PBL Core Skills Faculty Development Workshop 2: Training Faculty in Group Learning Facilitation Skills Through Role-Modeling and Role-Play Activities

Carol W. Wuenschell, Ph.D.; Kirsten R. Dalrymple, Ph.D.; Charles F. Shuler, D.M.D., Ph.D.

Abstract: This report describes the second workshop in a series intended to prepare faculty for their roles in a newly instituted problem-based learning (PBL) dental program. The Facilitation of Learning workshop was designed to familiarize participants with the role of the facilitator in the small-group learning context, the skills required for facilitation, and identification of student behaviors requiring facilitator intervention. Methods included discussion of a subject-specific scenario, role-modeling of a mock student group by workshop leaders or PBL students, and role-play by participants as facilitators of the mock group. An exit survey showed the majority of participants felt the workshop goals had been met. The opportunity to observe and participate in a realistically simulated PBL group was most commonly identified as an effective workshop element by attendees, with participant discussions and opportunities for input from experienced facilitators and students (when used) also cited as effective. Participant criticisms and suggestions that will likely contribute to program enhancement notably included expressed desires for further observation and practice prior to facilitation of a PBL student learning group and availability of ongoing follow-up training and support for fledgling facilitators.

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In the 2000-01 academic year, the University of Southern California School of Dentistry (USC-SD) undertook the full-scale change from a traditional lecture-based format to a problem-based pedagogy, following the success of a small problem-based learning (PBL) pilot program. The change was to take place as a phase-in over the course of four years, with each new entering class of 144 students receiving their education by the new pedagogy, while previous classes completed their studies under the traditional instructional program that had been in place when they entered dental school. The need to provide an adequate number of competent facilitators to meet the needs of the new entering class, as well as subsequent classes, required creation of a new faculty development program. This article is one of a series describing the development, implementation, and initial evaluation of this faculty training program. Development of the program curriculum, the central elements of which consisted of a coordinated set of four workshops, is described in the first in the series, which appeared in the September 2006 issue of the Journal of Dental Education. This article provides the full description and outcomes of the second workshop in this series, Facilitation of Learning, which focused on the skills needed by faculty to effectively facilitate the learning process of students working in small groups using PBL. The goals and objectives of the Facilitation of Learning workshop will be outlined, and the methods and workshop format described. Measurable outcomes in the form of workshop participation and participant perceptions...
will be detailed, and the article concludes with a discussion of potential changes to the program based on participant input.

The experience of training faculty in the roles and responsibilities associated with problem-based learning has been more thoroughly explored in medical than in dental education. Reports from medical schools bring up a number of general issues to be considered when undertaking the creation of a faculty development program, such as sequencing, use of methodologies consistent with adult learning principles, institutional support, and program evaluation.\(^2,5\) Aside from these general considerations, there are additional specific issues that arise when considering a change in instructional approach to PBL. First, the transition from the traditional lecturer role to that of facilitator of learning is difficult for many faculty members.\(^3,5\) At the same time, the success of this transition may be critical to the success of the PBL pedagogy since there are important links between facilitator behavior and small group function.\(^6,7\)

For these reasons, the developers of the faculty development program at USCSD decided that training in facilitation skills should be a major component in the design of the PBL faculty development program. It was felt, however, that faculty first needed to be equipped with a basic understanding of the PBL process. Accordingly, the Facilitation of Learning workshop was placed second in the workshop sequence, immediately following the PBL Process workshop, which was devoted to providing faculty with an understanding of the rationale and procedures involved in the PBL small-group learning process.\(^3\) The workshop planners recommended that the Facilitation of Learning workshop follow the PBL Process workshop and be in close conjunction with observation of a real PBL case. In addition, it was recommended that workshop participants should facilitate a case relatively soon after completing the workshops, so that individuals could apply what they had learned. The planners were committed to utilizing methods for instruction and practice that were consistent with concepts of adult learning theory\(^9\) and to providing opportunities for faculty to discuss their concerns amongst their peers in a nonthreatening environment. Program evaluation was also considered important to determine the impact of the program on faculty perceptions, as well as to assess the need for modifications to the program based on input from the faculty.

### Methods and Materials

The Facilitation of Learning workshop was offered to the dental school faculty and others, including dental hygiene faculty and postdoctoral students, who had an interest in the workshop subject or who might be expected to engage in facilitation of small-group learning. All individuals involved in the education of students at USCSD were required by the administration to attend the first, second, and third workshops in the series.

