This paper explores the use of a peer coaching model, the Collaborative Learning Process (CLP), to increase the application of content from inservice teacher training. Educators (N=40) of students with moderate to severe disabilities were trained in the use of CLP to encourage application of the newly trained skill of facilitating skill generalization. The model involved: (1) choosing a partner; (2) establishing a climate of trust; (3) participating in the collaborative learning sessions; and (4) keeping the process going. Training involved four sessions covering the CLP process, writing of student objectives with generalization intent, assessment of generalization, and use of decision rules and strategies to solve generalization problems. Participants were surveyed after training to determine if they coached using CLP and if they perceived any effects on their knowledge and application of training content. Results indicated about 55 percent of those trained in the use of CLP utilized CLP to apply the content of skill generalization. In addition, there was a high correlation between incentives for participation and use of CLP. Barriers to the implementation of CLP included lack of time, perceived lack of administrative support, difficulties with the CLP process, and problems in relationships between partners. Noted are implications for those considering use of the CLP model. Includes 11 references. (DB)
The Collaborative Learning Process:
Peer Coaching in Special Education

Barbara Matlock, Felix Billingsley,
Valerie Lynch, Norris Haring, & Michael Boer
University of Washington

Acknowledgements

Preparation of this article was supported, in part, by the U.S. Department of Education (Grant No. G008730020, CFDA 84.029K) and in part from Program Development Services, Experimental Education Unit, University of Washington, Seattle, Washington. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Department of Education, and no official endorsement by the Department should be inferred.

The authors wish to thank Mary Fischer and Sheri Hlas for their thoughtful comments when reviewing drafts of this article.
Abstract

This paper explores the use of a peer coaching model, the Collaborative Learning Process (CLP), to increase the application of content from inservice training. Educators serving students with moderate to severe disabilities were trained in the use of CLP to apply the content of training on facilitating skill generalization. Participants were surveyed after training to determine if they coached using CLP and if they perceived any affects on their knowledge and application of training content. Results show about 55% of those trained in the use of CLP utilized CLP to apply the content of skill generalization. In addition, there was a high correlation between incentives for participation and use of CLP. Barriers to the implementation of CLP are explored.

Implications for those considering the use of the Collaborative Learning Process for application of new content are discussed.
The Collaborative Learning Process: Peer Coaching in Special Education

Dynamic changes have occurred throughout the last 20 years in service delivery to students with moderate to severe disabilities. It is an imperative, yet difficult, task for personnel to keep pace with these changes. Inservice education has been found to be one means to promote effective professional development (Lynch, 1989). Furthermore, Joyce & Showers (1980) and Lynch (1989) have recommended that follow-up assistance be provided in order to promote skill application by inservice participants. An interactive form of follow-up appears to be most effective in achieving that outcome (Lynch, 1989).

One form of interactive follow-up is peer coaching. Three peer coaching models -- technical coaching, collegial coaching, and challenge coaching -- have been described by Garmston (1987). Technical coaching is based on the work of Joyce & Showers (1983) and strives for transfer of training with effects on student achievement. In collegial coaching, educators, usually working in pairs, support each other in improving their skills. Problem-solving is the basis of challenge coaching. Challenge coaching provides a process for a team of teachers to resolve persistent problems which are often those related to instructional design or delivery.

A variation of collegial coaching is the Collaborative Learning Process (CLP). CLP was developed at the University of Washington by the Generalized InService Training Project (GIST) to assist educators who serve students with moderate to severe disabilities in the adoption and application of generalization strategies in their unique situations. The process involves encouraging participants to form teams (2-3 members per team) to plan, learn, and debrief together. Team members first identify a facilitator or "coach" and a learner. The learner takes the lead role during the planning session to determine the precise nature and time of his or her learning session. The facilitator is responsible for gathering information in the manner specified by the learner and, after the learning session, in a debrief session, the facilitator and learner identify what happened, analyze why it happened, and generalize to new situations.

