Identifying Characteristics of Effective Small Group Learning Valued by Medical Students and Facilitators

Diana T. Robillard  
*University of Massachusetts Medical School, Diana.Robillard@umassmed.edu*

Laura M. Spring  
*University of Massachusetts Medical School, Laura.Spring@umassmed.edu*

Susan J. Pasquale  
*University of Massachusetts Medical School, susan.pasquale@umassmed.edu*

See next page for additional authors

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Repository Citation

Robillard, Diana T.; Spring, Laura M.; Pasquale, Susan J.; and Savageau, Judith A., "Identifying Characteristics of Effective Small Group Learning Valued by Medical Students and Facilitators" (2011). University of Massachusetts Medical School. Senior Scholars Program. Paper 120.

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Identifying Characteristics of Effective Small Group Learning Valued by Medical Students and Facilitators

Authors
Diana T. Robillard, Laura M. Spring, Susan J. Pasquale, and Judith A. Savageau

Comments
Medical students Diana Robillard and Laura Spring participated in this study as part of the Senior Scholars research program at the University of Massachusetts Medical School.
Small group teaching is an important part of undergraduate medical education, providing the ideal setting for learners to clarify misunderstandings, test hypotheses and evidence, and to develop collaborative skills. It is an overall priority of literature examining case-based small group sessions in medical school. This study was designed to examine facilitator perceptions of effective case-based small group teaching in the pre-clinical years and compare results in order to identify similarities and differences and to shed light on how the facilitator’s role can be improved.

METHODS: An 18-Item survey was distributed to 388 students who started the second year of medical school at the University of Massachusetts between August 2008 and August 2010 and to 146 of 161 facilitators who had facilitated a case-based small group session that year. Chi-squared tests of equality of proportions were used to compare the answers of students and small group facilitators.

RESULTS: 79 (54%) small group facilitators and 195 (50%) students responded. Of the 195 students who started the survey, 70 answered all questions (88.6%). Of the 195 students who started the survey, 176 answered all questions (90.3%). An 18 item survey, informed by a review of the literature and a focus group of students, was distributed to facilitators of case-based small group sessions that are deemed effective and maximize learning and teaching time. A link for the survey was emailed to each student and facilitator. City-wide tests of equality of proportions were used to compare the answers of students and small group facilitators.

CONCLUSIONS: This study demonstrates that there are areas where perceptions of effectiveness differ between students and facilitators. Identifying these areas presents an opportunity to make small group sessions more effective by allowing for more informed facilitator development and better communication of session expectations to students. This lack of a substantive body of literature on this important trend in medical education, coupled with our findings, suggests that further study is needed to identify characteristics of case-based small group learning that are mutually valued by students and facilitators. This will encourage development of small group sessions that are deemed effective and maximize learning and teaching time.

Introduction

As opposed to a lecture in which students are passive receivers of information, small group teaching allows students to deliberate and discuss case-based material. This process is learner centered, and learners are able to reflect on their own experiences while also learning from their peers. Additionally, learners can have more control over their learning activities since they can raise questions and contribute to group refection. Small group sessions allow students to work collegially and obtain skills critical to being part of a medical team such as active listening, presenting an argument, and persuasiveness. Perhaps most importantly, in a small group environment, students are able to monitor their own understanding and knowledge acquisition, identify gaps in understanding, and prepare themselves for a career marked by reflective learning and lifelong education.

Several characteristics of effective small group learning have been identified in the literature.3 Steinert used focus groups to assess preclinical year students’ perceptions of effective small group teaching. The following seven characteristics were identified: 1) Tutor characteristics (including: personal attributes, knowledge, and facilitation skills), a non-threatening group atmosphere, clinical relevance and integration, and pedagogical materials that encourage independent thinking and problem solving.4

Methods

An 18 item survey, informed by a review of the literature and a focus group of second year medical students, was developed. An anonymous online data collection tool (SurveyMonkey) was used to distribute the survey. Contact information was available for 146 of the 161 small group facilitators, and all 388 students in years 2, 3 and 4. A link for the survey was emailed to each student who had started the second year of medical school at the University of Massachusetts Medical School between August 2008 and August 2010. An identical survey link was distributed to facilitators of case-based small group sessions during the same time period. Demographic questions were also asked in each group. A code was assigned to each response to enable the identification of potential respondents. Chi-square tests of equality of proportions were used to compare responses of students and facilitators.

Survey Respondent Characteristics

A significantly greater percentage of students (86%) reported that the small group leader should be a skilled facilitator rather than a content expert (p = 0.04). Facilitators should attend training <0.01

Table 1: Characteristics of Effective Small Group Learning

<table>
<thead>
<tr>
<th>Facilitator Characteristics</th>
<th>N</th>
<th>Most Desire</th>
<th>Very Less</th>
<th>Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of facilitator to create supportive environment</td>
<td>176</td>
<td>73%</td>
<td>16%</td>
<td>3%</td>
</tr>
<tr>
<td>Facilitator skills most important</td>
<td>176</td>
<td>73%</td>
<td>16%</td>
<td>3%</td>
</tr>
<tr>
<td>Review session objectives</td>
<td>176</td>
<td>72%</td>
<td>24%</td>
<td>4%</td>
</tr>
<tr>
<td>Facilitators should attend training</td>
<td>176</td>
<td>71%</td>
<td>24%</td>
<td>4%</td>
</tr>
<tr>
<td>Facilitator role to summarize main points at end</td>
<td>176</td>
<td>71%</td>
<td>24%</td>
<td>4%</td>
</tr>
<tr>
<td>Facilitator role to identify and address misunderstandings</td>
<td>176</td>
<td>71%</td>
<td>22%</td>
<td>7%</td>
</tr>
<tr>
<td>Facilitator role to foster group discussion</td>
<td>176</td>
<td>71%</td>
<td>22%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Facilitators 76 94% 5% 0% 3.17

Table 2: Facilitator Characteristics

Asterisk(*) Respondents were asked to rank the importance of each of the above roles of the facilitator from 1 being the ‘most desired’ and 3 the ‘least desired’ role.

Facilitators 76 4% 18% 30% 2% 3.17

Table 3: Facilitator Characteristics

We would like to thank the University of Massachusetts Medical School Office of Academic Affairs for providing institutional support for this project. We are grateful to Dr. Bruce Barton for his assistance with the statistical analysis. We also appreciate the assistance of Dr. Melissa Fischer, Tricia Donney MPH, Christine Locke, Andrea Walls and Joel Bradley.

References