The formulation of the Facilitation of Learning workshop was based on the underlying idea that, to be effective as a facilitator, one should understand the process of learning being utilized by the student, the behaviors exhibited by the student that are representative of this process, and the general role the facilitator should take in guiding this process. All of these contribute to the goal that the participants would leave with the basic skills and confidence necessary to facilitate small-group student learning. It was also anticipated that workshop participants would leave with a more solid concept of the differences between traditional large-group teaching and small-group facilitating. With these items in mind, objectives for the workshop participant were set and are detailed in Table 1.

Instructional methods were selected to be in keeping with adult education principles,\(^5\) since this approach is thought to enhance participant satisfaction with the learning experience.\(^5\) For example, methods of instruction were chosen that required

<table>
<thead>
<tr>
<th>Number</th>
<th>Learning Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To understand the skills needed to facilitate student groups.</td>
</tr>
<tr>
<td>2</td>
<td>To understand and be able to identify behaviors that would prompt intervention by the facilitator.</td>
</tr>
<tr>
<td>3</td>
<td>To understand the roles and responsibilities of the facilitator in the student group.</td>
</tr>
</tbody>
</table>
the participants to engage in active and cooperative
learning and that allowed opportunities for construct-
tive sharing of prior experience. In addition, methods
were chosen when possible that used real-life con-
texts for presentation of material. The introductory
information presented, as well as the methods to
be used during the course of the workshop, were
discussed with the participants, and discussions in-
volving the participants were employed in each of the
workshop activities. For the Facilitation of Learning
workshop, activities consisted of a subject-specific
scenario as well as role-modeling and role-playing
activities.

The Facilitation of Learning workshop was
presented in a half-day format. The sequence of
activities in the workshop is summarized in Table
2, including details of time allotted, the principle
parties involved, and objectives addressed by each
activity. The objectives for the workshop, as well
as the workshop format, were presented to the par-
ticipants at the beginning of the workshop, and the
introduction also included a short recap of the PBL
process as well as presentation of key concepts. The
subject-specific scenario, role-modeling, and role-
play activities are described in further detail in the
next section. Selected literature on facilitation issues
was made available to the participants at the close of
the workshop as were two handouts, one outlining
specific responsibilities of the facilitator and the
other, a “Facilitation Starter Kit” designed by the
program developers and based on recommendations
from The Skilled Facilitator.10

Table 2. Workshop program, resources, and learning objectives

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time Allotted</th>
<th>Parties Primarily Involved</th>
<th>Supporting Materials</th>
<th>Relevant Learning Objectives*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>30 min.</td>
<td>Workshop leader</td>
<td>PowerPoint slides</td>
<td>1, 3</td>
</tr>
<tr>
<td>Role of the facilitator: subject-specific scenario</td>
<td>10 min.</td>
<td>Participant pairs</td>
<td>Subject-specific scenario, flip charts</td>
<td>1, 3</td>
</tr>
<tr>
<td>Full group discussion of scenario</td>
<td>20 min.</td>
<td>Workshop leader and participants</td>
<td>Flip charts</td>
<td>1, 3</td>
</tr>
<tr>
<td>Mock group: role-modeling of student behaviors and facilitator responses, followed by discussion</td>
<td>40 min.</td>
<td>Workshop leader and mock group members (PBL-experienced faculty)</td>
<td>One-part PBL case, flip charts</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Mock group: participant role-play as facilitator with mock group, followed by discussion</td>
<td>60 min.</td>
<td>Workshop leader, mock group members, and 1-3 selected participants</td>
<td>One-part PBL case, flip charts</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Workshop wrap-up and evaluation</td>
<td>15 min.</td>
<td>Workshop leader and participants</td>
<td>Survey</td>
<td></td>
</tr>
</tbody>
</table>

*Workshop learning objectives 1-3 are listed in Table 1.

