorporate the commander’s intent and obtain his approval for the P2P training objective. When time allows, poll the Soldiers scheduled to participate in the session to determine what they already know about the topic and identify any focus issues they want to address.

Example: Discuss Soldier experiences with culture and language in al-Anbar Province in order to prepare inbound Soldiers for interacting with the local population. At the conclusion of the session, the inbound Soldiers will understand guidelines for interacting with the local population.

- 1.2 Develop a session title.** Develop a descriptive title based on the training objective and the session topic.

Example: “Culture and Language in al-Anbar Province: Lessons Learned”

- 1.3 Establish a session agenda.** Consider time constraints, and prepare the agenda. Present the training objective as the purpose of the session. Include a post-session assessment practical exercise when time permits.

Example:

- Introductions
- Purpose of the session [Measurable Training Objective]
- Session rules
- Discussion on topic
- Practical exercises [Post-session Assessment]
- Wrap-up

- 1.4 Develop session rules.** The rules are guidelines to enable discussion and keep the session focused on the training objective.

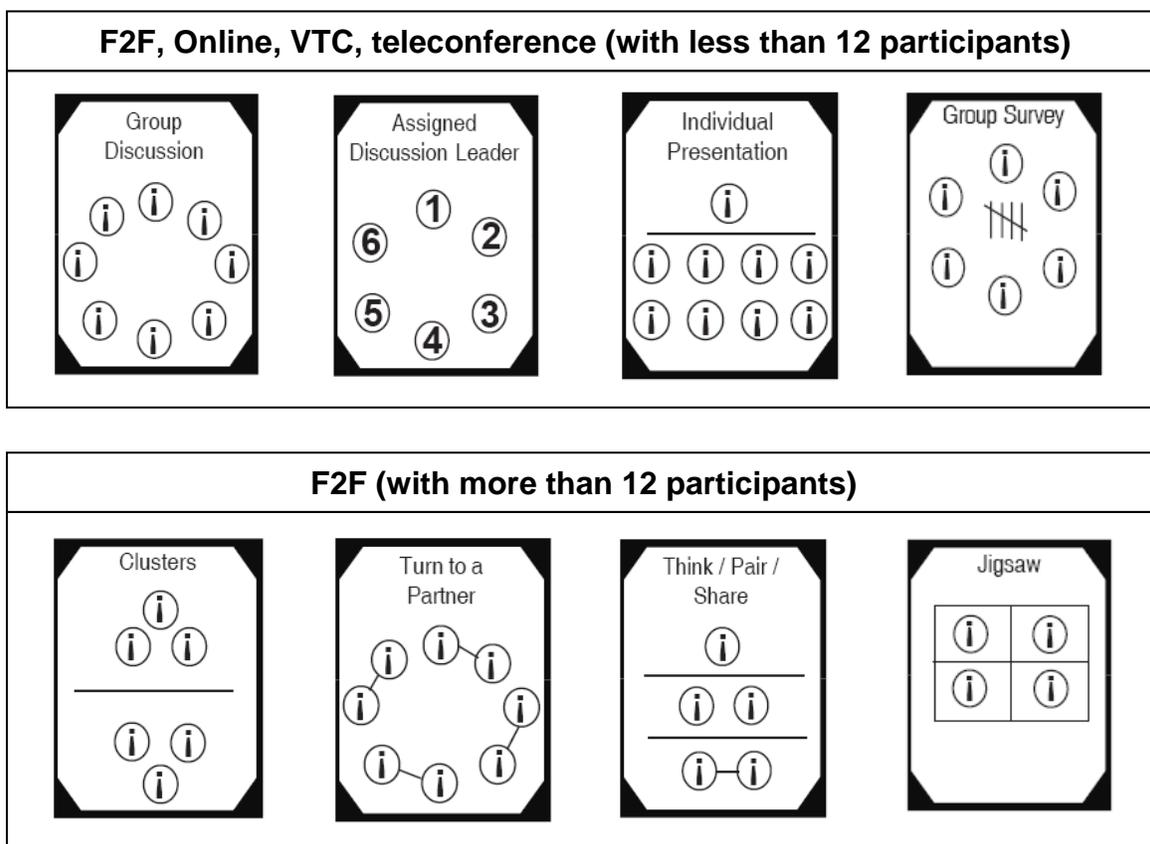
Example:

- All participate in the discussions
- Respect others’ opinions
- Allow others to speak
- Stay on track

- 1.5 Prepare an introduction.** Introduce yourself, the other members of the group, and explain the purpose of P2P training and your role as the facilitator. Let the group members know that through discussions such as this ill-defined tacit information can be made explicit and then shared with other Soldiers.

Example: “P2P training uses discussion among peers to collaborate, evaluate, and record successful experiences as TTPs, Lessons Learned, or SOP. The purpose of this session is to inform inbound Soldiers about our experiences with culture and language in al-Anbar Province. At the conclusion of the session, the inbound Soldiers will understand guidelines for interacting with the local population. I’ve been a platoon leader for the past eight months in this area. My platoon interacts daily with the local population as a routine matter. We are constantly seeking ways to improve our relationship with the locals, and I’m prepared to share with you what we’ve learned.”

