



**IMPACT OF A STEM PROGRAM TO ENHANCE  
RECRUITMENT, RETENTION, AND SUCCESS OF  
HIGH POTENTIAL, HIGH PERFORMING STUDENTS**

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# THE NEED

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- ✘ Well-documented trends have been reported nationally of declining interest by underrepresented students
  - + poor preparation
  - + a lack of diverse representation
  - + low persistence of U.S. students in STEM disciplines (URM students have 10-15% lower graduation rates)

# FEELS OVERVIEW

## (FOOD, ENGINEERING, ENVIRONMENT, AND LIFE SCIENCES)

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- + Overall goal: To cultivate a diversity of leaders that will effectively compete in the global marketplace as STEM scientists
  - × AIMS—
    - \* Increase diversity
    - \* Improve retention and graduation
    - \* Increase student responsibility and involvement in the community
    - \* Increase students going to graduate school/ high profile jobs



# FEELS PHILOSOPHY

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- ✘ Integrated program - combines financial compensation with academic and social support **throughout** student's collegiate career.
- ✘ Students support - FEELS directors, program manager, faculty academic and research mentors, peer mentors, and additional university support programs.

# PROGRAMMATIC APPROACH

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- ✘ Elements –
  - + Seminar course each semester
    - ✘ provides weekly contact with staff
    - ✘ Sequenced topical information
  - + Research project
  - + Industry internship
  - + Service-Learning
  - + Social functions

# WITHIN FEELS CHANGE OF MAJOR

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- ✘ FEELS Fellows – 31 students entered the FEELS Program, 18 students continued in FEELS
- ✘ FEELS FELLOWS - 3 of 18 changed Major or Concentration, all within STEM disciplines
- ✘ Left FEELS - 9 of 13 Changed Major or Concentration, 3 within STEM disciplines



# WITHIN FEELS GPA AND GRADUATION RATES

GPA (out of 4.0)	FEELS	3.47**	18 Students
	Left FEELS	2.51	13 Students
Graduation Rate <sup>#</sup>	FEELS (Cohorts 1,2)	3.00*	13 of 13 Students
	Left FEELS (Cohorts 1,2)	1.85	3 of 13 Students
Graduated/In School <sup>&amp;</sup>	Left FEELS (Cohort 1,2)	2.23	8 of 13 Students

\*\* P < 0.002; \* P < 0.05

<sup>#</sup> Graduation Rate – 1 = left Purdue, 2 = currently enrolled, 3 = graduated

<sup>&</sup> Graduation Rate assuming those currently in school graduate

# FEELS AND COLLEGE OF AGRICULTURE (COA) COHORT COMPARISONS

GPA	FEELS (Cohort 1,2,3)	3.47	18 Students
	COA (Cohort 1,2)	2.93**	172 Students
Graduation Rate (4 Year)	FEELS (Cohort 1,2)	3.00	13 Students
	COA (Cohort 1,2)	2.15	172 Students
	COA (Cohort 1,2)	2.40	142 Students

\*\* P < 0.002; \* P < 0.05

# Graduation Rate – 1 = left Purdue, 2 = currently enrolled, 3 = graduated  
& Graduation Rate Assuming Currently in School Graduate



# FEELS GRADUATION RATE COMPARISON WITHIN PURDUE

	4 Yr	> 4 YR
FEELS - Completed	100%*	100%**
FEELS - All	76.2 %*	83.9%**
FEELS - Started and left	33.13%*	82.0%**
College of Agriculture	52.2%	69.9%
Purdue University	45.7%	70.2%

\* Includes Feels Cohorts 1, 2

\*\* Includes FEELS Cohorts 1, 2 and 3 anticipated graduation

# PROGRAMMATIC RESULTS

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- ✘ Post Graduate Employment - Cohorts 1 and 2
  - + Graduate school - 3
  - + Vet/Med School - 4
  - + Industry - 6\*

\*Two are interested in graduate school

# CONCLUSIONS

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- ✘ FEELS increased GPA of students that remained in FEELS
- ✘ FEELS increased 4 year graduation rates of students that remained in FEELS
- ✘ FEELS exposure enhanced anticipated graduation, although at a slower rate
- ✘ Requires time, \$ and dedicated faculty/staff



# QUESTIONS

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Thank you!!!

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