Detailed Instructional Methods

A subject-specific scenario was used in the
Facilitation of Learning workshop. This approach
has been effectively used to train math instructors11
and was adapted for use in the USCD faculty de-
velopment program. Use of such scenarios directly
involves the learner and recognizes adult preferences
for lifelike problems. The scenario utilized for the
Facilitation of Learning workshop (Figure 1) outlined
a common situation experienced by facilitators, one
that highlights behavioral cues that present appro-
priate and inappropriate opportunities for interven-
tion by the facilitator. The scenario was used as a
means to focus participants on particular topics and
engage them in a brainstorming and problem-solv-
ing discussion with a partner. After brainstorming,
the moderator brought the participant pairs back
together and conducted a larger group discussion,
applying participant-generated points back to the
topic at hand and, where possible, providing specific
answers to questions raised in the discussion. In us-
ning the scenario as a discussion-stimulating tool, the
workshop planners anticipated reinforcing steps of
the PBL process and sparking discussion of facilita-
tion opportunities and faculty attitudes about playing
Spring Break Scenario (A)

It was Wednesday, the second session of Dr. Blix’s PBL case. Dr. Blix walked into Seminar Room 1 and found his freshman PBL group engaged in an animated discussion about their spring break plans. He settled into the remaining seat at the table and asked the group if they were ready to get started reviewing materials from Monday’s part of the case.

He and several members of the group had a lively discussion about the ideas from the previous part of the case. Overall, Dr. Blix felt pretty good about the discussion. Some of his questions generated interesting conversations. Only a couple of questions fell flat. He wasn’t sure why.

From the fidgeting he saw from the left side of the table, it seemed that the group was ready to move on. There was an idea from Monday’s session that they couldn’t answer. Dr. Blix thought they’d get to it in the new part of the case so he didn’t worry about it too much. He passed out part two of the case.

Spring Break Scenario (B)

The students read part two of the case. Unlike part one, which focused on medical topics, part two was mixed with what looked like dental topics. Dr. Blix felt a grimace come over his face. He had a Ph.D. in developmental biology and a dental knowledge set limited to tooth development and his own personal experience. Dr. Blix put on his poker face for the group and decided to wing it.

The group wrote out all of the facts and then moved on to ideas. Janice, Kyle, and Sara fired off several ideas with no comment from the rest of the group. Kyle started with another, and Dr. Blix noticed Joseph furrow his brow.

When Kyle finished, Dr. Blix initiated the following interaction:

Dr. Blix: “Joseph, is Kyle’s idea clear to you?”
Joseph: “Well, no, actually.”
Dr. Blix: “What were you thinking?”
Joseph: “I was thinking that PDL destruction was due to collagen destruction by bacteria and not by the immune system.”

Someone in the group suggested that both ideas be put up on the board. Discussion about the case continued.

Potential Scenario Outcomes
1. Sequence and steps of PBL process and case progression
2. Initiating and maintaining productive group discussions
3. Encouraging equal participation
4. Content versus non-content expertise
5. Roles and responsibilities of the facilitator
6. Verbal and nonverbal cues
7. Safe learning environment

Figure 1. Subject-specific scenario for break-out groups and general discussion
the role of facilitator. This activity thus served as a means of tapping the participants’ prior knowledge and experiences, as well as their preconceived ideas about the facilitator’s role. It was anticipated that the scenario might create a “need-to-know-experience” for the participants in accordance with adult learning principles.5

Role-playing and role-modeling were used in the Facilitation of Learning workshop to provide demonstration and to allow participants to practice the actions of a facilitator working with a small group of students engaged in the PBL process. It was felt that role-modeling and role-playing were instructional methods that would appeal to adults’ preferences for learning through lifelike situations. The activities also provided an opportunity for critique of the demonstrated facilitator behavior. During these activities, a mock student group worked on a mini-case, following the same learning steps used by the dental students when working on the full-scale cases used in the PBL curriculum at USCSD. The mini-cases, one of which is shown in Figure 2, resembled the first part of a case from the PBL curriculum, with a small number of facts for the mock group to work with so that the group’s work on the case could proceed relatively quickly.

The overall goal of the role-modeling was for the mock group to clearly demonstrate how student behaviors prompt specific interventions by a facilitator. To elicit specific behaviors from the mock student group, a loose script was created as a guide. The script (Figure 3) assigned roles to each of the mock students, specifying a type of “problem” behavior to be demonstrated such as presenting ideas with no supporting evidence. The mock student group members were asked to base their behavior on the script and fulfill the objectives set for the dramatization. For the role-modeling portion of the activity, the mock student group included an experienced facilitator, and it was intended that the participants would identify the problematic behaviors in each case and observe the specific intervention by the facilitator that was prompted by the student behavior. The impact of the facilitator’s intervention was designed to be clear to the participants (i.e., the problem was resolved). The take-home message for the participant was intended to resemble the following pathway:

Observation and Diagnosis of Behavioral Problem → Facilitator Intervention → Resolution of Problem

A set of criteria for facilitator behavior (Figure 4), derived from a number of sources,10,12 was provided to the participants to aid their understanding and evaluation of the facilitator’s actions. A worksheet accompanying the list of criteria was designed to assist the participants in applying the criteria to the behaviors exhibited by members of the mock group. After behaviors and interventions had occurred, the demonstration was stopped, and a discussion of the events was initiated among the moderator, participants, and mock group members. The goal of the discussion was for the participants to link student behavior to the resulting facilitator intervention, applying the facilitator behavioral criteria and noting the impact of the facilitator on student behavior.