1.6 Determine group discussion format. Make a deliberate decision about how to arrange group members to get the types of cross discussion required for success. Deliberately arranging group members and assigning specific tasks to each group shifts responsibility for learning onto the group. The assigned tasks serve to involve the Soldiers and keep them focused on the training objective. If the group is larger than 12 members, then divide the group into smaller sub-groups. An ideal group number is between 8 to 12 members. Whether face-to-face (F2F), online, VTC, or teleconference, the group discussion format should resemble a tribe sitting in a circle around a campfire sharing stories. Avoid a group format that looks like a lecture hall, where the instructor stands as the “sage on the stage” and the students are in rows. For example, if the session is F2F and there are more than 12 participants, consider dividing into smaller groups by using the *jigsaw* or the *cluster* technique to enable more participation. Figure 2 illustrates appropriate group discussion formats for each forum (the circles with inverted exclamation marks or numbers represent a group member in the discussion format). [Section 2.2.3](#) provides a detailed description of each of the group discussion formats.



Copyright by the Curators of the University of Missouri, 2006. Adapted with permission.

Figure 2. Selecting a Group Discussion Format.

1.7 Coordinate for technical support. Coordinate for required personnel and technical equipment. This may include reserving audio-visual equipment, as well as reserving personnel to assist with setting up and recording the session. Conduct audio-visual checks and confirm room availability prior to the session. If audio/videotape capability is not available, arrange for a third party to take notes during the session.

- 1.8 Prepare session materials.** If the session is F2F, make writing and recording tools available to Soldiers, such as butcher paper, whiteboard, etc. Prepare informational and data collection handouts. This includes [Pre-Training Survey](#) and [Post-Training Survey](#) assessments (see Job Aids).
- 1.9 Conduct an information exchange.** When possible, conduct an information exchange prior to the session so Soldiers come prepared to discuss topics and develop questions they want to have answered. This could be in any medium such as a read-ahead packet or an information brief. An information exchange also enables the facilitator to ensure the session covers special focus areas identified.
- 1.10 Special considerations for VTC or online forum development.** All previously discussed P2P development steps apply to P2P F2F, VTC, or online professional forum training sessions. Special considerations to support VTC and online forum P2P training sessions include the following:
- Notify Soldiers well in advance with instructions for accessing, logging on, and participating in the session.
 - Allow ample time for audio and visual checks.
 - Collect and post read-aheads online to improve Soldiers' background knowledge on the topic.
 - Maintain situational awareness of Soldier locations and time differences.
 - Be aware that deployed units may not have as much time to prepare for a session.

Stage 2: Deliver P2P Training

2.1 Begin the session. Introduce yourself and briefly explain the P2P training concept. Ask Soldiers to introduce themselves, provide their duty position and time in the duty position. Review the session agenda, session rules, training objectives, and why the topic is important to Soldiers. Distribute handouts and conduct the [pre-training survey](#). A vignette may be used to assess [learning before](#) prior to initiating the discussions.

To assess **learning before** the session starts, present a vignette of a real-world event related to the topic. Ask the group members, "What would you do in this situation?" After Soldiers have responded, ask the experienced members of the group to describe how they would respond given the same set of conditions. Assess the responses to determine the knowledge and experience levels with the topic.

2.2 Facilitate the session. Initiate the session by posing one or more topic questions to the group. Avoid interrupting Soldiers when they respond. Protect Soldiers from being interrupted by others. When waiting for Soldiers to respond, be prepared to allow up to 30 seconds (which may seem like a long time, but it keeps the responsibility for the discussion on the group). Do not allow one Soldier to dominate the discussion, or for the group discussion to turn into a question and answer format (with the Soldiers directing questions to you instead of interacting with each other). Use guided questioning and collaborative learning techniques to encourage participation and assess [learning during](#) the session. [Track agenda items](#) and training objectives.

To assess **learning during** a session, use guided questioning and track progress of the agenda items and training objectives. Use the Facilitator Session Assessment Form in Job Aids to determine session performance.

2.2.1 Encourage each Soldier to participate. If Soldiers are not participating, use [guided questioning techniques](#) and [collaborative learning techniques](#) to draw out and elaborate responses.

Table 1
Encourage Soldier participation

• <i>If ...</i>	• <i>Then ...</i>
Soldiers are participating	Continue to assess learning during the session.
Soldiers are not participating	Use guided questioning.
	Use collaborative learning techniques.
Soldiers interrupt each other	Protect Soldiers from interruptions, laughter, or those with louder voices by addressing these type interferences directly with the person responsible.
One person dominates the discussion	Redirect questions back to the group.
Session turns into a question/answer format	

2.2.2 Use guided questioning techniques. Guided questions are used to generate discussions, assess [learning during](#) the training session, and keep discussions focused. Guided questioning is open-ended questions to the group or an individual which require more than a "yes" or "no" response. Soldiers responding to guided questioning have a better chance to process new information by putting it into their own words. Soldier responses to questions provide the facilitator an opportunity to assess their understanding of the discussion topics. Guided questioning may be used to redirect questions back to the group by asking the Soldiers questions such as "Could you explain

that in more detail?” or “Have you had a similar experience?” When Soldiers are unable to answer questions at all, search for the answer together and avoid taking responsibility to be the one providing the answers. With P2P training and learning, the group is trusted to self-moderate and police itself for inaccurate information. For more sample questions and question starters, refer to the “[Facilitator Questions](#)” sheet in Job Aids.

