Abstract
The First-Year Experience for the College of Engineering, Computer Science, and Technology (FYrE@ECST) at Cal State LA will engage the students in the STEM community through (1) STEEP, a pre-freshman summer bridge program to prepare them to start the Calculus sequence in their first year, a critical factor for on-time graduation from engineering and computer science programs; (2) Introduction to Engineering and Technology, a new 3-unit first-year engineering and technology course with hands-on design projects; and (3) supplemental instruction workshops to enhance our students' critical thinking in math and physics. All of these components will be integrated through a new comprehensive developmental advisement plan (MyGoldenEagle Flight Plan, or GEFP) as well as a professional learning community (FYrE PLC) for faculty and staff within the College and across campus who are dedicated to STEM student success. The GEFP will be together targeted milestones of the students' academics, career development, and community engagement into one integrated first year learning community (PLC) for faculty and staff within the STEM majors. Working together with faculty, staff, and administrators leading STEM education on our campus, we will develop a model for all STEM majors that not only strengthens foundational math and science skills, but also instills a culture to “Commit to Excellence” and “Engage in Community” and eventually leads to many more Cal State students graduating with STEM degrees.

Working towards cultural change

- While we do not yet have measures of student outcomes to report, we sense that barriers to the collaboration we have been aiming for are starting to be broken down.

Overview of Progress to Date
- The ENGR 1500 (Intro to Engineering and Technology) team has developed course outcomes and pilot tested the design project on Tech Ed students.
- Dr. ChengYu Sun has been leading development of the GEFP online app in his Web Programming course (CS 520); a first draft of the web app is ready for pilot testing in Spring 2015.
- Drs. Sharri Kornblum and Albert Lee will pilot section of the FYrE@ECST course at Cal State LA in their first-year engineering and technology course with hands-on design projects.
- FYrE PLC will cultivate a shared leadership amongst faculty and staff to bring high-impact teaching practices to our STEM majors. Working together with faculty, staff, and administrators leading STEM education on our campus, we will develop a model for all STEM majors that not only strengthens foundational math and science skills, but also instills a culture to “Commit to Excellence” and “Engage in Community” and eventually leads to many more Cal State students graduating with STEM degrees.

Discussion
1. FYrE PLC is growing and deepening its roots. Meetings have been attended by a varied mix of faculty, staff, administrators, representing both NSS and ECST Colleges and both Academic and Student Affairs.
2. The online Golden Eagle Flight Plan is not only gearing up for use by the first FYrE@ECST cohort, but turned into a nice class project for our CS faculty member’s Web Development course.
3. The good teamwork of the ENGR 1500 development team has generated good progress on the project front. The new active learning components planned for the IHE culmicum may take more time to develop.
4. Spring 2015 will be devoted to pilot testing online GEFP, SL, ENGR 1500 project on students; and to coordinating enhancements to STEP.

Limitations
- IRB approval process has been time-consuming and slow. Ability to collect needed data for research in time is an issue.
- Collaboration is requiring break down of long history of poor cross-campus communication and interaction.
- Project is very wide-spread and is proving difficult to integrate due to sheer number of components and people involved; integration is expected to be aided by use of online project management tool.

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