In the role-playing situation, the mock group were to continue demonstrating their assigned roles in a novel phase of the process or with a new case, and one of the participants was asked to take on the role of the facilitator and interact with the mock group. Participants were randomly selected to role-

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**Oswell’s Aches**

Mr. Thomas A. Oswell, a 33-year-old accountant, complains of recurrent swelling and tenderness in his right lower leg. He reports that the problem began over a year ago following an automobile accident. As a result of the accident, Mr. Oswell suffered a painful blow to his right leg. At that time he went to an emergency clinic for treatment of the contusion on his leg.

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**Figure 2. Mini-case for role-modeling and role-play activities**
Student behaviors addressed by the mock group activity were drawn from the following:
1. Presenting ideas with no supporting evidence
2. Addressing the facilitator as a resource
3. Participation by a group member
4. Rushing the case
5. Promoting clarification of terms and use of specific examples
6. Promoting consensus and commitment on Learning Needs

Sample of mock group script for first behavior

*Throughout the demonstration:
Do not verbally acknowledge errors in process made by your group members. All errors will be addressed by the facilitator.*

*Behavior 1: Presenting ideas with no supporting evidence*

*Student A: Make unfounded statements with no rationale during the ideas segment of the session. For example: “The lingering symptoms are due to an infection.”*

*Facilitator Intervention: The facilitator will intervene when unfounded statements are made by questioning the rationale and inviting comments by other students.*

*Resolution*

*Student(s): Student A or other members of group will provide rationale to support the idea.*

*Brief period (1-2 min.) of normal activity*

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**Criteria for Facilitator Behavior** (The facilitator should . . .)

1. Promote equal opportunity for participation by all group members.
2. Recognize and assist group in identifying goals, resolving debate, and evaluating actions.
3. Act primarily as a facilitator rather than as a primary source of information (avoid “teaching” and dominating).
4. Help group establish and adhere to ground rules.
5. Encourage students to make thinking visible and to develop hypotheses based on facts.
6. Encourage group to check their understanding of terms and concepts used in group discussion.
7. Recognize when the group is effectively using PBL process, and allow them to run the session with minimal intervention from the facilitator.

*Criteria were derived from Schwarz,10 Mennin,12 and facilitation experience of USCSD faculty.*

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**Figure 3. Behaviors addressed and script sample for mock group**

**Figure 4. Criteria for facilitator behavior**
play as the facilitator. In the larger workshop groups, time constraints made it impossible to allow each participant to facilitate a mock group. After the participant-facilitator had been given an opportunity to respond to the student behaviors, the role-playing was stopped, and the entire group was again asked to discuss the activity with respect to the facilitator behavioral criteria.

Methods of Program Evaluation

The Facilitation of Learning workshop was evaluated by surveying the participants immediately following completion of the workshop. The first part of the survey assessed the level of participant agreement that the workshop objectives had been met, using a four-point Likert scale with these choices: Strongly Disagree, Disagree, Agree, Strongly Agree. Survey data were tabulated by first assigning numerical values to the scale (1, 2, 3, and 4, respectively). Mean values and standard deviations were calculated for each survey item.

Participants were also asked to identify effective and ineffective methods used for the workshops and were asked to make any suggestions they might have as to how to improve the workshops in the future. Similar responses were grouped where possible to identify common recurrent themes. As an additional immediate assessment, those involved with running each workshop session discussed their impressions of the event with respect to logistics, participant outcomes, and needed modifications at the end of each presentation of the workshop.