Table 2
Guided Questioning Techniques

• <i>If ...</i>	• <i>Then ...</i>
Redirecting questions to back to the group	“Who else can comment on this question?” “Has anyone had a similar experience with this issue?”
Soldiers provide inaccurate information	Ask Soldiers to find specific references to help clarify the correct information.
Soldiers are unable to answer questions	Search for the answer as a group. Avoid taking responsibility for providing answers.
Check for understanding	Monitor for signs of confusion: “Can you be more specific?” “Can you think of another way to think about that?”
	Use action verbs: define, describe, apply, differentiate, formulate, compare, construct, recall, demonstrate
Examples: “Would you explain that in more detail?” “Please clarify what you mean ...” “Would you be more specific?” “Would you give an example of that?”	“What evidence supports that conclusion?” “How has that worked for your organization?” “How would you do that?” “How can you be sure of that?” “How might someone argue against that point?”

2.2.3 Use Collaborative Learning Techniques based on the group discussion format selected. More than one collaborative learning technique may be used in a single P2P session. For example, a session may start out using *group survey* where each member is asked to briefly describe their experiences with the topic, and then transition into *assigned discussion leader*. The collaborative learning techniques used during the session depends on the size of the group, the topic, and whether the facilitator senses individuals need to become more actively engaged in the discussion. The purpose of using the collaborative learning techniques is to encourage participation, attain the training objectives, and enable each member of the group to contribute fully. Group tasks may be used in conjunction with collaborative learning techniques to get Soldiers involved and keep them on track with the training objective. The facilitator should circulate through the room while Soldiers are divided into smaller groups if it is a F2F session. The facilitator’s goal is to generate discussion and encourage participation without interrupting. Maintain a presence if the session is an online, VTC or teleconference forum. Use guided questioning with each of the different types of collaborative learning techniques. Recommendations for using collaborative learning techniques are presented in Table 3.

Stage 2: Deliver P2P Training (Continued)

Table 3
How to Use Collaborative Learning Techniques

Collaboration	How to Do It	Tips
<i>Group Discussion:</i> A general discussion of an issue or topic by the group.	Decide on a discussion topic that is of equal interest to all Soldiers. Use participation and questioning techniques to get everyone involved.	When group discussions are successful, it may be difficult to know who is leading the discussion.
<i>Assigned Discussion Leader:</i> One person other than the facilitator leads the group discussion.	Facilitator assigns someone else in the group a topic to lead the discussion on. Allow a little time for the discussion leader to prepare.	You may not know until you start the discussion which Soldiers may want to lead discussions.
<i>Clusters:</i> Soldiers are divided into smaller groups for discussion.	Assign someone in each cluster to record. Allow time for each group to report back to the larger group.	Provide each group with a flipchart or whiteboard space to record important points of their discussion.
<i>Turn to a Partner:</i> Each Soldier works with another on an assigned topic.	First provide the group with background information on a topic. Immediately move to discussion with a partner.	This works best when Soldiers have enough background on the topic to discuss without reviewing concepts.
<i>Think/Pair/Share:</i> Each Soldier works alone on an assigned topic, and then shares results with a partner.	Allow Soldiers time to think BEFORE they discuss with a partner. Give Soldiers a specific amount of time (30 seconds, five minutes, etc.) for the “think” segment of this technique.	When people are given time to think, their responses differ from those they would give if they respond immediately.
<i>Individual Presentation:</i> A formal presentation delivered to a captive audience.	Soldiers give a presentation on a topic, question, or issue to the group without interruption.	<i>Individual presentations</i> should be used sparingly and only when independent research is required.
<i>Jigsaw:</i> Each smaller group provides a piece of the puzzle to the whole.	Soldiers are divided into smaller groups to work on some aspect of the same problem. They then share their part of the puzzle with the larger group.	Ensure the limits of what each group will contribute to the topic are clearly defined.
<i>Group Survey:</i> Each Soldier is surveyed about the topic.	Allow each Soldier to offer or state their point of view. Keep track of the results of the survey.	A survey works best when opinions or views are briefly stated.

Stage 2: Deliver P2P Training (Continued)

- 2.2.4 Provide feedback throughout the session.** Provide affirmative feedback to encourage Soldier participation. Provide supportive feedback by repeating what you heard in the response, such as “I heard you say that you hesitated before entering the crowd, could you elaborate on why you hesitated?” Supportive feedback may be as simple as, “I see,” or “Please continue with what you were saying.” Provide corrective feedback as required. This is accomplished through questioning, such as “Can you be more specific?” or “Can you think of another way to react in that situation?”
- 2.2.5 Use closure techniques to conclude the session.** Use restatement and summary closure techniques to review discussion results. Reserve the last few minutes for this process before assessing learning after the session. *Restatement* is asking the Soldiers to share what they thought was the most important concept(s) from the session. *Summary* involves reviewing the key points of discussion.
- 2.2.6 Special considerations for VTC or online forum delivery.** All previously discussed P2P delivery steps apply to P2P F2F, VTC, or online professional forum training sessions. Special considerations to support VTC and online forum P2P training sessions include the following:
- Use available resources, such as PowerPoint, whiteboard, video, and simulations.
 - Read message postings in a discussion thread in the order they were posted.
 - Allow for time lags in VTC connections between overseas and stateside units.
 - Have an audio or video back-up if the technology support fails.
 - Provide Soldiers with an opportunity to follow-up with questions when the session ends.

Summary of P2P Best Practices

Establish measurable training objectives.
Avoid falling into traditional “Instructor – Student” roles.
Ask open-ended questions to guide dialog back to the group.
Incorporate activities to promote social

Stage 3: Assess P2P Training

- 3.1 Learning Before.** Use a [pre-training survey](#) to assess what the Soldiers know about the topic before beginning the session.

