RIGOR | INCLUSIVENESS | SUPPORT | ENGAGEMENT

R.I.S.E. Research Guide for Faculty Participants

Study 1, Beginning Fall 2021

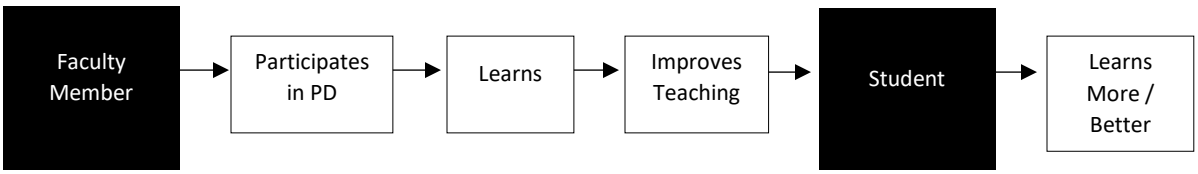
Research Rationale and Theoretical Framework

As student populations continue to diversify (American Council on Education, 2019; U.S. Department of Education, 2019), programs that support faculty in effective teaching across differences grow in importance. At Lindenwood, 15% of students are Black/African American, 4% are Hispanic/Latinx, 22% are international, and 34% of undergraduates are eligible for Pell Grants. Equity gaps exist for some student groups. Black undergraduates show 6% lower retention rates than white undergraduates and 15% lower 6-year graduation rates. They graduate in four years at about half the rate that international students do. Similar gaps exist for retention and graduation rates of Pell-eligible students. Gawronski, Kuk, and Lombardi (2016) note, "The more faculty members are able to expand their repertoire of research-based instructional strategies that meet a wide variety of student needs, the greater impact they could have on student achievement" (p. 332). Lindenwood University has identified a need for a common framework for effective teaching as well as for faculty to focus on research-based practices to enhance their ability to teach a diverse student body. Umbach and Wawrzynski (2005) found that, "Campuses where faculty emphasize best practices have students who are engaged, perceive they are supported, and gain from their college experiences." To boost a campus-wide focus on best practices for teaching and learning, the Learning Academy has designed the R.I.S.E. Project, which focuses on faculty development in its first year.

Faculty development programs are an expedient way to ensure instructors learn best practices, but most only assess impact through faculty participation or through "self-reported changes in teaching, stopping short of the ways that faculty bring their new knowledge into their courses" (p. 10). Often missing is a proven link between faculty and student learning and although challenging to trace, this link is worth pursuing as a positive associate between faculty development and student outcomes provides an ongoing rationale for institutional investments in faculty.

The Tracer Project successfully demonstrated a link between faculty development and student learning. Condon, Iverson, Manduca, Ruts, and Willett (2016) grounded their work in the Direct Path Model (Kirkpatrick, 1959) shown below (p. 29). Their research focused on professional development programs that provided strategies for improving students' critical thinking and writing. They assessed the

The Direct Path Model



relationship between these programs and student outcomes using faculty interviews, class observations, and analysis of assignments and student work. Results showed that faculty learn from professional development programs, they translate this learning to improvements in teaching, and student work in their courses improves based on those teaching changes. Also grounded in the Direct Path Model, the R.I.S.E. research intends to track the connection between faculty and student outcomes in similar ways. Additionally, the research aims to test the utility of the R.I.S.E. framework and validate particular pedagogical strategies that faculty who participate implement in their courses.

R.I.S.E. Research Questions and Study 1 Description

Study 1: Examining the Impact of Incremental Development and Small Teaching Changes

This study will examine the impact of incremental development on faculty outcomes and the impact of enhancement to rigor, inclusiveness, support, and engagement on student outcomes. Faculty who agree to participate must commit to implementing small teaching changes (Lang, 2016) that they learn about through R.I.S.E. Roundtables, peer coaching, online guides, or other R.I.S.E. related events or resources. Additionally, they will help to provide self-report data, teaching and learning artifacts, and student perception data. By comparing pre- and post-test faculty and student data, this study will address the research questions below and pilot teaching strategies and research methods to be used in a subsequent study that focuses on course redesigns based on the R.I.S.E. framework.

Working with faculty participants/partners, the R.I.S.E. research aims to answer the following questions:

RQ1: Does R.I.S.E. faculty development increase faculty members' knowledge of pedagogical strategies associated with rigor, inclusiveness, support, and/or engagement?

RQ2: Does R.I.S.E. faculty development increase faculty members' self-efficacy regarding their ability to create classroom climates characterized by R.I.S.E.?

RQ3: When pedagogical strategies associated with rigor are implemented, how does this effect students' learning, engagement, persistence, and perceptions of academic challenge?

RQ4: When pedagogical strategies associated with inclusiveness are implemented, how does this effect students' learning, engagement, persistence, feelings of belonging, and perceptions of instructor support?

