



Plainfield Public School District

COMMON CORE

STATE STANDARDS INITIATIVE

PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER



Research News

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IN THIS ISSUE

Plainfield Common Core Academy

The New Jersey Department of Education (NJDOE) has awarded a grant to Kean University to offer a FY15 Common Core Academy for 25 teachers in five schools in Plainfield. Dr. Anthony Pittman, Associate Dean of the College of Education, is Project Director for the grant. In addition to his work in Higher Education, Dr. Pittman was a successful high school English teacher and so brings direct classroom experience to this project. The NJDOE adopted the Common Core State Standards (CCSS) in English Language Arts (ELA) and mathematics in 2010. Recognizing that the adoption of these standards requires principals and educators to implement significant shifts in content and instructional strategies, the NJDOE offered grants for professional development to support the implementation of the CCSS, funded by the "No Child Left Behind" Act. Partnerships between high-need school districts and Institutions of Higher education (IHE) are at the core of this effort. The FY15 Common Core Academy requires a year of job-embedded CCSS support culminating with a one-week summer academy, and includes the development of an IHE-facilitated Professional Learning Community for principals of all participating schools. The Kean University project focuses on CCSS ELA for grades 6-12. Kean University's College of Education and College of Humanities & Social Sciences will partner with two middle schools and two high schools in the Plainfield Public Schools and the Barack Obama Green

Charter School in Plainfield. The 25 teachers participating in the Common Core Academy will engage in nine monthly, full-day, intensive staff development sessions and a five-day Summer Institute. In addition, they will be coached in their classrooms in effective instructional practices a minimum of four times during the year. They will develop several lesson plans and a full unit, incorporating research-based teaching strategies, effective use of technology, differentiation, and assessment. Each teacher will be provided a Chromebook computer to support their participation in a face-to-face and online Professional Learning Community and to facilitate their online research. Eight teachers will be part of a special graduate course designed to equip them to be effective leaders of the PLC for other teachers, with an eye toward sustainability and building future leaders. Plainfield is a school district working hard to overcome the effects of poverty, racial isolation, rapid increase in its ELL student population, leadership discontinuity, and teacher turnover. Barack Obama Green Charter School, in the five years of its existence, has produced an enviable record of growth and student success. Both the district and the charter school have expressed willingness to collaborate not only on this project but also others in the future. The hope is to use this project as a strong foundation on which to build a structure for further collaboration.

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*Dr. Anthony Pittman, Associate Dean
College of Education*

Research Compliance Matters

Audit Process

Any research protocol approved by the Kean University IRB might be subject to an audit review by the committee at any point during the approval period. Researchers selected for an audit will be notified and given more information about the process at that time. They will have to fill out a brief form providing information about the progress of their study as well as some basic

questions about participant recruitment and data storage and security. Researchers and their faculty advisors (if applicable) will then be asked to schedule a meeting with the IRB administrator and committee chairperson to discuss their study and how things are progressing up to this point.

The audit process is meant to ensure that any questions or ambiguities researchers may have are being answered and to help further educate researchers about issues relating to human participant protection. Contact Dr. Joseph Cronin jcronin@kean.edu or ext 73464 for questions and guidance related to all aspects of research compliance.

Grant Administration

Cost Sharing/Match/In-kind Contributions

Cost sharing, match, and in-kind contributions are terms that refer to project costs that are supported by funding from a source other than the primary sponsor. Although the terms are sometimes used interchangeably, the University uses specific definitions for each. Direct cost-sharing is defined as out-of-pocket cost contributed by the University. Match is defined as funding that is pledged to match a portion of the primary sponsor's funding and may be in the form of cash or a third party in-kind contribution.

In-kind contribution refers to non-cash contributions that are not recorded by the University's accounting systems but can be assessed a cash value. Mandatory Cost Sharing is required by the sponsor as a condition of obtaining a grant agreement. Voluntary Cost Sharing is not required by the sponsor. Mandatory Cost Sharing is supported by the University whereas Voluntary Cost Sharing is not. Contact Brenda Dunlop bdunlop@kean.edu or ext. 73345 for questions and guidance relating to grant administration.



