

Case Study Analysis of Cooperative Learning Strategies Employed at the Collegiate Level

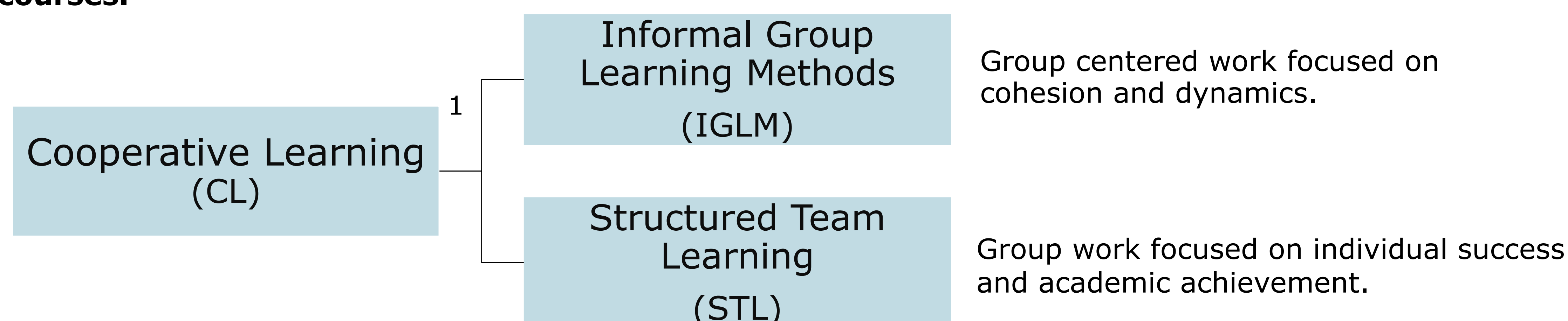
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Informal Group Learning Methods dominate cooperative learning strategies employed by faculty.

We used a case study approach to (1) describe faculty experiences with cooperative learning (CL) and (2) develop an understanding of how faculty implement CL in college STEM courses.

How is cooperative learning implemented in courses?



We identified courses and instructors with consistent levels of cooperative learning for use in this study.

1



Faculty	Classroom Arrangement	Tenure Track
Peter	Desk	Non-tenure
Susan	ALC*	Pre-tenure
Edmund	ALC*	Tenure
Lucy	Scale-Up	Non-tenure

*Active Learning Classroom

Many faculty are adopting active, learner-centered pedagogies, including CL, as it has a multitude of benefits². Research on the efficacy of CL is mixed which may reflect differences in implementation. CL can be broken down as informal or structured³.

2

Collected Syllabi



Extracted CL Evidence

- In-class activities
- Worksheets
- Homework
- Group projects



Respondent	CL Percent in Course	CL Method Used
Peter	50%	IGLM
Susan	88%	IGLM
Edmund	56%	IGLM
Lucy	100%	IGLM

Only IGLM methods were present in sampled courses. STL methods are thought to have a greater impact on learning¹.

Course artifacts were then used to develop open-response survey questions to which faculty members responded.

3

We used course artifacts to develop a survey to ask faculty about their experiences with CL.

Time matters

Time is a challenge because I don't always realize how long something will take and I simply run out of time for implementation.

Student resistance

I find that underclass students are more hesitant to work in groups.

Faculty needs

I have some colleagues who have make awesome activities. If I could learn more about them, then I could adapt them for my topics and my course.

Beneficial for students

I have done a lot of reading and workshops that focus on the benefits of group work, so I know it is useful.

Faculty members use CL to get students thinking and talking.

- Faculty face several barriers that prevent them from employing STL strategies into their courses.
- Faculty may need additional professional development to create structured learning opportunities that can positively impact all learners.
- Future research is needed to uncover ways to implement student buy-in when it comes to CL.

References

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