Synthesis & Integration (S&I) Sessions

General Information

One goal of S&I sessions is to reinforce the interrelationships among the biomedical, clinical, and psychosocial underpinnings of the clinical presentation of the week. The optimally effective S&I session reinforces for students the conviction that the concepts and skills they have explored during the week can be applied to any patient encounter with a similar clinical presentation. The discussions and the challenge of the unknown case highlight students' ability to "think clinically" and to apply their learning to arrive at conclusive diagnostic and treatment decisions.

The S&I Unknown Case challenges students to approach a new clinical problem – i.e. one they have not previously encountered – and to apply their accumulated knowledge and experiences to develop hypotheses to explain the problem and to construct strategies to manage it.

Generally, the S&I session will convene weekly at the end of each module. Block teams, however, may choose to conduct S&I sessions less frequently because of modular organization and content. S&I sessions may be scheduled for one or two hours. Generally, two hour sessions will be necessary for students early in their training; however, one hour sessions may be sufficient for more experienced students.

S&I sessions also provide an excellent opportunity for addressing learning issues that are unresolved despite CBL group discussions. Unresolved issues are to be posted on Blackboard by students representing their CBL group on the day prior to the S&I session. These issues should represent learning issues that the CBL groups were not able to resolve. Some of these unresolved issues may end up being addressed as part of the unknown case presentation and discussion. If not, the panelists may address these issues after the unknown case and quiz, as time permits.

Quiz questions are asked during the S&I session to assess student understanding of fundamental biomedical, psychosocial and clinical concepts related to the unknown case. Student credit for attending and participating in S&I sessions are described in the course syllabus.

Responsibilities

The block team:

- Prepare the unknown case as a PowerPoint presentation.
- Prepare the quiz questions given during the S&I session.
- Select panel members with department chair approval.

Participants:
- Moderator
- Panelists
- Unknown Case presenter
- Students

The moderator:
- Will normally be a member of the relevant block team.
- Will normally moderate all S&I sessions of a given block.
- Communicate with the panel members and the unknown case presenter to insure that all are prepared for the upcoming session.
- Prepare a list of unresolved issues for discussion.
- Insure the S&I quiz is prepared.
- Facilitate student-faculty and faculty-faculty interactions.
- Serve as a time keeper to keep the session on track.

Panelists:
- Review the CBL cases and unknown case prior to S&I session.
- Check Blackboard postings the night prior to the S&I session for unresolved issues.
- Prepare to address unresolved issues.

Unknown case presenter:
- Read the CBL cases.
- Prepare the unknown case for presentation in collaboration with the Block team.
- Present the unknown case in relationship to the schema and the standardized clinical behaviors.
- Administer and grade the S&I quizzes.
- Summarize and bring the CBL and S&I cases together.

Time line of S&I sessions[1]

1) Prior to the S&I session, the curriculum office emails panelists copies of the CBL cases, the unknown case, the schema and the educational goals statement of the block along with a memo emphasizing the importance of coming prepared to the panel. Preparation for the S&I panel includes reading the CBL cases and the unknown cases before the panel session, being familiar with the module

[1] Most blocks follow the following format for the S&I sessions, especially during year 1 and early year 2. Later during year 2, blocks may elect to have students participating more directly in leading S&I sessions.

objectives, reviewing the questions posted on Blackboard by the students the night prior to the S&I session.

2) Moderator introduces the panel to the students.
3) Introduce the unknown case – review the schema, discussing similarities and differences between clinical presentations.
4) Present and discuss the unknown case by progressive disclosure. This should actively involve the students by having them suggest the questions that should be asked of the patient, listing the differential diagnosis, requesting diagnostic tests, etc. Students may be used as scribes. The following should be incorporated into the unknown case presentation/discussion:
    a. Complaint
    b. History and physical exam
    c. Construct a list of differential diagnoses
    d. Request diagnostic tests and discuss the rationale behind each request
    e. Primary and secondary diagnoses
    f. Medical plan (short-term and long-term) and patient follow-up, including patient education and further consultations
    g. End with a quiz followed by discussion (see below) or embed the quiz questions into the presentation
5) Discuss unresolved issues from CBL cases.

S&I Quizzes:[2]

Quiz questions can be embedded throughout the unknown case to assess student learning and to stimulate student discussion (suggest using the TurningPoint audience response system). Alternatively, quiz questions can be given at the end of the unknown presentation, covering either the unknown case or as part of a quiz case vignette. If a quiz is given after the unknown case, it is important to leave several minutes to discuss student responses. At the discretion of the Block Team (and this needs to be clearly communicated to students prior to the S&I sessions), S&I quizzes may be graded or non-graded, but in either case, the quiz is to be used to enhance student learning during the S&I session.

[2] Most blocks utilize one of the following S&I quiz formats; however, there is flexibility in how blocks assess students during the S&I sessions, especially in year 2.