Reports of the effectiveness of peer coaching in general education have been mixed (Wade, 1985; Sparks, 1985) and little is known about the use of peer or collegial coaching as an instructional technique for changing the behavior of teachers and related service personnel who serve students with moderate to severe disabilities.

This article describes the outcomes and implications of a field-test of the Collaborative Learning Process. Specifically, we attempted to address the following questions:

1. Did participants form teams and coach using CLP?

---

1 In effect, the GIST Project examined strategies for facilitating recursive levels of skill generalization: by educators (i.e., the generalization of skills from inservice sessions to application in classrooms) and by students with disabilities (i.e., the generalization of skills from training settings to natural situations).
2. What barriers were encountered when using CLP?

3. Would participants use CLP again to learn new material?

4. Did participants perceive that their knowledge and application of training content were affected as a result of receiving training?

5. Was CLP a factor contributing to application of the content?

6. Were incentives for participation related to use of CLP?

Implications for those considering the use of the Collaborative Learning Process for application of new content will be discussed.

**Method**

**Participants**

The Collaborative Learning Process was field-tested over a 3-year period. Three school districts, one each year of the project, were involved. All districts served students with moderate to severe disabilities. Two districts (i.e., Sites A and B) were located in suburban areas and one (i.e., Site C) was located in a rural setting.

All certified special education personnel, as well as the building principals where potential participants were located, were invited to attend an informational meeting. Staff at each site were informed about the nature of the project, the content (i.e., facilitating skill generalization), the Collaborative Learning Process (CLP), and incentives for participation (e.g., extension credit, payment for attendance, etc.). Staff members interested in the content and applying that content through CLP were encouraged to register. Participants included 31 teachers of students with moderate to profound disabilities, 4 occupational therapists, 2 administrators, 1 communication disorders specialist, 1 school nurse, and 1 school psychologist for a total of 40 participants. Two administrators at Site C attended inservice sessions to gain information about CLP and the content. Thirty-seven participants attended the training module on CLP; 35 of these participants formed a total of 15 CLP teams.

**Model Components**

There are four steps in the Collaborative Learning Process: (a) choosing a partner, (b) setting the climate, (c) conducting collaborative learning sessions, and (d) keeping the process going.
Step One: Choosing a Partner

Partners are self-selected in CLP. Because of this self-selection, partners may include other teachers, paraprofessionals, support service personnel, administrators, or any other school personnel.

In selecting partners, participants are advised to consider tangible and intangible factors. Time to participate and accessibility to one another are two important tangible factors. Nonschool commitments, characteristics of the students served, extra duty activities, and daily schedules should be considered as well. Intangible factors may be more difficult to define, but are nonetheless important. Shared experiences, respect for the other person as a professional, personal styles, and trust are just a few of those factors. A CLP: Partner Selection form has been developed to assist this process.

Step Two: Climate-Setting

Since participation in a coaching partnership may be new to some participants, there are several activities that may occur to "set the climate." The first activity may be a meeting between partners (Cummings, 1988). That meeting would give each partner an opportunity to discuss and understand each other's work situations, learn about personal preferences, and share information concerning students served. This could also be a time to share concerns about CLP itself. How should we schedule the observations? Do we plan all observations, or can some be unannounced? Just how is CLP going to work between us? One big question to answer is, "Who goes first?" Who will be the learner first? Who will initiate the process? One partner will be the facilitator or coach and one will be the learner.

Two other climate-setting activities may be utilized: a walk by and a drop-in (Crouse, 1987). The purpose of those two activities is to build trust. In a walk-by the facilitator just walks-by the classroom of the learner and looks in. Later, the facilitator gives positive feedback (e.g., a note, a brief comment) thanking the learner for his/her willingness to be observed. Of course, this means the classroom door is left open! A drop-in is similar to a walk-by. The facilitator is not observing specific teacher or child behavior, but building trust. A drop-in is a short observational period in the classroom in which the facilitator walks into the classroom and observes from the back of the room for a short amount of time. Again, the facilitator thanks his/her partner for the willingness to be observed.