3.1.1 Present the discussion topic. (See section 2.1 Begin the Session in Stage 2: Deliver) [When initiating the session](#), present a topic related to the training objective by giving the group a brief real-world situation based on experience. Ask the Soldiers, “What would you do in this situation?” Ask the experienced members of the group to describe how they would respond given the same set of conditions. This process enables the less experienced Soldiers to compare their responses to the more experienced members. This also allows the facilitator to assess responses and determine the group’s knowledge on the topic.

Assessing learning before, during, and after the session overlaps within stages 2 and 3.

- 3.2 Learning During** (See section 2.2 Facilitate in Stage 2: Deliver). Check for understanding by using guided questioning techniques. Track progress in accomplishing the agenda items and attaining training objectives.

3.2.1 Check for understanding with guided questioning. (See section 2.2.2 Use Guided Questioning Techniques in Stage 2: Deliver) Monitor the discussion for signs of misunderstanding and confusion among the Soldiers. Ask more questions, like “Can you be more specific?” and “Can you think of another way to solve the problem?” Question Soldiers to determine if they understand the discussion topic. Ask the group questions using actions verbs. Some actions verbs that make good starter questions are: *define, describe, apply, differentiate, formulate, compare, construct, recall, and demonstrate.*

3.2.2 Track agenda items and training objectives. (See section 2.2.3 Use Collaborative Learning Techniques in Stage 2: Deliver) Note progress in accomplishing agenda items and attaining training objectives during facilitation. Consider using the “[Facilitator Planning Worksheet](#)” to track the agenda and training objectives, and the “[Facilitation Assessment Form](#)” to assess how well the session is working.

- 3.3 Learning After.** After concluding the discussions, assess what the Soldiers learned. One method is to administer the [post-training survey](#), and compare results with the [pre-training survey](#). The overarching goal of assessing learning after a session is to see whether the group attained the training objective. Keep in mind that the goal of training is to apply what was learned to new and different situations. New knowledge construction is more than Soldiers simply reciting rules or repeating information.

3.3.1 Apply knowledge to a new situation. To assess the session results, present a new situation through a vignette and require Soldiers to apply their new knowledge to that situation. Ask the Soldiers, “Based on what you learned in this session, what would you do in this situation?” You may present several situations that require applying new TTPs or Lessons Learned. Ask experienced members of the group how they would respond given the same set of conditions. Use the discussion as an opportunity to assess Soldier learning by comparing the differences between Soldier responses given prior to the session with those given at the conclusion of the session.

3.3.2 Special considerations for VTC or online forum assessment. All of the previous assessment steps apply to a successful P2P training session for F2F, VTC, or online professional forum. To help further support VTC and online forum P2P training sessions, consider conducting an informal content analysis of the recorded VTC session or the online threaded discussion. Read through the transcripts and examine whether the

training objectives were met, how well members participated, and what new products were generated.

3.4 Return on Investment (ROI). P2P training ROI may be assessed by comparing the assessment of Soldier knowledge gained, with the costs associated with conducting the P2P training program. P2P training in the context of this guide is specifically designed to enhance the transfer of knowledge between Soldiers. Determining the ROI for this type of P2P training program may include P2P technical and operational costs as compared to the P2P training value. Training value could be estimated in terms of the unit's ability to successfully accomplish tasks associated with missions, indicators of unit readiness, and Soldier self-reports of confidence in their unit's ability to conduct missions. The P2P training approach may also contribute to reducing the time required for the transfer of institutional knowledge.

Practical Exercises

Introduction

Use the training scenarios in these practical exercises to think through the task of preparing for a group discussion using P2P techniques. First, read the training scenario. Next, reference the guide as you answer questions about how to develop, deliver, and assess P2P training. Then, check your responses with the solutions on the following pages.

P2P Training Practical Exercise #1:

Where do I start?

As a platoon leader, you have been selected to lead and facilitate a P2P discussion between the platoon leaders of your company, who have been deployed in theatre for 8 months, and a group of platoon leaders who are training to deploy into your area of operations. There will be a total of nine Soldiers. The session will occur as part of a series of VTCs between company and battalion level leaders of the inbound and outbound units. The operations and training officer (S3) has designated the time and place the session will occur. You have received a copy of the *P2P Training Facilitator's Guide* to use in preparing for the session.

You lead daily patrols in your assigned area, where you interact with the locals. You've learned first-hand how common behavior and actions may offend the local population. You've also learned that even when trying to be "culturally correct" you can still make big mistakes if you don't understand the culture. You're just not sure where to start the group discussion. What does this group need to learn? What should you do now? Use the Facilitator's Guide to develop your responses.

Write a measurable training objective ([see Stage 1, section 1.1](#)).

Write a session title ([see Stage 1, section 1.2](#)).

Plan an agenda for the session ([see Stage 1, section 1.3](#)).

How will you begin the session (see Stage 1, [section 1.5](#) and Stage 2, [section 2.1](#))?

How will you measure what the group of Soldiers already know about this information before the session starts (see Stage 3, [section 3.1](#))?

How will you assess whether the inbound group of platoon leaders is learning during the session (see Stage 2, [section 2.2.5](#) and Stage 3, [section 3.2](#))?

How will you measure what the group of Soldiers have learned when the session ends (see Stage 3, [section 3.3](#))?

P2P Training Practical Exercise #1: Best Practice Solutions

Write a measurable training objective (see Stage 1, section 1.1). By the end of this session, Soldiers will share and exchange good ideas about cultural awareness and record those ideas in an SOP.

Write a session title (see Stage 1, section 1.2). “Cultural and Situational Awareness for Platoon Leaders”

Plan an agenda for the session (see Stage 1, section 1.3).