Results

The principal measurable outcomes of evaluation of the Facilitation of Learning workshop rest upon the perceptions of the faculty participants as expressed in responses to items on a survey conducted immediately upon completion of each workshop. Surveying faculty perceptions was done primarily to provide the course developers with an idea of the elements of the workshop with which faculty felt less satisfied or areas where they had less confidence, so that modifications or additions to the faculty development program could be made in the future, an approach similar to that used by Des Marchais and Chaput.13

This article reports the outcomes of the PBL core skills workshops offered over a two-year period from 2003 to 2004. During this time, the Facilitation of Learning workshop was presented a total of eleven times. The number of participants enrolled in any given presentation of the workshop varied between five and twenty-five. While the workshops were open to all faculty and to non-faculty individuals involved in case facilitation, only those faculty employed with at least a 40 percent commitment of time to USCSD were required to be certified in the PBL core skills. Of the 182 individuals identified as requiring certification, 119 attended the Facilitation of Learning workshop during the indicated two-year period. All participants were given the opportunity to complete the exit survey regardless of faculty status or requirement that they be certified.

A total of 125 surveys were distributed to participants in the Facilitation of Learning workshop. Of these, eighty-nine were returned with data for analysis of responses regarding the achievement of workshop learning objectives, representing a 71.2 percent return rate for this portion of the survey. The analysis is summarized in Table 3. In general, the respondents expressed the opinion that the workshop was successful as measured by their responses to the first part of the survey, in which they were asked whether they agreed or disagreed that the workshop had met its three stated objectives. The mean levels of participant agreement that the Facilitation of Learning workshop objectives had been met were 3.32 (SD ±0.63) for objective one, 3.34 (SD ±0.62) for objective two, and 3.36 (SD ±0.63) for objective

<table>
<thead>
<tr>
<th>Table 3. Participant perceptions: achievement of learning objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective: This workshop helped me . . .</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1 To understand the skills needed to facilitate student groups.</td>
</tr>
<tr>
<td>2 To understand and be able to identify behaviors that would prompt intervention by the facilitator.</td>
</tr>
<tr>
<td>3 To understand the roles and responsibilities of the facilitator in the student group.</td>
</tr>
</tbody>
</table>
three, where the numerical value of 3 was assigned to the “Agree” response choice and the value of 4 was assigned to “Strongly Agree.”

The exit survey also requested that the workshop participants respond to a number of questions by writing comments. Specifically, the participants were asked to describe what they felt were the most effective elements and the least effective elements of the workshop and to give suggestions for ways in which the workshop could be improved. Out of 125 surveys distributed, ninety-eight were returned with some written response on this qualitative part of the survey, although only thirty-five individuals responded to all three items. The written comments were transcribed and grouped, based on related content, and a number of recurrent topics and themes emerged. Comments on less effective elements and suggestions for improvement were sometimes difficult to separate since respondents tended to note a weakness and suggest a solution in the same written statement. In the discussion below, numbers of comments in any specific category cannot necessarily be directly equated with numbers of respondents since workshop participants frequently wrote more than one comment to identify most effective and least effective components of the workshop. The purpose here is to present the overall patterns observed among the comments.

The overall tone of the written comments was favorable in that there were more responses for the “most effective” question (89) than for the “least effective” question (55). Of the fifty-five respondents who made “less effective” entries, twenty-one wrote either “none” or “could not think of any” in response to the query, so that the number of actual negative assessments of the workshop obtained in response to this question was only thirty-four. In addition, there were twenty-two unsolicited expressions of either thanks or general praise for the workshops or the workshop leaders. Although they were not asked specifically about learning, thirteen of the participants volunteered the perception that they had learned something, either general or specific, and the area of perceived learning, when specified, was in all but one case related to one of the workshop objectives. These observations are broadly consistent with the view of the majority of participants that the workshop objectives had been met.

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### Comments Regarding Effectiveness of Workshop Exercises

The participants’ comments are summarized in Table 4 (most effective elements) and Table 5 (less effective elements). By far the greatest numbers of comments on effective elements of the workshop were related to the activities involving the mock group. In all, forty-two of the comments for the “most effective” question referred to some aspect of the mock group activities. Of those who wrote more extensive comments, many seemed simply to appreciate the opportunity to “see how it is done,” as, for example, the participant who wrote that the most effective element was “being able to observe an experienced facilitator and group in action.” A smaller number expressed an appreciation more specifically for what the activity was designed to show, as in the case of one participant who indicated that the effectiveness resulted from “actual observation of behaviors and how the facilitator managed the group.” It was difficult to separate the role-modeling activity from the role-playing activity when analyzing the participants’ comments. Some mentioned role-playing specifically, but it was not always clear that the respondent understood the distinction between role-modeling and role-playing. In fact, these two activities were closely

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### Table 4. Participant perceptions: effective workshop elements