Deadlines & Reminders

Save the date! Kean Research Days 2015 will be April 27—29



Monday, January 19

RTR Application Deadline

Tuesday, January 20

SpF Application Deadline

Wednesday, February 4

IRB Application Deadline

Tuesday, February 10

Visual and Performing Arts, Media and Digital Humanities Workshop

Student Spotlight



Wave Propagation and Ultra Short Pulses – Engineers and Education

During Summer 2014 Timothy Alcíd (undergraduate student, NJCSTM, Engineering Science), Jonathan Coronel (undergraduate student, NJCSTM, Computational Math), and David Yepez (undergraduate student, NJCSTM, Chemistry Education/Physics minor) worked with

Dr. Ted Farnum on a project to give computational engineering science students an introduction to numerical and analytic methods for solving a class of partial differential equations (PDEs), a branch of mathematics that describes phenomena that vary in both space and time.

Dr. Farnum hopes the results of the project can be used to help educate a non-specialist about the applications and behaviors of PDEs, a field of great importance to a broad range of sciences, but one which may not be studied by most math and science undergraduates.

Diffusion and wave propagation are two examples of physical phenomena that have fundamental applications in biology, medicine, oceanography, and climate science and can be described by PDEs. So, at least a cursory understanding of the behavior of PDEs is beneficial to all science students even if a course in PDEs is not necessary.

The team's overall project had three interrelated but distinct sub-projects.

After a couple of meetings regarding the project, each student involved chose a particular area to work on. Jonathan Coronel worked on developing an Easy Java Simulation (EJS) modeling tool for short pulse propagation. His goal was to not only describe a particular laser system but also to create a way for students to develop an intuition about non-linear waves in general. Tim Alcíd worked on a specific, focused problem: the onset of harmonic pulse-splitting. His project was about the analysis of a model for optical pulse propagation built for electrical engineers. David Yepez's project was theoretical in nature. He worked on modifying and developing code to run simulations for multi-channel pulse propagation. The students will present their research during Kean Research Days 2015 and plan to submit their results to various journals and regional conferences.

ORSP News

Visual and Performing Arts, Media and Digital Humanities Workshop



Tuesday, February 10

12:30 pm—1:30 pm, UC 226

This workshop will present the major ongoing funding programs available through the National Endowment for the Humanities (NEH) and the National Endowment for the Arts (NEA) as well as major foundations that fund Digital Humanities, Arts and Media.

Student Research Days Presentations

Wednesday, April 29, 2015

This annual event provides students the opportunity to present their preliminary or completed research and creative activities to the campus community. Formats include posters, oral presentations, performances, exhibits and demonstrations.

All Kean University graduate or undergraduate students who are conducting original research, original data collection, or creative work under the supervision of a Kean University faculty member are eligible to present.

The deadline for student registration is February 22, 2015

Faculty Book Event

Calling All Faculty Authors...

If you are the author or co-author of a book published in 2013 or 2014, or one that will be published by April, 2015, we'd like to hear from you.

The Nancy Thompson Library is organizing a faculty book event, in conjunction with Research Days 2015. Books written by Kean faculty will be acquired and put on display in the library during Research week.

On Monday, April 27, there will be a "meet the author" event from 3:00PM to 6:00 PM in L108.

Government Grant Opportunities

Opportunity Title	Due Date
NSF – Major Research Instrumentation	1/22/2015
NSF – Division of Environmental Biology – Core Programs	1/23/2015
NSF – Long Term Research in Environmental Biology	1/23/2015
National Endowment for the Arts – Big Read	1/28/2015
NSF – Law and Social Science	2/4/2015
NIH – Research Project Grant	2/5/2014
National Endowment for the Humanities – Digital Humanities Implementation Grants	2/18/2015
National Endowment for the Humanities – Summer Seminars and Institutes	2/24/2015
NIH – Academic Research Enhancement Award	2/25/2015
EPA – Environmental Education Local Grants	3/6/2015
NSF - Campus Cyberinfrastructure - Data, Networking, and Innovation Program (CC*DNI)	3/24/2015
NSF – Earth Science – Instrumentation and Facilities	Rolling deadline

Foundations and Corporations

Opportunity Title	Due Date
PADI Foundation – Grants for Underwater Science, Environmental Projects and Education	2/1/2015
Christopher and Dana Reeve Foundation – Quality of Life Grants	2/15/2015
American Psychological Foundation – Visionary Grants	4/1/2015

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