



OPAS Motivate Workgroup

ETIC Proposal Key Points

Post-Meeting, February 14, 2008

Items for immediate Action:

Eileen will talk to Ben about being the writer for the proposal.

Don will help writer

Endi will help edit

Jo will get out (this) summary tonight

Jo will call Joyce – can she do this criteria exercise for interns and rewrite? – Vmail 6:02 pm

Ryan will help – 3-5 metrics to Jo – ask for restatement of his last words linking OST, in-class, standards, etc for integrating statement for entire proposal

Attendees Bruce, Jo, Mary Beth, Eileen, Endi, Ryan and Don had a passionate discussion, mostly centering on the OST team challenge programs, and used that discussion to distill some criteria for the distribution of funds to programs, probably by a highly targeted re-granting process.

Ideally, we will roll up all the sub-proposals into one terse but highly informative proposal.

Criteria

(may be tweaked depending on whether we are talking about team-based challenge programs or internships):

- Connection to real-world problems; building context
- Inclusive appeal & recruitment – girls, minorities, more than just the “born engineers” who will become engineers no matter what hurdles you put in front of them
- Team based and/or mentor based – don’t carry the coach analogy too far – you want the kids, not the coach, designing the plays
- Organizational hubs, not just organized by teachers – 100% ad-hoc grass roots is just as bad as humongous bureaucracy
- Open-ended problem solving – balance of achievable and challenging
- Ongoing activity – substantive time commitment - is there a minimum contact hour or other metric? – no decision here; the once-a-week-all-school-year-club vs. intense FIRST team over short season.
- Linkage to quality of project – adjudicated product made by kids
- Culminating event(s) –
- link to regional programs with existing infrastructure and track record
- Professional development component
- Engineering or computer science based
- Metric: contact hours x student count

- Metric: OUR test -- standardized pre- and post-assessment w/ demographics, possibly permissions for longitudinal tracking (that last Jo's embellishment)
- Metric – Ryan will provide a summary of 3-5 suggested metrics

Additional Resources

- Summary of the January 30 Meeting, with corrections emailed by Ben and Don, below
- Proposal template - <http://opas.ous.edu//Workgroups2007/OPASProposal2009-2011A.doc>
- ETIC presentation slides, complete set including backup data
 - Powerpoint – ask Bruce
 - February 5, 2008 Pdf (Bruce may have a later version)–
<http://opas.ous.edu//Committees/OPASS/OPAS%20Initiative%20rik2-5-08-1.pdf>
- Jo's raw notes from the January 30 Meeting -
http://opas.ous.edu//Workgroups2007/Motivate/Motivate_013008_raw.doc

Corrected Summary of January 30 Meeting

Corrections in italics.

The January 30, 2008 worksession meeting of the Motivate group was attended by 10 members and two guests, Bruce Schafer and Karen Lakin (Saturday Academy).

The OPAS Investment Model and draft sub-plans were discussed in some detail. Ben Manny previously volunteered Motivate to take the lead for these segments:

- the OST (out of school time) team-based engineering for grades 9-12,
- the OST team-based computer science for grades 9-12, and

to contribute to the Marketing segment. The group brainstormed some plans to address the segments in preparation for the February 8 ETIC meeting:

- Marketing – pull in Businesses via NEM;
- Engineering coach extra-duty stipends for teachers, based on the athletics model;
- Internships for students & educators;
- Linking volunteers to CRLEs and Capstone courses in mentoring relationships;
- Enhancing FIRST Tech Challenge by increasing the number of teams and adding relevance components;
- Enhancing NOISE by improvements and staffing to the TechnoScienceSupersite;
- Funding a “tiny RFP” program to enable teachers needing funds for field trips and enrichment activities such as field trips, mini-conferences, travel funds for inter-school teacher visits to study best practices.

The group decided to combine some of the ideas, resulting in the following recommendations:

- **Tiny RFPs** – are really the purview of the Prepare Workgroup; Jo will bring this idea to their attention.
- **Internships** – to be developed by Joyce Cresswell and Mary Beth Horton, with additional input from Karen Lakin and Eileen Boerger; a very few slides to Bruce ASAP and written sub-plan by February 6, 2008.

- For students:
 - \$2200 per student
 - Mentor company matching at \$1000 - \$2000 per student
 - 75% go into a STEM field
 - 78% of kids interning in a technical field choose a technical major – Joyce will articulate definition of “technical field”
 - 50 students annually, 320 contact hours per student
 - Cost per contact hour per student = \$6.80 ~\$7
 - Don Domes says there is pent-up demand among students.
- For educators
 - 150 – 180 students per educator per year; accumulates
 - \$2,500 per educator to help offset startup costs
 - Companies match \$2,500
 - 10 teachers, 5.5 weeks of internship
- **OST team-based engineering & CS opportunities for students** – to be developed by Ben Manny, Don Domes, David Coronado and Endi Hartigan; sub-plan draft to Bruce no later than Wednesday, February 6, 2008.
 - Program scalable, track record – not lock in brand, but be able to articulate example
 - E.g. FIRST Tech Challenge – would benefit from relevance pieces
 - Stipends for extra-duty teachers –
 - *ETIC match for \$10K to match head football/basketball coach*
 - *Head \$6-8K*
 - *Assistant \$3-4K*
 - *Under proposed matching, year 1 cost is \$12K*
 - *ETIC match year 1 = \$8K*
 - *ETIC match year 2 - \$4K*
 - Equipment scholarships - \$3,000 per team
 - Targets:
 - *Stipends: 30 schools in the first year (2009-2010, \$150K); similar numbers for second year with yet-to-be-detailed district matching to phase out ETIC funding.*
 - *Estimate 20 students/ school*
 - *50 school-based teams for FIRST Tech Challenge =>\$150*
 - *Assume 50 non-school based teams*
 - *Need admin/event costs for a 100-team FTC tournament under ORTOP*
 - Contact hours per student per year estimate ~ 175 hours per student per year.

Next Meeting: Thursday, February 14, 2008 3:30 – 5:00.