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>The mock group (role-modeling and/or role-play)</td>
<td>42</td>
</tr>
<tr>
<td>Opportunities for discussion/question and answer</td>
<td>27</td>
</tr>
<tr>
<td>Performance of workshop leaders and/or mock students</td>
<td>10</td>
</tr>
<tr>
<td>Other workshop elements (general or specific)</td>
<td>6</td>
</tr>
<tr>
<td>Participant factors (input from experienced faculty)</td>
<td>6</td>
</tr>
<tr>
<td>Input from experienced PBL students</td>
<td>11</td>
</tr>
</tbody>
</table>

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### Table 5. Participant perceptions: less effective workshop elements

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>None/can’t think of any</td>
<td>21</td>
</tr>
<tr>
<td>The mock group (more participation, more of process)</td>
<td>18</td>
</tr>
<tr>
<td>Length/time management</td>
<td>7</td>
</tr>
<tr>
<td>Workshop design (redundancy, coverage, other)</td>
<td>7</td>
</tr>
<tr>
<td>Participant factors (experience level, behavior)</td>
<td>12</td>
</tr>
</tbody>
</table>
linked to each other in the workshop design, and it is
not surprising that the participants might have seen
them as a single activity.

A substantial number of participants (twenty-
seven) mentioned discussions or question and answer
sessions as effective elements. More than half of
these comments referred specifically to the discus-
sions of the mock group sessions. For example, one
participant wrote that the most effective element
was “the ability to observe the mock session and the
discussion that followed.” Apparently, these partici-
pants not only liked being able to see how it is done,
but also appreciated having the opportunity to talk
about the experience. Most of the other comments
identified “discussions” or “question and answer”
sessions as most effective elements without identi-
fying a specific part of the workshop. This could
be viewed as a general endorsement of the adult
learning principle of allowing learners to be actively
involved in their learning. A few comments did refer
specifically to discussions on understanding the role
of the facilitator, which was the topic targeted by
the subject-specific scenario. In general, however,
specific workshop components other than the mock
group activities received very little mention.

A number of participant comments were re-
lated to what might be termed participant factors,
outside of the control of the workshop organizers.
Some of these were of interest in that they described
participant input as an effective element and even
commented that they had learned from fellow faculty
or that “having people who had facilitated before
coming to the workshop” was part of what made the
experience effective. These comments may be viewed
as further evidence that the workshop participants
were actively interested in having additional input or
insight into how PBL facilitation is done. The same
may be said of the responses to the use of experienced
PBL students as the “students” in the mock group in
some of the workshops. A surprising number of par-
ticipants mentioned that they found it helpful to hear
the PBL students’ comments on their experiences in
group or on what makes a good facilitator.

The mock group activities were also identified
as a least effective element by some participants.
However, none of the eighteen negative comments
concerning the mock group was worded in such a
way as to suggest that the mock group activity was
viewed as ineffective. Rather, the comments referred
to specific aspects of the activity, such as the length
of the sessions, which did run over time on a number
of occasions. Interestingly, a number of comments
indicated that the respondents wanted more from
these activities; that there was not enough attendee
participation (role-playing) in the mock group ses-
sions, or that the respondents thought too little of the
case process was demonstrated. For example, one
attendee wrote: “I think the group process should not
have been interrupted—I think it caused the group not
to act all the way through a normal group process.”

Items that could be termed participant factors
also appeared in the ineffective comments. In contrast
to those who appreciated having experienced facilita-
tors among the participants, there were a few who felt
that widely divergent levels of experience among the
participants was a problem; that the presence of some
who were “accomplished facilitators” inhibited the
inexperienced participants from asking questions; or
that some faculty participants dominated and were
opinionated. The divergence of perspectives on the
presence of participants with facilitation experience
may reflect the individual makeup of the audiences
at the different workshops.

**Participant Suggestions**

Fifty-four of the participants made responses
in the space designated for suggestions, although
fifteen of these responses were indications that the
individual had no suggestion to offer, either because
“everything was good” or because they felt they did
not know enough to make useful suggestions. One
participant wrote: “Maybe after I facilitate a group,
I will have input in this category.” Since the category
of “suggestions for workshop improvement” was
broad and open-ended, the observations here are, as
one would expect, somewhat anecdotal. Nevertheless,
it is worth noting that the general theme of partici-
pants wanting more experiences with observing or
participating in small-group learning was evident in
suggestions proposed by participants.