Step Three: Collaborative Learning Sessions

Each collaborative learning session consists of three components: a planning session, a learning session, and a debrief session. During the planning session, partners define the

---

2 This form is available from the authors. The form is also included in CLP Participant Guide, by Barbara Matlock, available from Program Development Services; University of Washington; EEU, WJ-10; Seattle, WA 98195, for $5.50.
logistics of the session and determine the best way to meet the needs of the learner. The learner takes a lead role in determining when learning and debrief sessions will occur, specifically what is to be learned, how the information is to be collected, and any other items of importance. The learning session, whether it be an observation of a teaching technique or collaboration on which strategy to use to facilitate generalization, is then conducted in the manner outlined during the planning session.

Finally, a debrief session is held. Debrief sessions are intended to assist in the analysis and refinement of teaching practices. An acronym, EIAG (Lynch, 1987, personal communication), is used to describes the debrief process.

**Experience:** The real thing. Everything that happened during the learning session. This is what was "lived through" by both partners.

**Identify:** Discuss the experience. What happened during the learning session in relation to the purpose? The observer speaks ONLY to what the observed partner selected during the planning session.

**Analyze:** Further discussion focusing on analysis of the experience. Examples of questions the facilitator may ask to help the learner analyze his/her own practices or use of a new skill: How would you describe your performance? Why did things go well? Why did things go poorly? What led you to perform this way? What were the strengths of the approach? How could your approach be improved?

**Generalize:** Further dialogue. The observing partner (i.e., the facilitator) may assist the observed partner (i.e., the learner) to adapt new practices to other situations through questions such as: What would you tell someone else who is about to attempt this? Where and how else could you use this?

**Step Four: Keeping It Going**

In CLP, as in any peer coaching model, a supportive environment is crucial. Participants are encouraged to meet on a monthly basis to share successes and problems. It is suggested that building principals be informed and, if desired, invited to attend those meetings. A person within each building could be designated as a team liaison, to act as a supporter and facilitator of the Collaborative Learning Process. This may mean facilitating monthly meetings, helping to solve problems between partners, or clarifying information received during inservice training.

**Field-Test Procedure**

Students with moderate to severe disabilities often experience difficulty in transferring skills learned in one situation to another. At each site, Special Education Directors indicated that their staff would benefit from both the content of skill generalization and the Collaborative Learning Process. For this reason, skill
generalization was selected as the content which inservice participants were to learn. A district representative, who received extra training in the Collaborative Learning Process, was selected at each site by district special education personnel. That person acted as the "GIST Representative" to provide support to participants, as well as liaison with the University project staff offering the training. The inservice offerings were initially planned with this representative.

Using inservice training kits developed by University project staff, training was conducted on CLP (one module) and skill generalization (three modules). Training sessions were scheduled with time between modules during which participants applied the module's content with their CLP partner. The length of time between modules varied from 5 days to 3 months due to unique needs of each district.

The first module consisted of a 4-hour training session on CLP. After training, all participants were encouraged to complete the partner selection form and self-select a partner.

The content of skill generalization was divided into three modules. Module One, a 3-hour training session, focused on writing IEP objectives with generalization intent. Module Two (4 hours) trained participants in the assessment of generalization. In the final module (7 hours), participants learned to use decision rules and strategies to solve generalization problems. At the conclusion of each content module, participants were given application activities related to the content of that module to complete with their CLP partners.

In all sites, college credit was offered as an incentive for participation. Participants at Sites A and C choose to take advantage of that offer. At Site B, participants chose to receive incentives offered by the district. These included attending inservice sessions that were scheduled during school hours or pay for those scheduled after school hours. Administrators at Sites B and C offered to make release time available upon request by participants to conduct CLP planning, learning, and debrief sessions.