- Introductions
- Purpose of session [Measurable Training Objective]
- Session rules
- Pre-training vignette
- Discussion of cultural awareness
- Post-training vignette
- Wrap-up discussion
- Closing of session

How will you begin the session (see Stage 1, section 1.5 and Stage 2, section 2.1)?

- Introduce yourself.
- Inform the group of the session purpose.
- Explain why the topic is important to the Soldiers.
- Request members briefly introduce themselves and provide their duty position and time in the duty position.

How will you measure what the group of Soldiers already know about this information before the session starts (see Stage 3, section 3.1)?

- Present several vignettes with situations that require applying the cultural awareness guidelines.
- Ask members of the inbound group to describe what they would do if they were in those situations.
- Assess their responses.
- Ask the platoon leaders of your unit to comment on how they would respond to the same situation (this will also start some dialogue between the two groups).

How will you assess if the inbound group of platoon leaders is learning during the session (see Stage 2, section 2.2.5 and Stage 3, section 3.2)?

- Monitor dialogue for signs of misunderstanding and confusion.
- Question Soldiers to determine if they understand.
- The following are some example phrases to use with the inbound group:
 - “Describe some actions that demonstrate cultural awareness.”
 - “Explain a process for winning over the hearts and minds of the people.”
 - “Compare how to use language cards with how to work through an interpreter.”
- Use closure techniques to end a session.
 - Ask Soldiers to go over *how* an answer or solution was arrived at, rather than just providing an answer.
 - Ask Soldiers to summarize key tasks/points before moving to the next topic.

How will you measure what the Soldiers have learned when the session ends (see Stage 3, section 3.3)?

- Present several vignettes with situations that require applying what they learned in the session.
- Ask members of the inbound group to describe what they would do if they were in those situations.
- Assess their responses.
- Ask the platoon leaders of your unit to describe how they would respond to the same situations.

P2P Training Practical Exercise #2:

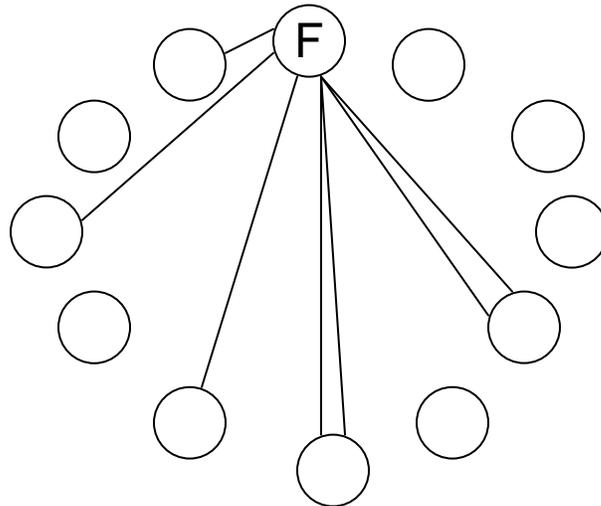
Why aren't the Soldiers participating?

You are a squad leader facilitating a F2F session between two squads, one with Soldiers who have deployed and one with Soldiers who will be deploying. Before the session started, you thought about your experiences in the first 100 days of your deployment, and wrote a series of questions and answers to address during the session. However, once the session starts, every time you ask a question addressing the session topic the group becomes very quiet. The few interactions are between you and the other Soldiers. You sense not everyone is participating fully as they should be. What should you do now?

During the session, you have lapsed into a question/answer format. You direct responses to the group, but the Soldiers respond directly to you -- there is no squad leader-to-squad leader interaction.

How will you get others to participate in the discussion ([see Stage 2, section 2.2.1](#))?

This chart shows the interactions of the Soldiers are mostly directed to you as the facilitator (F).



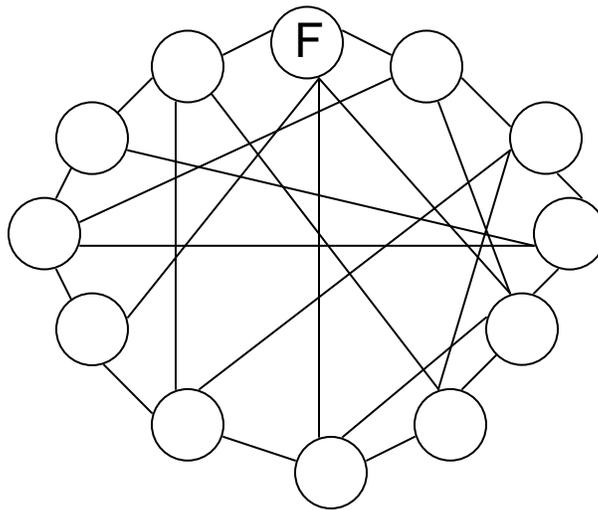
Write at least two collaborative learning techniques to encourage interaction among the Soldiers ([see Stage 2, section 2.2.3](#)).

P2P Training Practical Exercise #2: Best Practice Solutions

During the session, you have lapsed into a question/answer format. You direct responses to the group, but the Soldiers respond directly to you -- there is no squad leader-to-squad leader interaction.

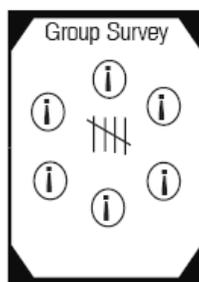
How will you get others to participate in the discussion ([see Stage 2, section 2.2.1](#))?

