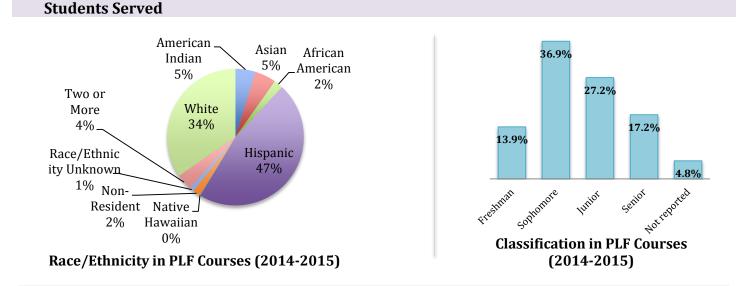
# **Peer-Learning Facilitator Program**

## Transforming Higher Education to what Students Want and Need

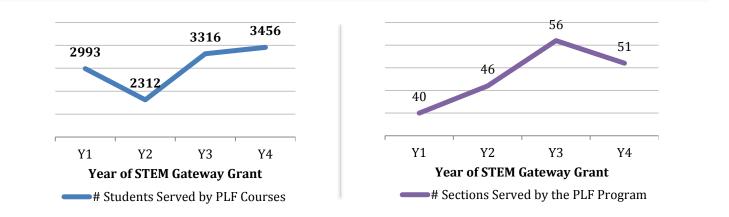
#### **Overview**

- **Peer-Learning Facilitators** (PLFs) assist with **active learning** approaches that involve students working with each other during class, which features three essential elements for student learning:
  - As their most important task, PLFs work with small groups of learners to support the successful completion of in-class assignments or to lead small-group, in-class discussions
  - Clarifying and explaining assignment expectations or reviewing the material.
  - PLFs enable instructors to use active-learning techniques that would otherwise be very challenging in a large class size with a single instructor
- 2014-2015 PLF-served courses: Bio 202L, Chem 121, Chem 122-001, Chem 301, Chem 302, EPS 101, Math 121, Math 150, Math 116, Math 180, and Math 162



Male, 48.2% Not reported,...

Gender in PLF-served Courses (2014-2015)



#### Need

### 90%

Of students switched out of STEM degrees because of poor teaching (Seymour & Hewitt, 1997) • Of students who start at UNM declaring a STEM major, 42.5% will switch majors out of STEM, 29.6% will stop attending UNM with no degree, and only 22.2% will graduate with a STEM degree (STEM Gateway, 2014).

• On average, STEM students left UNM after 3.5 semesters. Also, the average time students switched majors occurs after 3.5 semesters, the

same time as students leaving UNM (STEM Gateway, 2014).

• STEM Gateway studied the grade distribution patterns for the following sixteen STEM-based courses on this list: MATH 120, 121, 123, 150, 162, 163, 180, 181; ENVS 101; CHEM 121, 122, 301, 302; BIOL 201, 202; PHYC 160. The study yielded the following results:

	GRADUATED in	SWITCHED out of STEM	LEFT UNM
Percentage of rollments in this group of ses that earned an A, B or C	86.18%	65.33% (20.85 points lower than GRADUATED)	54.36% (31.82 points lower than GRADUATED)

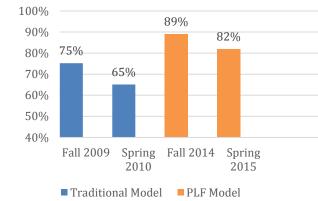
• Research has concluded that STEM students who engage with the instructors and interact with the subject are more likely to be successful in the classroom (Stigler & Hiebert, 2004).

# STEM degree success requires intervention within the first 3-4 semesters focused on effective teaching in gateway courses.

#### Impact

- Active learning is a path for more engagement with the material and "instructors."
- The assistance of PLFs allows instructors to incorporate a wider variety of effective instructional strategies and collaborative learning activities in large gateway sections.

**92%** Of students surveyed last year responded that it was 'important' they had a PLF available in their course



**Course Success Rates comparing students** 

in PLF vs non-PLF sections of Math 121

### **Student Comments:**

- "PLFs are great helpers and it is not intimidating to ask for help because they are peers."
- "Classes with just a professor [are] very difficult because its hard to help and give each student necessary time."
- "Having a PLF provides one-on-one learning opportunities that we wouldn't have if they weren't there."
- "With the PLFs more students are able to receive help in the class at once."

(2014-2015 PLF Satisfaction Survey)