

SI and PLTL

Can They Co-exist Within One Institution?

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Communities
of learners

Earning
higher grades

Similar
activities in
the same
spaces



Supplemental Instruction (SI) in an Introductory Physics Class

Total student enrollment in PHYS115	66
Number of SI sessions offered in term	26
Total number and percentage of students who attended at least one SI	72.7%
Total number and percentage of students attending ≥ 5 sessions	37.9%
Total contact hours of SI participating students	333
Mean number of sessions attended by SI attendees	6.9
Mean number of students at SI sessions	12.8
Mean Final Course Grade of SI Participants	77-80%
Mean Final Course Grade of Non-SI Participants	63-67%
Percentage of SI students receiving a D+, D, D-, or F grade	0.0%
Percentage of Non-SI students receiving a D+, D, D-, or F grade	34.1%
Mean SI Participant Evaluation Rating of Helpfulness of SI leaders and sessions (End of semester survey using a Likert scale: 1=low, 6=high)	5.5, n=17

Peer-Led Team Learning (PLTL) in an Introductory Biology Class

Total student enrollment in BIOL 102	165
Number of students enrolled in PLTL	51
Number of PLTL sessions offered per week	6
Mean Final Course Grade for PLTL Participants	74%
Mean Final Course Grade for non PLTL Participants	59%
Percentage of students in PLTL with ABC grades	90%
Percentage of non PLTL students with ABC grades	51%
Mean student satisfaction with the program (End of semester survey using a Likert scale: 1=strongly disagree, 5= strongly agree)	4.5 (n=28)
Mean student satisfaction with the PLTL leaders (End of semester survey using a Likert scale: 1=strongly disagree, 5= strongly agree)	4.6 (n=29)

How are they similar?

SI and PLTL are attached to a course.

Learning is constructed within an interactive social context*.

The peer leaders are students who have successfully completed the course.

Leaders are trained and supervised, with attention to content knowledge, teaching/learning strategies, and leadership skills for small groups.

Initial training (7 hours) provided by the SI program supervisors.

Leaders use strategies such as think/pair/share, jigsaws, concept maps, outlines, matrices, chalkboard models.

Leaders plan sessions and monitor attendance.

Sessions are regularly scheduled and out-of class.

Students attending SI and PLTL compare notes, discuss readings, develop organizational tools, solve problems, and prepare for tests.

How are they different?

SI leader follow-up training (4 hours) provided by the SI supervisors.

PLTL leader follow-up training (1-2 hours) provided by SI supervisors. PLTL leaders meet weekly with their workshop supervisor.

SI leaders attend classes and prepare session plans incorporating appropriate content and processes.

SI leaders meet with the faculty, often a few minutes at the start of class

PLTL leaders meet with their workshop supervisor who provides the content. Leaders plan the process.

SI attendance is voluntary. Students are encouraged to attend sessions as often as they like. This may be 3X per week. There may be different students attending sessions although core group often remains the same. Sometimes sessions are large, $n > 12$; other times they are very small, $n < 5$.

PLTL sessions require a sign-up process. If students do not attend their weekly session, they are required to withdraw from the session. Size of group is consistent, $10 < n < 12$. Students may form a stronger bond/learning community.

Administrative Challenges

SI is administered by the Learning Skills Centre; Peer-Led Team Learning is administered by the Biology program.

SI supervisors train both SI and PLTL leaders.

SI and PLTL leaders are trained separately thus increasing workload and need for overtime.

Both programs face room booking and scheduling challenges.



Future Directions

Initial and follow-up training will include both groups of leaders. This will provide additional training for the PLTL leaders without increasing need for more SI supervisor training time.

A peer-leader training manual is in development incorporating group facilitation strategies from SI and PLTL.

Plans are underway to move to a one-credit training course. This is in progress, but facing some obstacles in terms of costs and university regulations.

Opportunities for increased interaction between both groups will be created so that leaders develop an appreciation of each other's disciplines.

Peer-to-peer observations across programs will be incorporated into training.

Enjoy more semester wrap-up events together!