Do not answer the questions yourself. Redirect them to other Soldiers. Ensure all feel comfortable participating by encouraging consideration and mutual respect. The chart below shows the appropriate interactions within a group – the goal being for all to participate actively. This chart shows a general exchange between all members, not just questions and answers directed to the facilitator.



Write at least two collaborative learning techniques to encourage interaction among the Soldiers ([see Stage 2, section 2.2.3](#)).

Example #1: The group survey technique. Ask Soldiers of the inbound group to describe how they would apply the emerging TTPs to a given situation. Then ask the experienced squad leaders to share any TTPs related to a similar situation.



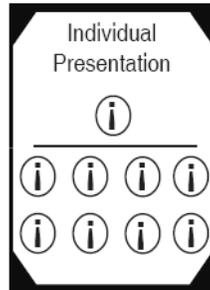
Group Survey

- Each Soldier is surveyed to discover their understanding of a topic or position on an issue.
- Each Soldier briefly states opinions or views.

P2P Training Practical Exercise #2: Best Practice Solutions (Continued)

Example #2: The individual presentation technique. Have every member of the experienced group come prepared to present a vignette to describe how they:

- Successfully accomplish task/mission X.
- Identify issues associated with task/mission X.
- Resolve issues associated with task/mission X.



Individual Presentation

- Each Soldier prepares and delivers a presentation to the group.
- Unlike "Assigned Discussion Leader" multiple presenters deliver briefings to a captive audience.

P2P Training Practical Exercise #3:

How do I facilitate a group of 24 Soldiers?

You are a battle-proven captain with combat experience in a counterinsurgency environment, which includes IEDs. You will be leading a group discussion of approximately 24 other Soldiers, many of whom share your battlefield experiences. You're aware that not all of the Soldiers have combat experience. The session will take place F2F on post in a room that will comfortably hold 24 people. Other than the room number, you haven't been given any other guidance. You have already worked on a measurable training objective and agenda, but how do you facilitate such a large group? What should you do now?

Select a group discussion format ([see Stage 1, section 1.6](#)). Write two collaborative learning techniques to use with groups larger than 12 (see Stage 1, [section 1.6](#) and Stage 2, [section 2.2.3](#)).

What should you check for technical support? If technical support isn't available, what should you do? ([see Stage 1, section 1.7](#))

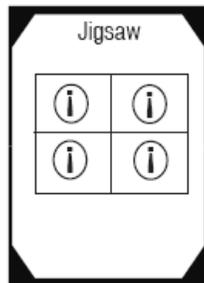
If you are not using handouts, what should you make available to the Soldiers? ([see Stage 1, section 1.8](#))

P2P Training Practical Exercise #3: Best Practice Solutions

Select a group discussion format ([see Stage 1, section 1.6](#)). Write two collaborative learning techniques to use with groups larger than 12 ([see Stage 1, section 1.6](#) and [Stage 2, section 2.2.3](#)).

If the group is larger than 12, divide the group into smaller subgroups.

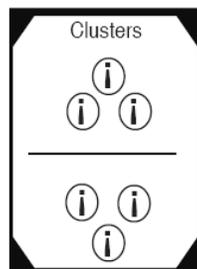
Example #1: The jigsaw technique. Divide the groups into four groups of six. Give each group a topic to discuss. Bring the groups back together to discuss as a whole in the larger group.



Jigsaw

- Soldiers are broken into smaller groups.
- Each group provides a piece of the puzzle and contributes to the whole.

Example #2: The clusters technique. Divide the 24 Soldiers into four groups of six. Then divide each group of six into two clusters of three. Give the clusters a topic to discuss, and then ask them to return to their group of six to share their responses.



Clusters

- Soldiers are divided into smaller groups.
- Each group reports its discussion to the larger group.

What should you check for technical support? If technical support isn't available, what should you do? ([see Stage 1, section 1.7](#))

Conduct audio-visual checks, room availability, and recorder availability. If technical support isn't available, coordinate for required personnel and technical equipment.

If you are not using handouts, what should you make available to the Soldiers? ([see Stage 1, section 1.8](#))

Make writing and recording tools available to Soldiers, such as butcher paper, whiteboard, computer monitor, etc.

Job Aids

P2P Training Steps and Procedures Quick Checklist

Facilitator Planning Worksheet

P2P Participant Survey – Pre-Training

P2P Participant Survey – Post-Training

Facilitator Session Assessment Form

Facilitator Socratic Questions

Example Unit P2P Facilitator Training Plan

Facilitator Training Hotwash Example

P2P Training Steps and Procedures Quick Checklist

Stage 1: Develop	Yes	No
<u>Measurable training objective</u>		
<u>Session title</u>		
<u>Agenda</u>		
<u>Session rules</u>		
<u>Introduction</u>		
<u>Group discussion format</u>		
<u>Tech support availability</u>		
<u>Use of handouts</u>		
Stage 2: Deliver		
<u>Begin session</u>		
<u>Facilitate session</u>		
<u>Soldiers participating</u>		
<u>Use guided questioning</u>		
<u>Collaborative learning techniques</u>		
<u>Provide feedback</u>		
<u>Use closure techniques</u>		
Stage 3: Assess		
<u>Assess learning before session</u>		
<u>Present discussion topic</u>		
<u>Assess learning during session</u>		
<u>Check for understanding with guided questioning</u>		
<u>Track agenda items and training objectives</u>		
<u>Assess learning after session</u>		
<u>Apply session learning to new situation</u>		

Facilitator Planning Worksheet

Date _____ Time Start: _____ End: _____

Location _____

Measurable Training Objective:

Session Title: _____

Agenda:

Session Rules:

Introduction:

Technical Support:

Learning Measures (surveys, practical exercises, etc.):

Group Discussion Format (online, VTC, F2F, diagram of format, etc.):

Notes:

P2P Participant Survey – Pre-Training

Instructions: The questions below ask for some information related to today's P2P training session. Detailed write-in comments are encouraged. Please use a separate sheet of paper if you need additional space.