These suggestions included changes to the
workshop itself and general improvements to fa-
cillator training. Among examples of the former, a
number of attendees suggested that videotaping real
or mock sessions could be useful to make the mock
sessions show what they were intended to show more
efficiently or to provide more examples of good and
bad facilitator behavior. One wrote, “Maybe there
should have been film of other facilitators in action,”
and others suggested that it would be useful to have
more feedback from experienced facilitators without
referring to the use of film or videotape. As another example, several respondents offered suggestions to broaden the scope of coverage of the workshop to cover what is encountered in everyday facilitation, rather than just specific problem behaviors, or to cover how the facilitator deals with the full PBL process. (Because of the mini-case used, the mock group activity was confined to only the first iteration of the PBL cycle and in some cases did not even progress to the students’ selection of Learning Needs.) One attendee simply wrote that the workshop organizers should “have additional cases to present for more experience in handling ‘problem’ situations.” Finally, two additional suggestions related directly to increasing the participant involvement in the role-playing activity (“you need more participation by attendees”). Frequently, there was only time for one participant to take the facilitator role in the mock group, and some participants felt that the workshop could be improved by allowing more faculty to have this experience.

Participants’ suggestions for broader facilitator training experiences beyond the Facilitation of Learning workshop included such things as more observation of cases or being mentored on a case. One wrote: “I recommend that each participant ‘sit in’ as [an] observer before taking on this as [an] independent solo facilitator.” The original plan for this faculty development program included post-workshop observation, but this activity had not been implemented at the time of this study. One participant, writing in the “less effective elements” box, tellingly observed that “this process takes practice—another case with practice facilitation would be helpful.” On a related note, there were several suggestions for various kinds of ongoing follow-up to the workshop. The institution of regular short workshops was one of these. Another respondent wrote: “I think it would be a good idea if I, as a facilitator, have somebody I can go [to] and ask my questions that come out later!” Another suggested that the school should “develop a PBL facilitation website bulletin board or email to discuss difficult PBL dynamics.”

Discussion

The circumstances under which PBL pedagogies have been implemented have varied widely among dental schools.14-17 The extent to which PBL is used in the curriculum, the structure of the small group tutorials, and even the exact style of the PBL process used also vary among health care education institutions.16-18 Probably no two institutions are alike in their experiences. During transitions from traditional lecture-based formats to PBL, however, the need to train faculty to implement an unfamiliar approach to student learning remains a constant. A number of descriptions of faculty training programs for PBL tutors/facilitators are available in the literature4,13,19-22 (reviewed by Hitchcock and Mylona1). These training programs have been evaluated, by and large, through surveys of participant perceptions, as we have done in this report. Though faculty self-assessment of teaching skill acquisition has been criticized, some studies have supported its validity.23,24 Reports of participant assessments have typically found that faculty development programs, for both PBL and traditional teaching approaches, were well received by the participants and have further suggested that these programs resulted in increased knowledge of teaching styles, as well as awareness of, and positive changes in, participants’ teaching behaviors.13,22-25

In evaluating the faculty development program instituted at USCSD, we found that participant responses to the Facilitation of Learning workshop were generally quite positive. Indeed, many participants freely expressed their appreciation of the learning opportunity afforded by the workshop activities. We further observed, however, that the workshop’s greatest perceived strength lay in the fact that it included an activity using a mock PBL group, thus providing participants an opportunity to observe, and in some cases participate in, aspects of the role of the PBL facilitator in action. In addition, a number of respondents voiced concerns that indicated they wanted more practice, more opportunities to observe experienced facilitators, or more instruction in aspects of the facilitator’s role that were not specifically included in the workshop design. One interpretation of these observations is that, faced with the major change in their role that PBL requires, most faculty were willing to learn, but felt insecure in their ability to fulfill the new role. They were glad to be offered helpful instruction, but they wanted more opportunities to observe or to practice facilitation and more demonstrations of additional functions they would be expected to perform. This is consistent with the view, also expressed by others, that acquiring confidence in one’s ability to facilitate small-group learning requires extensive experience and practice over time.13
Achievement of Workshop Objectives

Based on the responses of the participants who filled out the survey, the workshop was broadly successful in achieving the stated objectives to increase understanding of the skills necessary to facilitate student groups, to increase the ability to identify student behaviors requiring facilitator intervention, and to increase understanding of the roles and responsibilities of the facilitator. On the face of it, faculty members’ perceptions that they have achieved a better theoretical understanding of a subject seem likely to be more accurate than a perception that one will be able to apply one’s new understanding to a practical situation. Participant responses to a training program at the University of Natal support this idea as reported by Ohmesdahl and Manning.25 In that study, fifteen participants in a facilitator training program were surveyed immediately following a workshop and again after they had facilitated their first PBL module. The participants’ views remained fairly stable regarding agreement with statements on the effectiveness of small-group learning in achieving curricular goals and on the importance of group atmosphere to group goal achievement. A substantial number of the respondents indicated, however, that in practice they found themselves wanting more control over the students’ learning. They also reported having more difficulty avoiding providing information to students in the group than they had predicted immediately after completing the workshop.25 These points are included in ongoing planning to continue to improve the faculty as small-group facilitators.

