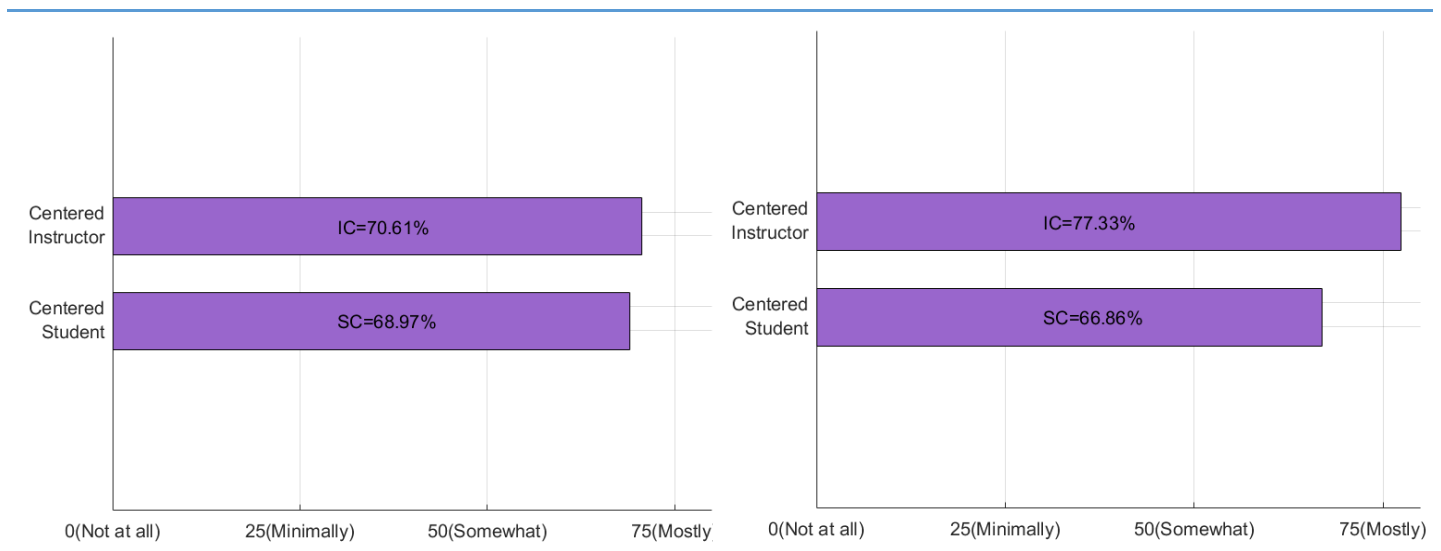


### <PIPS Histogram>

Look for differences between averaged PIPS 2F scores of instructors' and students' group. Student and instructor group thought their courses more instructor-centered. But, in case of students' group, IC PIPS score was almost 10% higher than SC PIPS score. Therefore, students felt their courses as IC practice more than instructors.

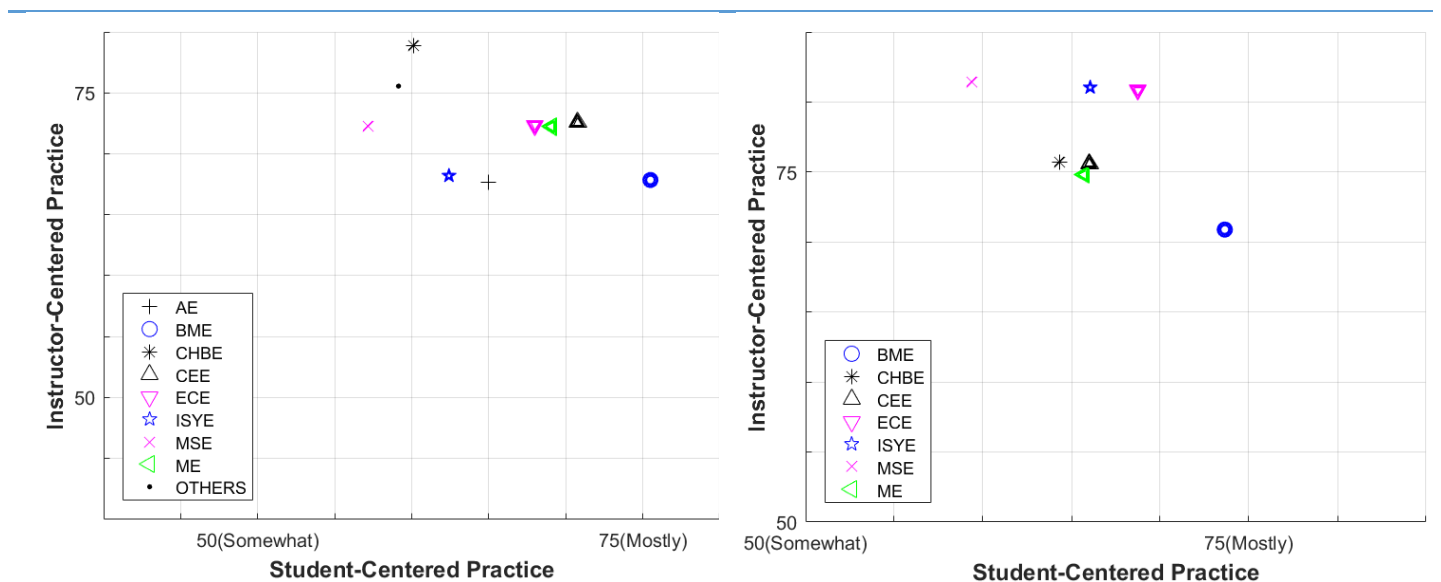
**FIGURE 1. Averaged PIPS 2F Scores for Instructors (left) and Students (right)**



