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## **Toronto Orthopaedic Boot Camp 2012: Perspectives on student-led learning**

### **Abstract**

**Background:** This study examines the underpinnings of student-led learning (SLL) in the context of an intensive, “boot camp” style laboratory course which focusses on teaching new residents basic clinical skills. Its aim is to systematically observe and analyze the types of interactions that occur when employing student-driven learning approach.

**Methods:** Twelve residents entered the one-month Toronto Orthopaedic Boot Camp program at the onset of their residency. This program teaches basic surgical skills to new residents who have ample opportunities for hands-on practice under faculty’s supervision. The residents were split into two groups. The student-led learning (SL) group used learning facilitators who were directed to teach using methods which encourage the residents’ to learn using principles of self-regulated and cooperative learning, providing feedback and guidance when requested. In contrast, the instructor-led (IL) group was taught in a traditional way. Two independent raters followed the groups and recorded the interactions between the residents and the instructors, and later classified these according to a generated list of criteria. In addition, various qualitative research tools were used, including field observation notes, interviews and surveys.

**Results:** A thematic analysis revealed several consistent patterns of interactions. The SL group asked more interpretive questions and demonstrated a higher number of peer-to-peer collaborations than their IL counterparts. Both groups asked a large proportion of factual questions. There were numerous reports on the evolving nature of the interactions, both with the faculty and peers. The observers also indicated that as the peer interactions increased, the demands on faculty’s involvement were reduced.

**Conclusion:** These reports, when taking with previously reported quantitative data which demonstrates a higher level of competency in the targeted skills for the SL group compared with the IL group, show that in addition to becoming more proficient in the targeted skills, at least in the short-term, the SL group creates stronger bonds and different learning practices. Early anecdotal evidence suggests that these practices greatly privilege later learning, but this requires further study.