**Evaluation Procedures**

To assess if participants did, in fact, use the Collaborative Learning Process to apply generalization content: a self-report feedback form and an interview protocol were developed.

The self-report feedback form was completed as an activity of the inservice training. Participants were asked to report if they participated in the steps of CLP as outlined during training, their personal reactions to each step, and any obstacles that occurred along the way. A second purpose was to provide project staff with information regarding needed revisions in CLP.

Interviews with participants at each site took place after training in all modules was completed. The interview was conducted by a staff member who was not involved in the
delivery of training. Those unable to meet with the interviewer in person were interviewed via phone. During the interview process, participants were asked a series of questions regarding their use of CLP. The questions were designed to provide information regarding motivation for attendance, which components of the inservice sessions were most beneficial, individual participation in the components of CLP, what was easy and what was difficult about using CLP, what changes participants would make in CLP, whether knowledge and skill application were affected, and finally, the extent to which CLP was a factor in affecting knowledge and skill application. In all, 37 persons (31 participants and 6 administrators) were interviewed.

**Results**

The following results are derived from the participant self-reports and/or interviews.

*Why did you attend?* Interview responses varied from being interested in the content (50%), wanting to take advantage of incentives (17%), because peers were participating (11%), and because of administrative encouragement (9%). A quarter of the participants (27%) did take advantage of earning University credit. In addition, all eight participants at Site B were given the choice of receiving credit or taking advantage of district-sponsored incentives. All eight decided to take advantage of district-sponsored incentives. Overall, 49% (18 of 37) of all participants chose to take advantage of an incentive to participate.

*Did you form a team and participate in planning, learning, and debrief sessions?* A total of 37 educators serving students with moderate to severe disabilities were trained in the CLP module. Fifteen teams were formed; five individuals did not join teams.

Partners were considered to have completed a CLP cycle when they had planned a learning session, conducted a learning session, and debriefed about the learning session for one partner. On the question of whether teams completed a CLP cycle, some participants provided conflicting information in the self-reports and the interviews. There were also several participants who either failed to complete the self-report forms or were not interviewed. Twenty of the 37 participants provided consistent data in both the self-reports and the interviews indicating their CLP progress.

In further analysis it was found that 71% (22/31 interviewees) participated in a CLP planning session. Of those who planned, 81% (18 of 22) said they participated in a learning session and 86% (19 off 22) said they participated in a debrief session. Of those interviewed, 77% (17 of 22) who began CLP by planning with a partner to learn and debrief did, in fact, do so. Overall, 55% (11 of 20) of those trained in CLP participated in planning, learning, and debrief sessions.

*What barriers, if any, did you encounter?* Finding time was mentioned by 58% of interviewees as the biggest barrier to the implementation of CLP. Problems with the process itself were noted by 21%. Relationships with CLP partners were noted as barriers by 16%. In addition, when specifically asked "What changes would you like to
see?", 38% of respondents said they needed more administrative support; most of these indicated they needed more release time.

**Would you participate in CLP again to learn new content?** The majority of those interviewed (65%) indicated they would participate in CLP again to learn new content. For 27%, future participation was dependent on the content to be learned. A small minority of respondents (8%) said they would not use CLP again.

**How were your knowledge and application of skill generalization affected?** A large majority of interview respondents (86%) felt their knowledge and application of generalization content increased as a result in their participation in the university-sponsored inservice sessions.

**Was CLP a factor in that [learning]? If so, how?** For 42% of those interviewed, CLP was a positive factor in their increase of knowledge and skill application, and 13% said CLP was somewhat of a factor. For the remaining respondents, CLP either did not impact their knowledge or application, or was considered to be inapplicable. For those who responded that CLP did, in fact, increase their knowledge and application of skill generalization, almost half (48%) felt that the collaboration was a factor.

