

IUB School of Education

Seed Funding for Research Involving Large IU Data Sets 2021

The Indiana University School of Education Bloomington is soliciting applications for innovation grants for pilot research involving large IU data sets. This funding initiative will provide up to \$8,000 each for pilot studies that will be used to support a subsequent external grant proposal by October 1, 2022. Proposed research studies must be related to utilizing data from INsite (Indiana Student Information to Empower) and/or the Unizin Data Platform (UDP) and have implications for K-16 education.

INsite (Indiana Student Information to Empower) is a partnership between the SoE and K-12 school districts focused on standardized educational data management. Using the Ed-Fi data standard, INsite hosts district data for its members in a format that facilitates both interoperability of multiple types of data (e.g., SIS and assessment) as well as the creation of customized data sets for instructional, operational, accountability/reporting, and research/evaluation use. For an overview of INsite see: https://iu.mediaspace.kaltura.com/media/1_71xgwncf
INsite PDF with more information and links: [INsite presentation with links](#)

Sample questions that could be explored using INsite are as follows:

- Looking at composition of high ability, core credit completion, advanced placement courses, and others.
- Analysis of benchmark (3x/year) scores as predictors or correlates to future enrollment in advanced courses
- Analysis of iRead3 state test (3rd grade reading) predicting/correlating with "future everything"

The Unizin Data Platform (UDP) is a comprehensive large-scale data platform that aggregates, cleans, models, and stores teaching and learning data for Indiana University (as well as other university members of the Unizin Consortium). Its goal is to establish a holistic portrait of learners in the context of their learning environments, enabling institutions to investigate student learning, from clickstreams to course enrollments, and to build effective data-driven practices at scale. For an overview of the UDP see: https://iu.mediaspace.kaltura.com/media/1_etwopq7u

Sample questions that are being explored using the UDP are as follows:

- Do high-performing students provide more critical feedback during peer review (measured by the presence of comparison terms during semantic analysis of peer feedback comments)?
- How does uncertainty in a student's end-of-semester performance (the percent of a student's grade that is not yet accounted for) affect a student's decision to request an S grade?
- What instructional strategies are most effective at improving students' compliance with reading assignments in an eText (measured by students' views of page views within an eText)?
- Does students' patterns of activity in the Canvas LMS provide valid proxy measures of theoretical constructs, such as student engagement, motivation, metacognition, or other aspects of self-regulated learning?

Guidelines for these applications are:

1. The principal investigator must hold a full-time appointment with research responsibilities in the IU School of Education Bloomington.
2. This competition is intended to support pilot research that will lead to large externally funded research. Proposals should a) make clear how the proposed research study is a part of, and contributes to, a larger research design, b) will enhance the likelihood of obtaining external funding to support the continuation of the applicant's research program, and c) clearly indicate which external funding agencies, including specific programs, may fund the continuation of the work.
3. Each budget submitted should meet the following criteria:

- a. *Budgets may not exceed \$8,000 and are limited to a maximum funding period of 12 months. The maximum funding will be proportional to the length of the project.
 - b. All projects will begin between July 1, 2021 and December 31, 2021 and end within 12 months of the starting date.
 - c. Purchase of equipment is not generally encouraged but will be considered.
 - d. Professional travel may be included.
 - e. The SOE does encourage collaborations with researchers outside of the School. In cases of such collaborations, however, any funds for faculty/staff outside of the SOE must come from match provided by their home institutions.
4. Proposals must be concise and must not exceed five double-spaced pages with one-inch margins on the top, bottom and sides, using 12 point font (12 characters per inch). Font size does not apply to charts, tables, figures and graphs.
 5. An abstract, bibliography, budget, and budget justification, including a project timeline, should be attached to the proposal but are not counted in the five-page limit.
 6. Over-budgeted and over-length proposals will be returned to the applicant for prompt revisions. A revision deadline will be announced and must be met in order to qualify for review.
 7. All proposed studies involving the use of human subjects must have a completed "research protocol involving human subjects" approved by the campus committee before funding will be released.

Applications are due on Monday, March 22, 2021. The proposal should be submitted here: <https://forms.gle/8vG79oues1JTC7rS9>

If the proposal is chosen for funding, attendance at a grant writing workshop will be required during the funding period. This workshop will be held by the R&D Office (TBA) to assist successful applicants in shaping their eventual external grant proposals.

Depending on the strength of the applications, the research incentive fund can support between 3-4 proposals.

Successful applicants must notify the Associate Dean for Research when they submit an externally funded proposal based on the results of the seed funding. An e-mail with the proposal title, agency, funding amount requested and a copy of the abstract should be sent to Gayle Buck at gabuck@indiana.edu (within 10 days of submission).