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A practical approach for successful small group teaching in medical schools with student centered curricula

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Abstrac

There has been a paradigm shift in the teaching strategies from didactic or teacher-centered to more vibrant student centered approaches. For the last five decades, small group teaching (SGT) has been a hallmark of this reorientation of educational strategies especially in medical schools, which use problem-based learning as a core educational tool. The key strength of SGT is the continuous and active participation by learners which fosters lifelong learning skills. SGT has had a profound influence on the motivation levels of students, self-confidence, self-directed learning and fabric of teamwork. The role of the tutor as a facilitator rather than knowledge provider is of paramount importance in this process. However, there are challenges that ensue as a result of heterogeneous teaching skills and attitudes of faculty members from diverse backgrounds. Some of the tutors from traditional backgrounds find it difficult to adjust to switching roles from a conventional teacher to a facilitator and inadvertently defeat the very philosophy of student-centered SGT. This article has been composed with this background in mind and ten general basic and practical guidelines are offered which are expected to be useful for the successful transition from a traditional teacher to a SGT

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Introduction

Keeping pace with the technological advancement in the last five decades and changing career demands, small group teaching has increasingly been adopted by many medical schools and other disciplines as well (1-4). The salient features of SGT include enabling of higher order thinking, fostering teamwork, inculcating lifelong learning skills and improving communication skills (2, 5-7). SGT empowers the learners to explore their hidden capacities of self-reliance, self-directed learning and directed self-learning (6-8). It offers plenty of opportunities for interfacing with peers and facilitators and foments innovative

ideas in knowledge pursuit (6, 9). An essential component of SGT is an expert, confidant and well-equipped tutor/facilitator with a huge repertoire of ideas to direct the learner without giving pure knowledge (10-13). A skillful tutor will lead the learners to critical reasoning and exploring the relevant information which leads to problem-solving (13). Nevertheless, a great challenge exits in balancing the switching roles by traditional teachers to real facilitators. Some tutors feel that the role of facilitators undermines their role as a didactic teacher while others feel uncomfortable in adjusting to the changing demands and as a result offer resistance to change (8, 14). This heterogeneity is bound to

have an impact on the successful implementation of teaching strategies of an institution and might lead to varying learning outcomes of the overall educational process.

In this manuscript, we offer ten basic guidelines which highlight the critical issues for successful implementation of a student-centered SGT process, particularly problem-based learning.

1. Have clarity of institutional objectives and strategies

The first and foremost important step is to have a clear understanding of the educational policy and the strategies of the institution you are associated with. This needs to be done before being actually involved in the teaching activities. Resistance to change and working against the inner conscience lead to a conflict of interest, spoil the personal work satisfaction and hinder the successful implementation of the educational process (11, 15).

- Keep in mind that the role of a tutor in student-centered SGT sessions is to be the facilitator who directs the process rather than being a content expert.
- Undergo orientation programs like workshops, faculty development programs and study relevant reference material in order to have a discrete understanding of the responsibilities of a facilitator.
- Approach your peers and the available medical education experts in case of any minor doubts or queries. Never feel shy in clarifying your doubts.
- Enjoy your role as a facilitator in SGT and get benefited from the acquisition and dissemination of the knowledge by the learners.
- Confide your concerns to the administration in case, you find it difficult to adjust to the changing roles repeatedly over a period of time and take a decision about your continuation with the organization.

2. Highlight and implement process guidelines

Each SGT activity has its basic set of specific and general guidelines which must be adhered to, in principle. At the beginning of each session, the important points need to be highlighted for quick reference (14, 16).

- Announce the institutional guidelines regarding the importance of punctuality in each session, use of mobile phones or other hand held gadgets, written handouts and other multimedia accessories.
 - Be a role model for professional etiquette to

be emulated by the students.

- Ask the group of learners to select a leader and a scribe on rotational basis for different SGT activities. The responsibilities of the leader, scribe, other members and tutor should be quickly revised.
- Make a quick review of the conduction process, for example, seven jumps of the PBL.

3. Be compassionate and treat each student fairly and equally (17, 18).

- Consider every session of SGT activity as a new and independent one and don't take into consideration the past performance of the student (whether good or bad) to judge the student.
- Be fair in assessment, taking into consideration the process of delivery of the current activity.
- Be methodical to tackle the dominant student. Some people are born leaders and as a natural tendency will overwhelm a situation. Interact with such a student delicately so that he gives a chance to his peers to put forth their viewpoints, without getting offended. Abruptly stopping him or using strong words might suppress the leadership qualities in him.
- Encourage a silent or shy student to give his opinion so that his inhibitions go away gradually. You can have private sessions with such a student so that he gets encouraged to open up and share his ideas and participate in the discussion. In rare cases, you can seek the help of mentor of such a student.

