



## Translational Data Analytics @ Ohio State 2015 Learning Analytics Seed Grant RFP and Application

### **Introduction**

To foster a dynamic and interactive community of data analytics research, teaching, and innovation at The Ohio State University, Translational Data Analytics @ Ohio State (TDA@OhioState) is launching a seed grant program focusing on the area Learning Analytics. In this context, learning analytics refers broadly to ***“the use of analytic techniques to help target instructional, curricular, and support resources to support the achievement of specific learning goals.”***<sup>1</sup> This investment is directed toward ensuring Ohio State excels in the retention and timely graduation of its students and optimization of their educational trajectories.

The primary objective of the seed grant is to catalyze the formation of new, interdisciplinary teams that can generate preliminary technologies, data, and findings on learning analytics. These technologies, data, and findings should be applicable to subsequent applications for extramural funding.

More specifically, TDA@OhioState is seeking proposals from transdisciplinary teams that wish to curate, analyze, report upon, and share novel data sets and predictive methods that can address fundamental issues related to the following priority areas<sup>2</sup>:

- 1) Identification of at-risk learners and the provision of interventions to assist learners in achieving success;
- 2) Making sense of complex topics through the combination of social networks and technical and information networks;
- 3) Helping leaders transition to holistic decision-making through analyses of what-if scenarios and experimentation to explore how various elements within a complex discipline (e.g., retaining students, reducing costs) connect and the impact of changing core elements; and
- 4) Providing learners with insight into their own learning habits and give recommendations for improvement.

---

<sup>1</sup> van Barneveld, Angela, Kimberly E. Arnold, and John P. Campbell. "Analytics in higher education: Establishing a common language." *EDUCAUSE learning initiative 1* (2012): 1-11.

<sup>2</sup> Norris, Donald M., and Linda L. Baer. "Building organizational capacity for analytics." Retrieved from *EDUCAUSE website*: <http://www.educause.edu/library/resources/building-organizationalcapacity-analytics> (2013).

## **Program Requirements**

Responsive proposals under this mechanism will **at a minimum** address the following requirements:

- Be led by a PI who is an active faculty member at Ohio State (faculty may be involved in more than one proposal, but can only lead a single proposal to ensure equal opportunity);
- Involve the participation of faculty and students from at least 2 different colleges;
- Focus upon data and/or analytics deliverables that correspond to the preceding priority areas;
- Leverage a combination of institutional data resources – as determined by each team – such as those maintained by the OAA Office of Enrollment Services and the Office of Institutional Research and Planning, as well as external and linked open data sets;
- Result in new findings and/or insights that generate value for the learning community at OSU, while also informing follow-on scholarly efforts (e.g., extramural funding proposals, publications, etc.);
- Ensure that all data sets used by or generated by the proposed project are available to the broad TDA@OhioState community, subject to FERPA regulations and Ohio State’s data governance policies; and
- Be completed within 6-8 calendar months from project initiation.

## **Funding Available**

The maximum funding available is \$25,000 per project for up to 3 projects. The final amount and number of awards will be determined based upon the merit of applications received.

Project budgets must reflect an equal co-investment of direct funding and/or in-kind support from the departments and or colleges of researchers involved in the application. A 1-to-1 match of funds (e.g., for every seed grant dollar provides, the host department or college must match with 1 additional dollar or in-kind equivalent). This should be in the form of documented cost-share for faculty and/or staff effort.

Funds may be used for faculty effort, trainee support, services, or supplies. Funds may **not** be used for travel, to supplement existing grants or research projects, or for expenditures outside those described here.

Funded teams will be responsible for outlining a detailed budget and tracking expenses. A formal agreement and budget template will be provided to those selected for funding.

## **Review and Selection Process**

Applications will be evaluated via a peer-review process, with an emphasis placed on the following criteria:

### **Significance**

Does the proposed research topic properly address 1 of the 4 fundamental issues outlined in the introduction (page 1)? If the aims of the proposed research are achieved, how will the data, technical capability, and/or findings improve scientific knowledge on learning analytics?

