STEM Gateway Symposium 2013

Discussion Group Responses

Course Reform Discussion Group Responses

Promoting Course Reform proposal process to faculty:

- Who to target:
  - New faculty who are interested in spending significant time on teaching
  - Lecturers who have more time to spend on teaching
  - Tenured faculty who are not satisfied with the results of their teaching efforts
  - Graduate students who are potential TA's on the projects
- How to promote:
  - Make sure faculty know about the financial incentives to participating
  - Ask current project teams to report on their efforts and findings to department meetings and faculty senate
  - Increase rewards for innovation on teaching, possibly even creating a Provost Award for Outstanding Course Reform Team effort

Sustainability:

- Use CAPS model to increase sustainability:
  - Generate buzz
  - Expand to more courses
  - Document success
- Ask the Provost to encourage course reform in departments with additional funding
- Promote creation of discipline-based groups in departments as well as degree/concentration areas

Courses to target:

- BIO 201-204
- Trigonometry
- Engineering Calc 162/163
- EE Circuit Analysis 203 & 238

STEM Gateway Symposium 2013

Data-Driven Prioritization Discussion Group Responses

- Who is already part of collaboration?
    - right now, it's mainly the traditional STEM disciplines
    - it would be good to include other stakeholders
- Who else should we collaborate with?
    - this was put out as a question to think about, but wasn't answered during the discussion
- Are we sharing info correctly?
    - same as above; not actually answered
- New-ish STEM initiative:
    - cross-training dept. advisors with UC advisors
    - creating advisor network
    - create better communication between dept. advisors and UC advisors so that students are getting consistent information
- Track students: department(s), sequence of courses (e.g. math), # course retakes, # credits to graduation, services utilized
    - Is advising helpful? Are students utilizing it?
    - Difficult to track transfer students
        - CNM: "swirling patterns" (e.g. double enrollments; students entering UNM as juniors & seniors)
        - we currently don't know much about this population, although a large proportion of UNM students are "swirlers"
        - would be helpful to determine a way to track this population, but there are obstacles
    - Tracking 1st-time freshmen is simpler but not representative
        - most traditional research tracks 1st-time freshman to graduation
        - this is how we currently track students
        - see above – traditional 1st-time freshmen do not represent our student population
        - what do we do about this?
- Datamart: Rita Abeyta says by mid or late summer/fall
- Use data from CAPS?
    - would be helpful to have a stronger partnership with them
    - they collect their own data on student progress and outcomes – can we use it? How could we integrate it?
- current obstacle to tracking student data: lack of access through Banner ID
    - most student tracking information is organized by Banner ID, but Banner ID is confidential and cannot be shared or utilized in data analysis
    - makes it difficult to pull data, track progress by student, etc.
- CNM & UNM may not collect same data from students
    - hard to make comparisons based on transcripts

        - coursework that transfers to UNM may not include the same course content
        - may not always have access to all of the information in CNM transcripts
    - need more consistency between CNM & UNM (articulation agreements)
        - prevent CNM students from having to retake courses at UNM due to lack of course transfer
        - make it clear what will transfer and what will not
        - make sure CNM transfer courses contain the same content as their equivalent UNM courses
- "Starfish": will cover Early Alert system → identify at-risk students
    - aggregate data, e.g. use of tutoring
    - how to flag students who are seemingly doing well, but are actually struggling?
        - provide referral to prof for intervention
        - don't wait until students are failing to start providing intervention
        - students show signs of struggling before problems manifest as poor exam grades, poor final grades, withdrawals, etc. – how to identify them and help them
- Much of this can be automated
    - this would reduce workload burden on staff and faculty
    - would provide a measure of consistency
- "Accuplacer": would be great if we could access it
- What value does it add to have SI leader, SSIG, PLF, switch from pedagogy to interactive learning?
    - Track progress in that class AND subsequently
    - If a class has both PLF & SSIG, does it really add value? (e.g., PLF helps by 10%, SSIG helps by 10%, but PLF with SSIG only helps by 12%)
    - need to examine this to ensure that services are being provided efficiently and are not being duplicated with little net gain
- Does SSIG help with progression to next required class?
    - e.g. to junior year (when courses in major generally start)
    - Problem: low enrollment in SSIG makes it hard to generalize current data

STEM Gateway Symposium 2013

SSIG Discussion Group Responses

1. **Reasons for low enrollment**
   - *Not enough incentives for students. Incentives suggested:*

     -Make SSIGs a core requirement

     -Utilize 3 credit hours

     -Link to a course

   - *Marketing. Suggestions:*

     -Recruit at New Student Orientation

     -Get advisors on board

     -Get campus organizations on board

2. **Organizations to partner with**
   - FAC
   - FLC
   - HESO
   - Engineers without borders
   - Ethnic centers
   - Departments (ie. Engineering)
   - All departments that advise 101
   - WISE
   - Faculty and staff (especially young faculty)

3. **Ideas for Redesigning SSIGs**
   - Integrate with Engineering 101
   - Link courses (ie. STEM and C&J) so it knocks off a core requirement
   - Application Topics that are interdisciplinary and solve social problems (i.e. acequia water system- tie in water division, water quality, sheer stress, forces involved)

STEM Gateway Spring 2013 Symposium: PLF Group Notes

1. Promote to Faculty—(Associate Dean/Faculty) (Advisement)
    a. Student Workshops by Advisors
        --School Of Engineering
        --CAPS, SI –study strategies
    b. STEM-UP Peer Mentors share info through class visits—faculty and students.
    c. Word of mouth—How/who

2. PLF Topics—Training (Include Instructors)
    A. Communications between peers and instructors
        a. Chain of command—protocol, situations
        b. Liaison—chairs (team?) Course Reform
    B. Resources