Spring 2015

T2L NEWS

Grade 5 (Lisa Tanner's class) working on a food web.

As the academic year of each college draws to a close and the end of the school year quickly approaches, we take this opportunity to look back at some of the great work that has happened over the year and also to look to the summer work ahead. The first academic year of the Teaching to Learn project has engaged a whole community in learning and we look forward to building on this strong foundation.

Sincerely,

T2L Project team

SPRING 2015

Contents

Calendar

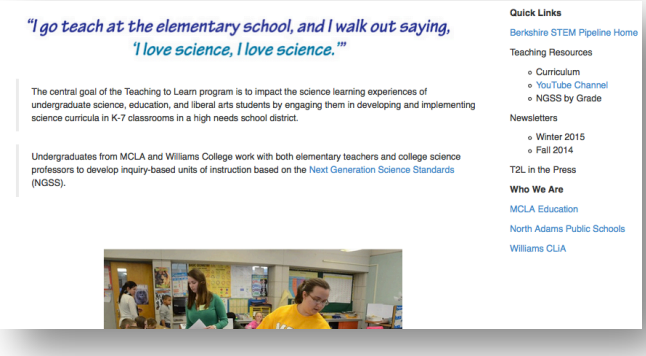
June 16th: Summer Science Fellows begin work.

Week of June 29th & July 6th: Williams Summer Science Lab.

Project Website

The Teaching to Learn project has a new public home on the internet! While it is still a work in progress, the project's website now lives here:

http://mcla.edu/About_MCLA/area/Community-Collaborations/stempipeline/Teach2Learn/teaching-to-learn



Research update

As we wrap up the first academic year of the project, the T2L project team is looking forward to analyzing a full year's set of data. This data comes from many different sources including surveys, reflections on Canvas, video recordings, input from the external evaluator, and feedback on the professional development. Taken together, this large set of data will give a holistic and detailed look into the ways in which this program may impact participants.

We have applied to present the results of this research at regional and national conferences such as the MA STEM Summit and the National Science Teachers Association conference, and have a poster accepted at the American Association of Colleges and Universities conference.

Making the results of this research broadly accessible is a primary goal of the project and we will be sharing results periodically through these newsletters and other outlets. The results will inform and guide the work of other colleges and school districts.

For those participating in the project, thank you as always for taking the time to complete the surveys and other feedback forms.

Grade 4 (Karen Cellana's class) calculating averages.

If you have any questions regarding the research you can contact any of the Principal Investigators (Nick Stroud, Jean Bacon, Chris Himes, and Jennifer Swoap).

Summer Preview

Grade 3 (Jaana Mutka's class) Kapok tree.

We are assembling a great team of Summer Science Fellows (college students from both colleges), classroom teachers, and project staff to revise the current science units and develop new ones. This work will take place over nine weeks this summer and will be a close collaboration between the college students, classroom teachers, and project staff. The goals are to have units that engage elementary students in the scientific practices of the Next Generation Science Standards (as represented in the draft revised MA Science, Technology, and Engineering Frameworks—soon to be released for public comment). These units will use hands-on and engaging activities to help students experience and be excited by real science in the classroom.

The development of the units will be guided by experts in science instruction, honed by classroom teachers, and developed with the creativity of college students.

Look back: Spring Professional Development Topics

PD #1: March 9 & 11

Focus topics: argumentation (as a scientific practice) and science journals.

Representative takeaways: *"Ask the why question and make students support their claim."* and *"Science journal as a source of learning, creating their own learning, and reinforcement."*

PD #2: April 6 & 8

Focus topics: formative assessment and questioning strategies.

Representative takeaways: *"Pushing students with thought provoking questions is a good way to stimulate discussions."* and *"Using a wide range of assessments/talk strategies are helpful to the students understanding."*

The Teaching to Learn project uses technology in many different ways. Here are a few highlights:

Canvas (a web-based learning management system) is used to support and document the work of the Science Fellows and classroom teachers. In grade-level teams they can reflect on specific lessons and their general teaching experiences. These comments and thoughts are used for revising the curriculum units as well as tailoring the support of project staff.

Video is used to document classroom teaching and professional development workshops. The videos of Science Fellows teaching are reviewed in groups with science faculty from the two colleges, to advance the explanations of science content. The professional development videos will become part of a larger video to help support those involved in the T2L project.

Classroom technology is used by students in many different classrooms as part of the science units and to extend their learning. This could include iPads, online videos, and other digital tools.

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