### **Innovation**

Will the research team introduce an innovative technique or insight into learning analytics at Ohio State? Does the proposed project challenge current research or knowledge on learning analytics and/or use novel theoretical concepts, approaches or methodologies, or technologies?

### **Approach**

Does the proposed project align with larger institutional goals? Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the research? Are potential problems, alternative strategies, and benchmarks for success presented?

### **Project Team**

Are the PI, collaborators, and other researchers well suited to accomplish the specific aims of the research? What is the competency of the Project Team in terms of mentorship, published works, and prior external funding?

To ensure successful completion of projects as proposed, it is **required** that applicants provide at least 1 (but no more than 3) letter(s) of support with their application. Letters of support should indicate (1) that the team has discussed and secured access to any/all required data sets not in the public domain, and (2) have secured appropriate matching support from the departments and or colleges of researchers involved in the application. This may include, but is not limited to, those data maintained by the OAA Office of Enrollment Services and Office of Institutional Research and Planning (<http://oaa.osu.edu/irp/home.php>). *Note: Letters of support will **not** be included in the maximum application length.*

### **Important Dates**

- Application Deadline: October 14, 2015
- Review: October-November 2015
- Notification of Decisions: Late November 2015
- Earliest Possible Start Date: Spring Semester 2016

### **Application Format**

Applications must be typed in 11-point font size with appropriate spacing and margins to ensure readability. Charts, tables, and graphics may be used to communicate responses in content areas. Proposal must be submitted as one complete **PDF** document with all components included.

### **Application Length**

Proposals may not exceed 8 pages in length and letters of support may not exceed 2 pages per letter (for a total of 14 pages).

***Submissions exceeding 14 pages will not be considered.***

**Submission and Application**

Proposals must be submitted to **tda@osu.edu, not later than 5:00 p.m., Oct. 14, 2015**; proposals received after this deadline ***will not*** be considered.

Grant Narrative Applications must include (8 pages maximum):

**A. Concept.**

1. Grant Title.
2. Primary Investigator.  
     Title:  
  
     Department:  
  
     Contact Information:
3. Document the significance of the project as it relates to Learning Data Analytics, as defined in the Introduction.
4. Summarize how the project addresses fundamental issues related to the stated priority areas.
5. Provide a detailed description of the outcomes expected from the project (e.g., extramural funding proposals, publications, curriculum development, etc.), including new findings and/or insights that will be generated and how activities will be integrated across teaching and research to advance the scholarship of learning analytics.

**B. Collaboration.** Identify at least 1 or more university collaborator(s) from a department, college or unit other than the PI and describe how their role(s) will contribute to success.

1. Team Members. Provide a list below of all team members (faculty, staff, and students) (add additional spaces as needed):

University Partner(s)	College/Department/Unit

2. Document how university and community team members will be integrated in program activities, and include how each will contribute in mutually-beneficial and reciprocal ways.

**C. Growth.** Identify how resources will be applied to achieve measurable outcomes.

1. Provide a detailed timeline and brief narrative description of key activities, milestones, and outcomes to track and measure success (add additional spaces as needed):

Activity	Milestone	Outcome	By Date

2. Discuss the purposed scholarly work(s) to be produced by team members, including how those works will be validated by peers and documented.

**Checklist for Grant Application.**

- Application (maximum 8 pages) including all components in A-C, as outlined above
- 1-3 Letters of Support (maximum 2 pages per letter)

Proposals are due **Wednesday, October 14, 2015, at 5:00 p.m.** and **must not exceed 14 pages.**

**Note:** Any non-electronic documents should be scanned and added to the PDF copy. The entire application is to be submitted as a single PDF document with all parts included.

For more information or questions, please contact [tda@osu.edu](mailto:tda@osu.edu).