**Were incentives a factor in CLP participation?** Of the 20 participants for whom complete data are available, 11 completed at least one CLP cycle. Eleven of these 20 also received some incentive for their participation. To determine if a statistical relationship exists between these variables, the data were submitted to a simple matching dichotomy coefficient analysis (i.e., similarity coefficient S4; Gower, 1985) using the SYSTAT (Ver. 4.2) microcomputer statistical package. The result, shown in Table 1, indicates a high correlation between incentives and completion of a CLP cycle.

Two other similarity coefficients are worthy of note. Individuals whose partners participated in incentives had a fairly high probability of completing a CLP cycle, whether or not they themselves were participating in an incentive. The data also reflect a low probability that an individual with no incentive will complete a CLP cycle (see Table 1).

**Discussion**

The two data collection methods confirmed that somewhat more than half of respondents (55%, 11 of 20) used all the steps in CLP to apply the content of skill generalization. Those who did use CLP felt it was worth their time and effort and that they preferred to work collaboratively. Those who did not complete a CLP cycle reported that they preferred to work alone or that no one initiated the process.
Less than half of the respondents reported that CLP was a factor in the increase of their knowledge and application of strategies to increase skill generalization in students with moderate to severe disabilities. Several barriers were noted on the part of respondents.

**Barrier One: Lack of time.**

The lack of time to implement CLP proved to be the biggest barrier even though in two of three sites release time was available upon request.

**Implication:** If CLP is to be used as a follow-up to training, scheduling time for CLP may need to be formalized. Three teachers involved in a peer coaching project in Canada found that it was helpful to schedule coaching activities a quarter at a time (Parry, 1985). Building administrators may need to take an active role in the scheduling process. Secondly, participants solved the problem of time in creative ways: getting together on weekends, flexible scheduling, and telephone calls. A number of low-cost or free ways to release personnel for coaching activities have been outlined by Joyce and Showers (1988). Such methods include having administrators take over classes, use of video equipment, and use of teaching teams. In special education settings, support service personnel, or teaching assistants could potentially be utilized.

**Barrier Two: Administrative support.**

Although administrators in all sites offered support (e.g., release time; the use of district incentives; and, at one site, attending the inservice sessions), some participants felt that more administrative support would be helpful. Participants seem to have wanted some acknowledgement of their efforts. It was perceived that administrators were overextended and, therefore, did not have the time to devote to content application. It should be noted that slightly over 1/3 (37%) of the respondents felt their administrators were doing an outstanding job of supporting their coaching efforts.

**Implication:** Garmston (1987) outlined five ways in which administrators can support peer coaching: select a coaching model that is most likely to produce desired outcomes, demonstrate that peer coaching is valued, provide a focus for coaching activity, provide training for coaches, and model positive coaching behaviors. It was felt by some that administrators could have organized a meeting of all individuals involved in CLP. The purpose of this meeting would have been to share ideas. One person suggested that administrators sit in on CLP sessions themselves. Garmston indicates that effective coaching programs train educators before they coach and provide follow-up training while coaching is underway. Representatives at all sites did encourage participants to attend small group meetings to share successes and concerns with CLP. At Site A, those meetings were facilitated by the district representative. Five meetings were held throughout the 7-month project, with about half of participants attending at least one meeting. At Site B, three meetings were scheduled to be facilitated by University project staff. Two of the three were cancelled due to lack of interest or need.
One large group meeting scheduled at Site C, again to be facilitated by project staff, was cancelled because participants did not feel the need for the meeting. It seems that the most successful small group meetings to provide support for CLP were conducted by district, and not project personnel.

**Barrier Three: Process itself.**

Participants noted that the coaching process itself proved to be a barrier. Comments such as "CLP should be taught as a separate course" and "an instruction manual with guidelines on the CLP process would be helpful" reflected this concern. However, other participants suggested less time and fewer materials.