### <PIPS Scatter Plot>

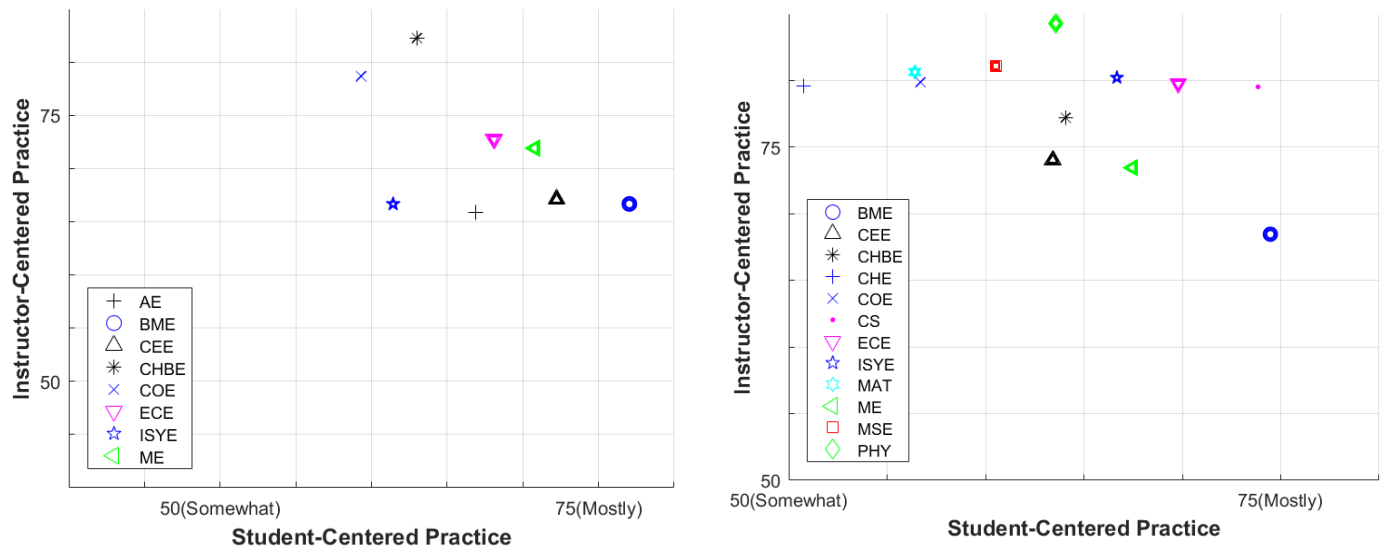
Figure 3 shows the averaged value of PIPS for instructors and students in various sampled departments. Comparing the results of two graphs in Figure 3, BME is depicted as the highest SC practice for both instructors' and students' data. In contrast, CHBE appears to be the highest IC practice for instructors' data and MSE for the student's data.

**Figure2. The averaged PIPS scores for instructors (left) and students (right) in the sampled departments**



The figure 3 shows the mean value of instructor- and student-centered scores for courses in the respective departments. BME is depicted as the highest SC practice for both instructors' and students' data. Contrary, CHBE appears to be the highest IC practice for instructors' data and the PHY for the student's data.

