LA-SiGMA

Louisiana Alliance for Simulation-Guided Materials Applications

Formative Assessment (Baseline Statistics)

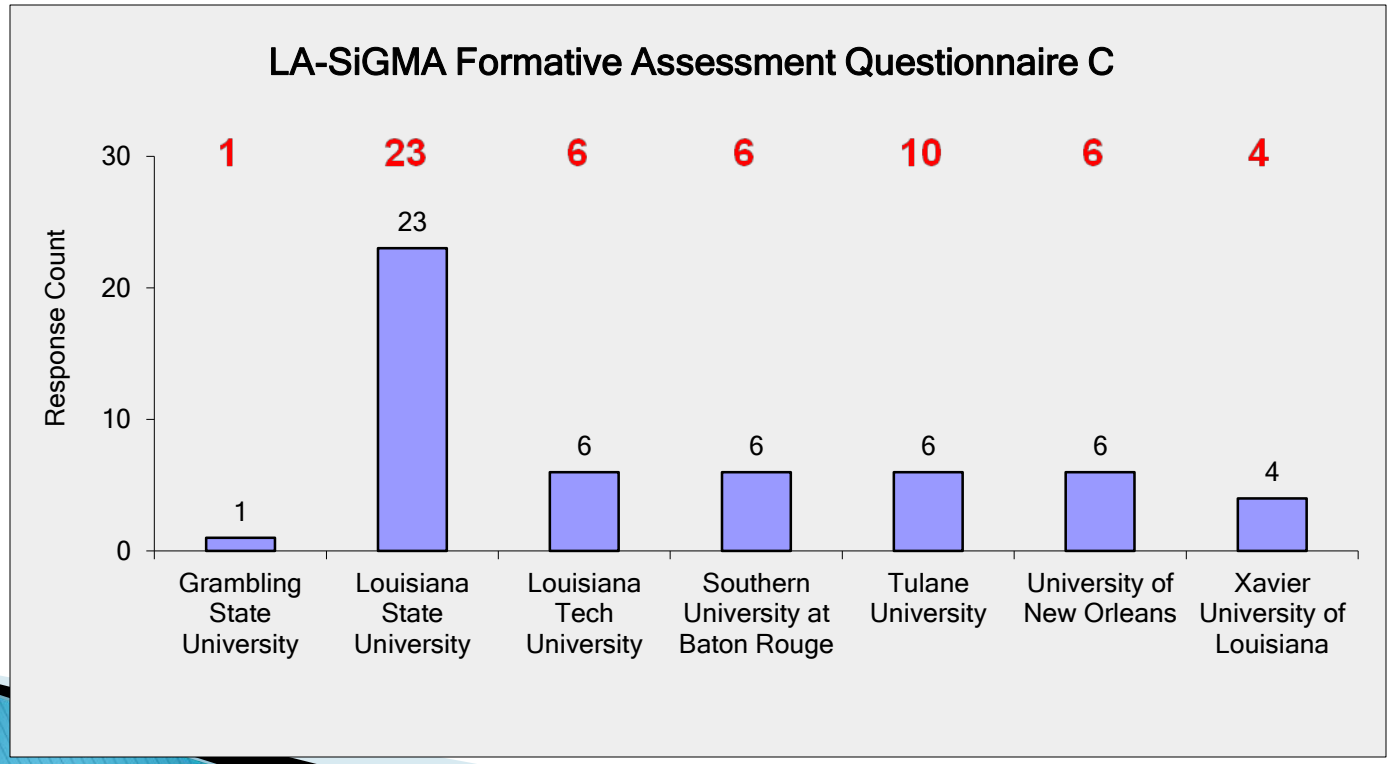
Ramu Ramachandran (LA Tech)
Cheryl Stevens (Xavier)
Scott Whittenburg (UNO)
Hank Ashbaugh (Tulane)
Diola Bagayoko (SUBR)
Shantenu Jha (LSU)

Survey Overview

- Goal was to collect statistics for the year prior to LA-SiGMA funding
- The time window deliberately had a small overlap (1 month) with the current project.
- The purpose of the overlap was to see how quickly we were able to pick up or transfer students to LA-SiGMA funding.
- Survey covered all aspects of the project:
  - Graduate students
  - Undergraduate students
  - Diversity in the G and UG populations
  - Research Productivity – papers, presentations, proposals
  - Research Collaboration – collaboration tools/mechanisms
  - Computational Science/Technology utilization
  - External Engagement
  - Intellectual Property Development
  - Recruiting Efforts

Survey Responses by Campus

- 56 funded senior investigators (SI) in LA-SiGMA were asked to respond to the survey.
- Survey period from Oct 1, 2009 through Oct 31, 2010.
- 93% response rate over a one-week window.



Main Survey Findings[1]

- Diversity
- Recruited and Shared Students
- Collaborations
- Resources

[1]Ref. Louisiana: Annual Report for EPS-100389752

Main Survey Findings[1] Diversity

- 16% of the *graduate students* among the LA-SIGMA research groups belong to *Under-Represented Minority* (URM).

- 13% of graduate students *transitioned* to LA-SIGMA funding in Oct 2010 were *URM*.

[1]Ref. Louisiana: Annual Report for EPS-100389752

Main Survey Findings[1] Recruited and Shared Students

- 9 graduate students (among 23 funded by LA-SiGMA) were being *co-advised* by LA-SiGMA SI's.

- 45 (31% of 143) graduate students working with LA-SIGMA SI's were *recruited through personal recruiting efforts* of the SI's.

[1]Ref. Louisiana: Annual Report for EPS-100389752

Main Survey Findings Collaborations

- 64% of *peer-reviewed papers* published by the SI's had co-authors from the primary author's institution and 20% had co-authors from other Louisiana institutions.
- 68% of *proposals for research funding* submitted by LA-SiGMA SI's had PI's from the PI's own institution and 17% had PI's from another Louisiana institution.
- The *success rate* of proposals among LA-SiGMA SI's in the year before LA-SiGMA was funded is about 45%; 64% of these had co-PI's from the PI's own institution and 20% had co-PI's from another Louisiana institution.

[1]Ref. Louisiana: Annual Report for EPS-100389752

Main Survey Findings[1] Resources

- A relatively high percentage of SI's used *multi-core* (52%) and *massively parallel* (35%) computing platforms in 2009-10,
- Smaller percentages of users made use of *GPU machines* (12%), engaged in *MPI* (23%), *OpenMP* (6%), and *hybrid* (4%) *programming*.
- Nearly all of LA-SiGMA SI's were using at least one of the *distance interaction tools* such as conference calls, desktop video conferencing, AccessGrid, Polycom, etc., and *collaboration tools* such as TeamViewer, Google Docs, SVN, etc.

[1]Ref. Louisiana: Annual Report for EPS-100389752

Paper Survey

- Still need to collect missing year 1 data (Sept-Oct 2011) for comparison to baseline data
- Still working up data on demographics, research outcomes, research funding, and collaborations
- Computing tools, platforms, technologies used