**Implication:** Trainers and administrators need to be in tune with the unique needs of each participant. A written guide was developed to assist participants (Matlock, 1989). The intent of the guide is to provide concise information on how to apply CLP. The first section reviews the basics and rationale for CLP and the appendix provides sample (blank and completed) forms.

**Barrier Four: Relationships between partners.**

Finally, a barrier to successful implementation of CLP was the relationship between partners. This is interesting to note because, in CLP, partners are self-selected. It could be that situations that were not initially thought to be of concern (e.g., distance) proved to be problematic during implementation. On the other hand, some participants felt that CLP imposed roles that were more rigid than roles they had formed on their own: "the process was too formal and interfered with the collaboration we already have going."

**Implication:** Factors which lead to successful and unsuccessful partnerships may need to be emphasized more during CLP training so participants can make better choices in selecting their CLP partners. It may need to be noted during training that the Partner Selection forms are meant as guidelines to be used if they meet the needs of the particular team. It may be that two persons who have worked well together in the past do not need a formal system to help each other learn new content.

Although barriers to the Collaborative Learning Process have been identified, one also needs to look at why participants took advantage of the inservice offering. A low percentage of participants (17%) said they participated to take advantage of incentives. However, 61% of all participants did take advantage of an incentive.

An analysis of completed CLP activities revealed that the majority (87%) of those who completed at least one CLP cycle (or their partner) received some sort of incentive. Only 9% of those completing at least one CLP cycle did not receive an incentive. These data suggest that offering incentives for professionals serving students with moderate to severe disabilities is an important factor for improving application of inservice content through the use of the Collaborative Learning Process.
Conclusion

A collegial coaching model (i.e., CLP) was developed to increase the application of strategies designed to facilitate skill generalization of students with moderate to severe disabilities. It was found that over half (61%) of the participants actually engaged in at least one CLP cycle. Barriers were noted with implications for the use of CLP as a follow-up to content training.

It was found that time to complete CLP activities, administrative support, and difficulties with the process and with relationships were barriers to Special Education personnel when applying the content of skill generalization. Solutions to each of those barriers will require systematic exploration with educators of students with moderate to severe disabilities.

Incentives to participate proved to be critical for participants involved in this inservice project. Further study is needed to determine which incentives are most effective, who should offer the incentives, or if a menu of incentives for participants to self-select is most powerful.

References


Author Notes

Barbara Matlock is a Technical Assistance Coordinator for the Generalized InService training (GIST) Project. For more information, write to Program Development Services, Experimental Education Unit, WJ-10, University of Washington, Seattle, WA 98195.

Valerie Lynch was Project Manager of Program Development Services during the Generalized InService Training (GIST) Project. She was recently appointed Director of Staff Development and Program Review at Puget Sound Educational Service District, Seattle, WA.

Felix Billingsley is a Professor of Special Education at the University of Washington. He served as a Senior Investigator of the University of Washington Research Organization (UWRO) and helped create intervention strategies to promote skill generalization in students with moderate to severe disabilities. He served as Co-Principal Investigator of the Generalized InService Training (GIST) Project.

Norris Haring is a Professor of Special Education at the University of Washington. Dr. Haring was Principal Investigator of the University of Washington Research Organization (UWRO) and is editor of Generalization for Students with Severe Handicaps. Strategies and Solutions. He served as Co-Principal Investigator of the Generalized InService Training (GIST) Project.
<table>
<thead>
<tr>
<th>Incentive Type</th>
<th>Coefficient</th>
<th>Number of Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Incentives and CLP Cycle</td>
<td>0.800</td>
<td>20</td>
</tr>
<tr>
<td>Completion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Incentives and CLP Cycle Completion</td>
<td>0.737</td>
<td>19</td>
</tr>
<tr>
<td>Lack of Incentives and CLP Cycle</td>
<td>0.250</td>
<td>20</td>
</tr>
<tr>
<td>Completion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>