**Figure3. The averaged PIPS scores for courses in the each department (instructors(left) and students(right))**



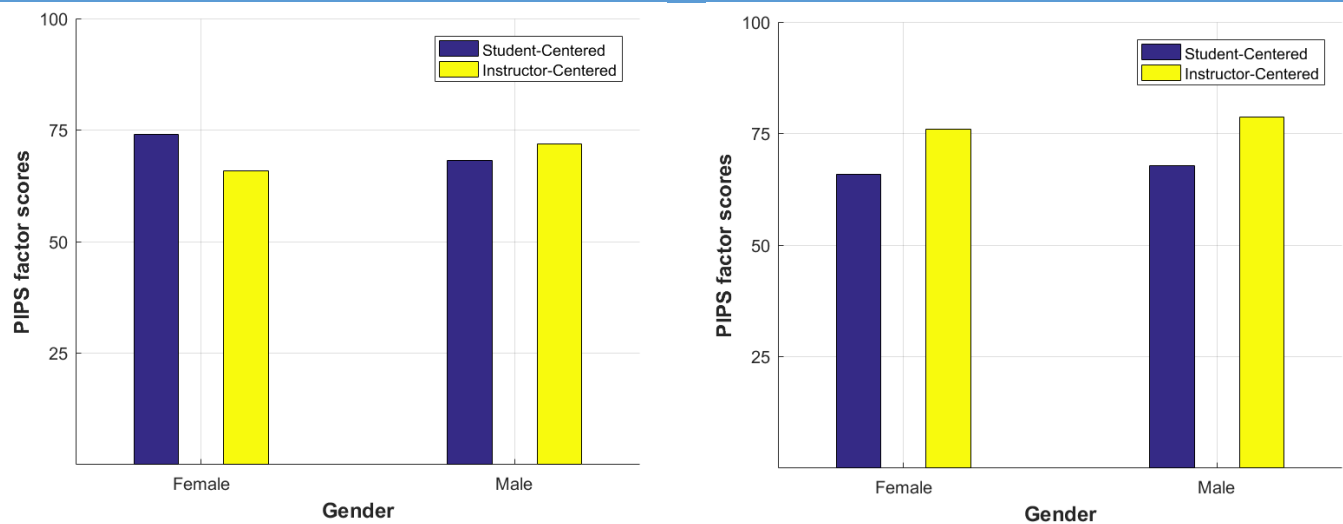
### <Demographic Differences>

#### 1) By Gender

Figure 4 shows the averaged PIPS by Gender. The IC scores (SC) in student data were higher (lower) than ones in instructor data. It is shown that students felt their courses more instructor-centered(less student-centered) than instructors, which follows the results in Figure 1.

(But, how do I compare female professor with female student?)

**Figure4. The Averaged PIPS scores by Gender (Instructors (left) and Students (right))**



2) How time is spent in class: doing lecture, small group, individualized instruction, and other instruction

We found that the lecture-based pedagogies were negatively correlated with SC practice, and positively with IC practice for both data. For the small group, instructors felt that there was a negative correlation with IC, but a positive correlation with SC. Similarly, students felt that small group was positively correlated with SC, but that there was no correlation between small group and IC. Students also thought that individual instruction had significant correlation with SC and IC practice, but the significant correlation was not founded for the instructor-data.

Table1. Pearson correlations among PIPS, and participant estimations of how time is spent in class: doing lecture, small group work, individualized instruction, and other instruction (Instructor)

	IC	SC	Lecture	Small group	Individual	Others
SC	-0.0847 (0.2621)	1	-0.5357** (1.5584e-14)	0.5855** (1.1440e-17)	0.0238 (0.7530)	0.0338 (0.6556)
IC	1		0.4689** (4.6014e-11)	-0.4102** (1.4323e-08)	0.0602 (0.4262)	-0.3040** (3.8921e-05)

Table2. Pearson correlations among PIPS, and participant estimations of how time is spent in class: doing lecture, small group work, individualized instruction, and other instruction (Student)

	IC	SC	Lecture	Small group	Individual	Others
SC	-0.2723** (3.2912e-10)	1	-0.4078** (6.6799e-21)	0.1520** (7.7725e-04)	0.3801** (3.7204e-18)	0.0974* (0.0317)
IC	1		0.2924** (4.8999e-11)	-0.0576 (0.2047)	-0.3275** (1.3065e-13)	-0.0206 (0.6498)