4. Maintain meaningful silence and avoid giving pure knowledge.

This is a very critical area and depicts the real control of a tutor having made a transition from a traditional information giving teacher to a SGT facilitator. It needs patience, self-control and confidence in your students (10, 19)

- Allow the learners to be responsible for the session, with the leader of the group in command and scribe taking notes.
- Have good ears to listen carefully to the discussion and try to identify the gaps.
- Exercise utmost control at the times you think you should intervene and let the leader drive the process in his own way and style.
- Facilitate the process by asking a few relevant questions if the things are not getting going or there is a longer pause and let the leader take the command again.
- Revert the question(s) to the group in case a student or the group as a whole asks you a question, don't give them the answer directly.
 - Redirect the group if it is deviating from the

core theme of the session by asking to differentiate between two possible directions depending on the available evidence and their prior knowledge.

- Let the students find gaps (if any) and list them as learning issues from relevant references and avoid mini lectures.
- Calibrate your interventions adequately so that you don't dominate the group discussion at any point of time.

5. Ensure group dynamics and discourage cliques.

Collective participation of the group in each thread of the discussion is an essential attribute of SGT. The disharmony in the flow of the discussion will have an impact on the expected outcomes of the session (13, 20, 21).

- Emphasize teamwork and its importance.
- Promote debate and discussion rather than arguments.
- Intervene periodically if students tend to make subgroups within the group.
- Encourage the learners to respect each other's opinion and support their viewpoint by scientific logic and evidence.
- Create a friendly and comfortable ambience in the group.
 - Ensure proper time management.
- Keep the ball rolling so that the discussion is on at every point of time.

6. Promote deeper understanding and critical thinking by articulating and reflecting on a problem or a situation.

One of the salient features of SGT is higher order cognition, interpretation of evidence, critical thinking, analysis and synthesis (3, 10, 17).

- Motivate students to dig deeper into the phenomena and their mechanisms.
- Develop the habit of asking; why, where, how and so on.
- Ask the students to interpret and analyze the patient data (symptoms or investigations).
- Inspire the students to support their hypotheses based on their knowledge of basic medical sciences.
- Persuade them to make concept maps and prioritize them in the light of available evidence.
- Encourage critical thinking by articulating and reflecting on a problem or a situation.

7. Avoid expressing an overt opinion on the correctness or quality of any student's contributions.

- Avoid to be judgmental as far as possible.
- Do not overtly affirm or negate the response

of a student.

- Pass on the response from one student to another or to the whole group.
- Generate a possible discussion among the group, on the merits of a point being made and let them decide whether to accept it or not.
- In case you feel the group is deviating from the core point or has reached a wrong conclusion, offer indirect cues from the patient data and let them discuss and make an opinion.

8. Nurture the importance of communication skills.

This aspect is of utmost importance for the successful achievement of learning outcomes and professional development. A skillful communicator will be very comfortable to express his opinion (22) and the effective communication skills promote peer teaching (23). The effective communication skills attain even more importance in countries like Saudi Arabia where English is not a native language.

- Encourage students to adopt the official medium of communication and avoid the native language (if different from the official medium of instruction) during group discussions.
- Motivate them to present their opinion in clear and lucid manner when asked.
- Let them wait for their turn without causing disruption while others are speaking.
- Incline them to listen to the other's opinion carefully and critically.
- Inspire them to maintain eye contact with all the group members and respect each other's oninion
- Inculcate in them the habit of being brief and to the point.

9. Promote self-directed learning

One of the cornerstones of SGT is to imbibe the zeal and art of lifelong learning in our students. We need to motivate them in such a way that they are always willing to accept this task and in a silent way become self-reliant (24-27).

- Persuade your students to be motivated, self-directed learners by highlighting its impact on their future academic and professional developments.
- Identify the gaps in the concepts of students and ask for their opinion about bridging these gaps.
- Provide them with hints or cues so that they become inquisitive and eagerly search for more information.
- Lay emphasis on the use of relevant and authentic references so that the students remain focused.

10. Conclude the session and plan ahead

This step, being generally overlooked, is important to have a feel of the overall success of the discussion and relative clarity of concepts by all the group members. Self and group introspection should be an essential element of performance check from session to session. This will give an idea of the pros and cons of the process and will be helpful for the improvement of student outcomes (20). It may also help in identifying the core areas which need further study.

- Take a note of your strong and week points in each session. Make plans to consolidate your strong points and improve your areas of concern.
- Ask the group leader, scribe or individual members to summarize the theme and core points related to the topic.
- Take a written feedback on a well-defined rubric about the essential ingredients of the SGT sessions like the fostering of group dynamics, critical thinking, communication skills, teamwork and self-directed learning.
- Receive a feedback from students about the tutor performance and the overall success of the session.
- Analyze the group feedback and devise strategies to address the challenges in coming weeks and months.
- Highlight the "carry home message" for the group and don't hesitate to get it repeated many times so that the main concept is augmented.
- Appreciate the contribution of all the group members and thank them all.
- Avoid complacency and be focused on the improvement of the process.

Conclusion

The above-mentioned guidelines will provide a general framework for a successful SGT facilitator and need to be revised at the beginning and throughout the academic sessions. The new issues which prop up during SGT sessions from time to time should be very frankly shared with peers and discussed in faculty development programs in order to find solutions and remedies. Reading focused medical education journals and attending regular workshops will be a boon in pursuit of your journey to a successful SGT tutor.

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