1. How many P2P training sessions have you attended? (Check one)

None One More than One Five or Less More than Five

Comments and Suggestions:

2. What are you expecting to learn from this session?

3. How would you rate your knowledge on the topic covered in this session? Check one.

1 2 3 4 5
Inadequate Good Superior

Comments and Suggestions:

P2P Participant Survey – Post-Training

Instructions: The questions below ask for your opinions about the P2P training session you participated in today. Write-in comments, both positive and negative, are encouraged. Please use a separate sheet of paper if you need additional space.

1. What did you learn from this session?

2. How would you rate your knowledge of the topic covered in this session?

Check one. 1 2 3 4 5
 Inadequate Good Superior

3. How much do you agree that the P2P training session:

	Circle one for each item.				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Facilitated development of sound TTPs	1	2	3	4	5
b. Encouraged me to explore all aspects of the TTPs	1	2	3	4	5
c. Achieved a good balance with speaking and listening	1	2	3	4	5
d. Enabled me to learn effectively with the right focus	1	2	3	4	5
e. Acknowledged my thoughts and insights accurately	1	2	3	4	5
f. Answered all my questions satisfactorily	1	2	3	4	5
g. Took advantage of group interaction	1	2	3	4	5

4. What problems or obstacles did you encounter during the session?

5. To what extent do you think today's session will help you prepare for future operations?

6. What did you like best about the session?

7. What did you like least about the session?

Comments and Suggestions

Facilitator Session Assessment Form

Leader Name:		Date of P2P Training Session:		
1. Session and topics covered (briefly describe):	Positive Points	Negative Points		
	6. The session in general:			
2. Most relevant session components:	7. Managing the group:			
3. Number of participants:	8. Your facilitation:			
4. Additional information (factors which influenced the success of your session):	9. Activities used:			
5. To what extent were the following present?	10. Points to remember for next session:			
	Never	Sometimes	Often	Always
Problem solving	1	2	3	4
Articulating ideas	1	2	3	4
Agreement on ideas	1	2	3	4
Disagreement on ideas	1	2	3	4
Debate on ideas	1	2	3	4
Clarifying concepts	1	2	3	4

Facilitator Socratic Questions

Facilitate the Session	Example Facilitator Questions
<ul style="list-style-type: none"> • Keep the Soldiers involved in the discussions. • Use questions to encourage group discussion in a manner which makes the Soldiers do the thinking and talking. • Enable Soldiers to process information rather than looking for a single “correct” answer. • Stimulate the internalization of new information by causing Soldiers to employ critical thinking. • Require Soldiers to clarify the information, put the information in their own words, and relate it to their own knowledge base and experience. • The facilitator must follow the discussions closely in order to recognize when he needs to engage in the dialog. • Use open-ended questions to guide dialog back to the group. 	<ul style="list-style-type: none"> • What are the key considerations in planning...? • What are the key considerations in preparing...? • What are the key considerations in executing...? • What are the key considerations in assessing...? • What Soldier training needs to be conducted to achieve...? • What leader training needs to be conducted to achieve...? • What unit training needs to be conducted to achieve...? • What are some situations in which that has worked? • How many people were involved in the operation? • Please explain the roles and responsibilities of those involved in the operation? • What were your roles and responsibilities in the operation? • How much time does it take to conduct that task/mission? • What are some pitfalls to watch for when conducting...? • What is the history behind how your unit evolved to that? • What is the sequence of ... to best accomplish that? • Have any other units/personnel had similar experiences? • What are some other ways to accomplish this? • Has anyone approached a similar situation differently? • Could you explain that in a more detail? • Please clarify what you mean by.... • Can you be more specific? • In what way? • Could you give an example of that? • What evidence supports that conclusion? • How has that worked for your organization? • How would you do that? • How can you be sure of that? • How might someone argue against that point? • What makes you think that? • How did you reach that conclusion? • Would anyone like to add to that? • What could be improved upon? • What experiences have you had which led you to that conclusion? • Can anyone else elaborate on that more? • How did you arrive at that? • What do you mean by...? • Has anyone else encountered this type problem? • What do we need to know in order to solve the problem? • Are there any assumptions involved in reaching that conclusion? • Is there anything else you would like to add? • How would you go about determining the facts associated with that situation? • What resources are required to conduct that...?
<p>Encourage participation</p>	
<ul style="list-style-type: none"> • Use Soldiers’ names. • Use Socratic questioning so that Soldiers break down complex issues into smaller parts that can be more easily addressed. • Get Soldiers to use the tools available (whiteboard, butcher board, etc.) • Wait long enough for Soldiers’ to respond rather than jumping in with the answer or another question. • Use positive reinforcement. 	

Example Unit P2P Facilitator Training Plan

A unit may be designated to provide P2P facilitators for multiple P2P sessions which will be conducted simultaneously or within a certain timeframe. In these circumstances, the unit may elect to centralize facilitator training in order to standardize training and optimize resources available. The following guidelines may be used to establish and conduct a unit facilitator training program.

