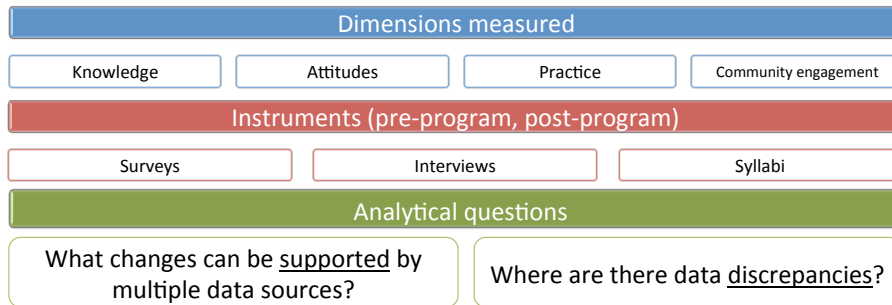
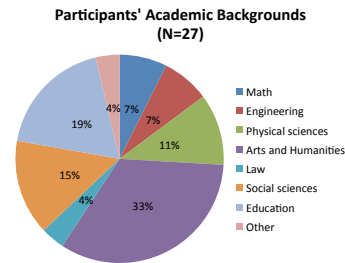
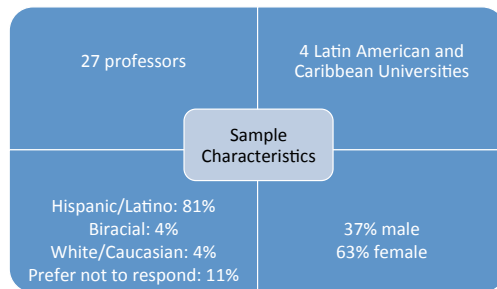


# Knowing as the Stage for Doing: Developing Professors' Pedagogical Knowledge, Attitudes, Practice, and Dissemination During Cross-national Faculty Development Programs

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**Abstract**

• How can we measure change in faculty development programs? This poster presents findings in response to this research question, using a mixed-method case study approach. We evaluated several faculty development programs targeting Latin America and the Caribbean, which trained over 75 professors total from research universities in Chile, Costa Rica, and the Dominican Republic. This case study's sample size was 27. The program evaluation methods analyzed four dimensions of pedagogical change: knowledge, attitudes, practice and dissemination. Results indicate our model for faculty development demonstrates statistically significant increases in pedagogical practice, attitudes, and knowledge, with less improvement in community engagement.

## Preliminary Findings from the Pre- and Post-program Survey

Changes in participants' self-reported use of teaching methodologies (6-point scale) (N=27)

| Teaching method  | Mean of the differences |
|--|-------------------------|
| Pure lecture   | 0.19                    |
| Lecture, but solicit interaction by asking students questions:                           | 0.19                    |
| Students engage in peer to peer discussion while I listen                                | .48*                    |
| Structured inquiry or question-based (I develop certain questions ahead of time to ask): | .92***                  |
| Case-method  | .81**                   |
| Formative assessment   | 1.37***                 |

\*p<.05, \*\*p<.01, \*\*\*p<.001

Changes in participants' self-reported confidence in implementing targeted teaching methodologies (5-point scale) (N=27)

| Statement  | Mean of the differences |
|--|-------------------------|
| I know how to design a learning experience for students using Backward Design                          | 1.73***                 |
| I know how to design experiences for students to learn using the case-study method                     | .89***                  |
| I know several strategies for using formative assessment for the purpose of enhancing student learning | .56*                    |
| I know how to motivate my students to do their reading before class to maximize in-class learning      | .56*                    |

\*p<.05, \*\*p<.01, \*\*\*p<.001

### Limitations

Survey data only; Sample size; sampling techniques; response rates; generalizability; validity.

Changes in participants' knowledge of targeted teaching methods (based on multiple choice questions) (N=27)

|  | Increase in % of correct answers |
|--|----------------------------------|
| Ability to correctly identify backward design        | .48***                           |
| Ability to correctly identify case method            | 0                                |
| Ability to correctly identify inquiry-based teaching | 0.11                             |

\*p<.05, \*\*p<.01, \*\*\*p<.001

### Data Claims: After participating in this faculty development program...

**Knowledge:** Participants demonstrate increases in pedagogical knowledge

**Practice:** Participants demonstrate increases in self-reported use of student-centered teaching practices

**Attitudinal claim:** Participants demonstrate increases in self-reported self-efficacy for implementing innovative teaching methods

**Community engagement claim:** Participants do not demonstrate significant increases in self-reported levels of institutional collaboration

**Proposition:** Faculty participants gain pedagogical knowledge and increase student-centered teaching attitudes and practices after participating in targeted cross-national faculty development programs.

**Next steps:** Triangulate additional data; Identify additional claims supported by multiple sources; Identify additional discrepancies among data sources; Adjust evaluation model.