RQ5: When pedagogical strategies associated with support are implemented, how does this effect students' learning, engagement, persistence, feelings of belonging, and perceptions of instructor support?

RQ6: When pedagogical strategies associated with engagement are implemented, how does this effect students' learning, engagement, and persistence?

RQ7: Are there differences in benefits for students based on their demographics?

If the results for student learning are positive, the R.I.S.E. Project model will be generalizable to other educational institutions looking to enhance teaching and learning and, potentially, reduce equity gaps in higher education.

So…what does it mean to participate?

Some data collection methods will be consistent across faculty participants and their students. All faculty participants will complete surveys and interviews regarding their knowledge and ability related to designing courses and creating class cultures that are characterized by rigor, inclusiveness, support, and engagement. Additionally, all faculty participants will help to facilitate data collection from their students by way of surveys and focus groups and will provide other data to assess student learning, engagement, persistence, perceptions of academic challenge instructor support, and belonging.

Each faculty participant will work with the LLA to design some of the specifics of the data collection, which will depend on

- what small teaching changes the faculty participant chooses to make,
- when the faculty member makes the changes, and
- what pre- and post-test data are available to measure the impact of those small teaching changes.

Therefore, to some extent, each faculty participant will be co-designing their own research project within the framework of the larger study. Study 1 will begin in August 2021 when the R.I.S.E. Project's campus-wide faculty development begins and will continue until adequate post-test data has been collected from and by the faculty member once small teaching changes have been implemented and results from that are observable.

EXAMPLE
Faculty member "A" decides to implement the following small teaching changes (within one course or dispersed across multiple):

- using problem-based learning (PBL) activities to enhance rigor in course "B"
- showcasing scholars in the field with diverse identities and backgrounds to enhance inclusiveness in course "B"
- making an assignment "transparent" to enhance support in course "C"
- designing assessments to allow for student choice in course "D"

The first two strategies are implemented in the Spring of 2022 and the third and fourth are implemented in the Fall of 2022, so data collection would extend through that semester. The faculty member would work with LLA staff to determine what sources of data would provide the best pre- and post-test measures of the impact of each small teaching change.

To measure the impact of the PBL, student work from course B before the use of PBL could be compared to student work from course B after PBL was implemented. To measure the impact of the diverse scholar showcase, student course evaluations could be compared from course B before the teaching change and after. To measure the impact of assignment transparency, student grades and frequency of student questions about the assignment could be compared from course "C" before and after the change. And to measure the impact of allowing student choice in assessments, student work and student course evaluation feedback could be compared from course D prior to the teaching change to feedback and work from course D during the semester the change was implemented.

Faculty participants should use the template on the following pages to help them plan the projects they'll co-design with the LLA staff.

Rigor

What teaching change(s) do you plan to implement to enhance rigor based on something you learned as part of the R.I.S.E. faculty development?

In what course do you want to study the impact of the change(s)?/

When is the last time you taught the course without the change(s) you plan to make? (Note: This could be Fall 2021)

What data do you have from that pre-intervention semester that might provide a good baseline to which you could compare to similar or the same data after you've made the change(s)?

When will you teach the course with the change(s) in place?

What data can you collect/provide from that post-intervention semester that might be compared to the baseline data so as to see an impact from the change(s)?

Inclusiveness

What teaching change(s) do you plan to implement to enhance inclusiveness based on something you learned as part of the R.I.S.E. faculty development?

In what course do you want to study the impact of the change(s)?

When is the last time you taught the course without the change(s) you plan to make? (Note: This could be Fall 2021)

What data do you have from that pre-intervention semester that might provide a good baseline to which you could compare to similar or the same data after you've made the change(s)?

When will you teach the course with the change(s) in place?

What data can you collect/provide from that post-intervention semester that might be compared to the baseline data so as to see an impact from the change(s)?

Support

What teaching change(s) do you plan to implement to enhance support based on something you learned as part of the R.I.S.E. faculty development?

In what course do you want to study the impact of the change(s)?

When is the last time you taught the course without the change(s) you plan to make? (Note: This could be Fall 2021)

What data do you have from that pre-intervention semester that might provide a good baseline to which you could compare to similar or the same data after you've made the change(s)?

When will you teach the course with the change(s) in place?

What data can you collect/provide from that post-intervention semester that might be compared to the baseline data so as to see an impact from the change(s)?

Engagement

What teaching change(s) do you plan to implement to enhance engagement based on something you learned as part of the R.I.S.E. faculty development?

In what course do you want to study the impact of the change(s)?

When is the last time you taught the course without the change(s) you plan to make? (Note: This could be Fall 2021)

What data do you have from that pre-intervention semester that might provide a good baseline to which you could compare to similar or the same data after you've made the change(s)?

When will you teach the course with the change(s) in place?

What data can you collect/provide from that post-intervention semester that might be compared to the baseline data so as to see an impact from the change(s)?