Facilitator training concept. The facilitators designated to conduct P2P training will conduct training as a group before facilitating sessions with their target audience. This will enable facilitators to practice P2P techniques among themselves before conducting a P2P session. All group discussion formats and collaborative learning techniques will be used at least once during the facilitator training. This will enable each facilitator to actively participate in a demonstration of the different formats and techniques. A hotwash will be conducted after each facilitator training session to capture P2P facilitation lessons learned.

Unit responsibilities.

- Determine the number of facilitation sessions that need to be conducted. Sessions to be conducted will usually be assigned according to duty positions or focus topics.
- Assign Soldiers facilitator responsibilities. Assign one Soldier as the primary facilitator for each session. These Soldiers should have experience in the session's topic.
- Designate the date, time, and location where the P2P facilitator training sessions will occur.
- Designate one Soldier as the Lead Trainer with responsibility for developing, delivering, and assessing the facilitator training.
- Provide resources to support the facilitator training. These requirements should be identified by the Lead Trainer.

Lead Trainer responsibilities.

- Coordinate for resources to conduct the facilitator training.
- Assign each facilitator responsibilities to Develop, Deliver, and Assess a P2P facilitation session during facilitator training (the session topic during facilitator training should be the same as the topic assigned by the unit when possible).
- Assign each facilitator responsibilities to demonstrate specific group discussion formats and collaborative learning techniques during their session (facilitators may elect to use different group formats and collaborative learning techniques during their actual sessions).
- Develop and publish a schedule for the facilitator training sessions.
- Supervise the delivery and assessment of the facilitator training sessions.
- Conduct a facilitator training hotwash after each session (see Hotwash Example below).

Facilitator responsibilities.

- Use the P2P Facilitator's Guide to develop, deliver, and assess the assigned P2P training session.
- Participate in P2P sessions conducted by other facilitators.

Facilitator Training Hotwash Example

Facilitator Training Hotwash Goals

- Soldiers identify ways to improve facilitation skills.
- Discuss facilitation processes used during each session.
- Address Soldiers' issues or concerns with facilitation.
- Note: the facilitator's skills and performance are the topic of interest, not the subject matter discussed.

Facilitator Training Hotwash questions

Develop

- Was a training objective developed? Was the training objective measurable? What other options for a measurable training objective could have been established?
- Were session rules identified? Were session rules effective? How could session rules be improved?
- Was an agenda developed? Was the agenda followed? What techniques were used to keep the session on track with the agenda?
- How would you improve the development of a P2P session?

Deliver

- Was a pre-assessment of participant knowledge conducted? What worked well with the pre-assessment? How could the pre-assessment be improved?
- What group discussion formats were used? What aspects of the group discussion formats worked well? How could group discussion formats be improved?
- How did the facilitator encourage Soldier participation? What techniques were effective at encouraging Soldier participation? How could Soldier participation be improved?
- What collaborative learning techniques were used? What aspects of the collaborative learning techniques worked well? How could the use of collaborative learning techniques be improved?
- Did the facilitator use guided questioning? What aspects of guided questioning worked well? What aspects of guided questioning could be improved?
- What training aids were used during the session (slides, whiteboard, butcher paper, etc.)? How did the use of training aids improve the session? How could the use of training aids be improved?
- How well did the Soldiers engage and participate? How could Soldier participation be improved?
- Did the facilitator provide feedback to the Soldiers during the session? Was the feedback effective? What elements of providing feedback could be improved?
- How would you improve the delivery of a P2P session?

Assess

- Was a post-assessment of participant knowledge conducted? What worked well with the post-assessment? How could the post-assessment be improved?
- How would you improve the assessment of a P2P session?
- How well was the facilitator able to apply the procedures in the Facilitator's Guide?
- How well did the facilitator answer Soldiers' questions?

Acronyms and Abbreviations

AO	Area of Operations
F2F	Face-to-Face
FOB	Forward Operating Base
P2P	Peer-to-Peer
SOP	Standing Operating Procedures
TTP	Tactics, Techniques, and Procedures
VTC	Video-teleconferencing

Resources

- Dixon, N. M., Allen, N., Burgess, T., Kilner, P., & Schweitzer, S. (2005). *Company Command: Unleashing the power of the Army profession*. West Point, NY: Center for the Advancement of Leader Development and Organizational Learning.
- Klein, G. A. (1998). *Sources of power: How people make decisions*. Cambridge, MA: Massachusetts Institute of Technology.
- Lave, J., & Wenger, E. (1990). *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press.
- U.S. Department of the Army (2007). *Battle command knowledge management cell (FMI 6-01)*. Washington, DC: Headquarters, Department of the Army.
- U.S. Army Battle Command Knowledge System. Retrieved August 1 from <https://forums.bcks.army.mil>

References

- Arendale, D. R. (2001). Review of research concerning the effectiveness of Supplemental Instruction from the University of Missouri-Kansas City and other institutions from across the United States. Retrieved September 16, 2007 from <http://www.tc.umn.edu/%7Earend011/Slresearchreview01.pdf>
- Center for Academic Development. (2006). *Supplemental Instruction supervisor manual*. Kansas City: The Curators of the University of Missouri.
- Center for Academic Development. (2006). *Supplemental Instruction leader manual*. Kansas City: The Curators of the University of Missouri.
- U.S. Department of the Army. (2007). *Battle command knowledge management cell (FMI 6-01)*. Washington, DC: Headquarters, Department of the Army.
- Peer Assisted Learning (2007). Retrieved August 1, 2007 from <http://pal.bournemouth.ac.uk/>