Effectiveness of the Workshop Within the Program Sequence

The placement of the Facilitation of Learning workshop in the sequence following the PBL Process workshop proved effective. The intended order of the workshops was not rigidly enforced, but rather was presented to faculty as a recommendation. It was noted that some faculty members deviated from the recommended workshop sequence, probably for reasons of scheduling conflicts, and this may account for the exit survey comments of the few individuals who indicated that the workshops should be taken in order, that they would have liked to have seen more of the PBL process demonstrated in the facilitation workshop, or that the presence of participants who lacked an understanding of the PBL process was detrimental to the workshop experience.

There were a number of faculty members who had moderate facilitation experience prior to the development of the PBL Core Skills workshops. These individuals were waived from taking the PBL Process workshop but were still asked to attend the Facilitation of Learning workshop. This was done because it was felt that even experienced facilitators would likely benefit from the workshop content. In support of this judgment, only three survey respondents complained that the content was “redundant” or that there was “not much new” for them in the Facilitation of Learning workshop.

Effectiveness of Application of Adult Learning Principles

Consistent with the principle that adults like to be actively involved in their learning rather than mere passive recipients, there was evidence that the participants valued the opportunities to participate actively in the workshop and that they valued the participation of the other workshop attendees as well. This was revealed in part by the number of comments, already mentioned, that pointed to “discussions” of one kind or another as effective elements. In addition, there were six comments in the “effective” box that cited input from the workshop audience specifically.

The striking popularity of the activities involving the mock group may, in part, reflect the adult preference for lifelike learning presentations. Four comments made direct reference to the mock session’s “realism.” For many of the other respondents, whose comments were grouped under “the mock group (role-modeling and/or role-play),” it was apparent that having the opportunity to “see how it’s done” by an experienced facilitator was valued as a learning experience. In this case, it may simply be that facilitation is a complex skill that is better learned through observation than through didactic instruction.

Lessons for the Future

A number of things were learned from the survey results and from the experience of running the workshop program that may be used to modify or extend the program in the future. The workshop could be strengthened by expanding the popular mock group activity, though not at the expense of
other aspects of the workshop program, especially activities that provided the participants an opportunity to ask questions and freely express their concerns. Modifications to the mock group activity that we are considering include 1) focusing less on specific problem behaviors in the mock group sessions by including more on the basics of working with a group, 2) covering more parts of the case, and 3) giving all participants the opportunity to practice being the facilitator.

We are looking into the possibility of preparing videotaped demonstration sessions to provide additional opportunities to “see how it’s done.” Such tapes could be made available online for faculty to view at their own convenience. In addition, it is clear that our intention to have faculty observe a case being facilitated by an experienced faculty member as part of their training is a plan that should be further implemented, as it would provide more extensive demonstration, including the opportunity to see all parts of the case demonstrated. Having the novice facilitator’s first case observed by an experienced peer who can provide ongoing evaluation and mentoring is likely to enhance the overall training experience. Finally, in recognizing the fact that facilitation of learning is a complex and subtle, as well as an unfamiliar, skill for most faculty, the need for an ongoing program of observation of facilitator performance, combined with peer mentoring and follow-up learning opportunities, cannot be overemphasized.

Conclusions

In conclusion, it appears that the majority of faculty participants felt that the goals of the Facilitation of Learning workshop were met, and the level of satisfaction with the workshop experience was generally high. Substantial numbers of participants expressed gratitude for having been given the chance to see the facilitation techniques demonstrated. Many expressed a desire for additional opportunities to observe or to practice these skills. Faculty comments provided an impression that most came to the Facilitation of Learning workshop with open attitudes toward learning about their new role as facilitators, but that many had some level of concern or anxiety about assuming their new role. It is also clear that, despite the general satisfaction with the workshop, some level of anxiety and concern remained among participants.

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