



Full Steam Ahead

LEVERAGING OUR WINS TO FUEL SYSTEM CHANGE

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The following presentation was given at the 22nd Annual Conference for the National Institute for the Study of Transfer Students. Please cite responsibly and direct questions to the original presenter(s).

Solutions Showcase

3307 - Promoting STEM Transfer Student Success: Implementing a Cooperative Grant Requires Institutional Change

Leading and Advocating for Change, Maximizing Credits and Streamlining Pathways

The Clear Path team will share our story of how we shifted a multi-institutional paradigm to successfully implement two NSF track 3 multi-institutional, S-STEM grants [NSF S-STEM DUE 1564634,2130103] focused on the cooperative financial, academic and social support of STEM transfer students. The principal investigators served as agents of change, promoting new practices in such diverse areas as admissions, financial aid, and human resources while developing a culture of intra- and inter-institutional trust.

T. Michelle Jones-Wilson, *Professor of Chemistry and Biochemistry*

Olivia Carducci, *Professor and Chair Mathematics*

Kristin Noblet, *Asst. Professor of Mathematics*

East Stroudsburg University of Pennsylvania

Danielle Ringhoff, *Asst. Professor of Chemistry*

Northampton Community College

Clear Path Associate and Bachelor's Degree Completion Scholarships NSF S-STEM



Promoting STEM Transfer Student
Success: Implementing a Cooperative
Grant Requires Institutional Change

Feb 21, 2024

The Team and the \$!



Awards – \$4,039,527 – \$4,982,181

ESU and Community College Partners

Lehigh Carbon Community College

Luzerne Community College

Northampton Community College

County College of Morris



How it all Began - Problem Identification



Assessed cc STEM persistent transfer students with >60 credits for “junior status” in selected major

Students are not prepared to finish bachelor’s degree in 4 semesters

Student debt burden increases!

Disasterous Data



Degree Program	Degree Progress (%)
Biochemistry	45.5
Biotechnology	63.6*
Chemical Biotechnology	33.2
Chemistry	54.4
Computer Science	46.7
Computer Security	17.2
Environmental Science	52.5
Marine Science	30.0
Mathematics	41.2
Physics	47.2

CP I and II Objectives



Increase STEM student academic success, particularly for underrepresented student populations.

Increase traits associated with academic success and GPA of graduating STEM students at all participant institutions.

Increase retention and STEM persistence at ESU and partner community colleges.

Increase STEM associate degree completion at partner community colleges.

Increase progression towards STEM baccalaureate completion in four semesters

Objectives



Maintain and expand a Clear Path - Increase communication and curriculum coordination among East Stroudsburg University and area community colleges.

Ensure students enter ESU from community colleges with appropriate prerequisites.

Create, implement, and evaluate a cross-institution Communication Plan.

Identify barriers to student preparation for the baccalaureate degree, propose and implement solutions.

Establish a *clear path* for qualified STEM transfer students, increasing the number of qualified transfer students.

Student Support Services – CP II



Financial

Up to \$5200 years 1 and 2 at community college

Up to \$10000 per year for two years at ESU

Maximum funding per scholar \$40,000

Student Support

Enhanced advising, Peer mentoring, tutoring, cohort activities

The State of the Union – CP I & II



Scholars

Total CP I scholars - 118 + 7 who did not matriculate to ESU

CP II 76 – 3rd year of program

Funds awarded

CPI total - \$2,618,087

CPII total – \$970,220 (so far!)

Data collection

Well underway

29 Presentations and 2 publications



Recruitment – An Opportunity for Change



Liaisons are essential

Push information to STEM students
Communication with stakeholders in a students' lifecycle at CC: Financial Aid, Professional Advisors, Admissions, STEM Faculty, Deans, Tutoring Centers ...

Assist applicants in the process: LORs and Personal Statements or an Interview

Use of CC and ESU student performance tracking programs (i.e. Starfish or other repositories)



Scholar Demographics



	% CP I	% CP II	% ESU
Women	46	39	18
Underrepresented Population	29	35	17
Non-Traditional	53	45	
First Generation	26	50	29.5
Pell Eligible	56	60	

Results



94 % transfer rate
Without Clear Path

50% students no plans to transfer to ESU
25% no plans to seek a B.S.

	GPA (mean)	Retention (%)	AS/AA Completion (%)	BS Completion (%)
CPI	3.22	86	71	86
CPII	3.17	97	77	NA

Impacting the Transfer Deficit



Clear Path - (45 credit minimum transfer)

Mean time to B.S. conferral – 4.54
semesters

59.4% \leq 4 semesters

79.2% \leq 5 semesters

ESU Comparison data:

Minimum 57 credit transfers 51.98%
earned a BS in any field \leq 4 semesters.

Leadership Structure



Faculty Faculty Faculty!

Grant management

- 3 ESU PIs (2 managing, 1 research)

- 1 Community College PI (CC leader)

- 4 Community College faculty liaisons (paid)

- Grant coordinator

Clear Path I and increasingly II rely on faculty-to-faculty interaction and cooperation



The Challenge



According to Darwin's Origin of Species, it is not the most intellectual of the species that survives; it is not the strongest that survives; but the species that survives is the one that is able best to adapt and adjust to the changing environment in which it finds itself

(Megginson,, 1963)





Policies, Procedures and Practices— Oh My!



Award of Clear Path involved:

- New performer review

- Challenging policies and practices that evolved over time without sufficient attention to consistency, logic, and interdependency of divisions.

Implementation of Clear Path involved:

- Program promotion and identification of scholars

- Acceptance and evaluation of financial need

- Actual funds transfer

- Hiring support staff

- All accomplished within the confines of the granting agency parameters.

Interdivisional Cooperation



Public (university) relations

- Advertising and branding
- Web page infrastructure

Office of admissions

- Education – transfer specialists
- Attending events

Financial Aid

- Establishing communication channels
- Establishing funding formulas
- Ensuring appropriate awards



Interdivision Communication – Big Wins



Finding the advocates...

Scholar tagging

Changes in web page structuring

First Gen Program

FAFSA Thursdays

Business office pay, reporting and funding policies - still working on it!

Better student hiring mechanism (still struggling here!)

OSPR reporting changes

Clear Path Corner

Inter Institutional Communication



And dare we say it... cooperation!
Pushing the "Our Student" mentality until
everyone believes it!

Looking for Poachers



CPI - Meeting 1 – an atmosphere of distrust!
By CPII launch – get to work attitude!
Cross institutional commitment to work in
scholars' best interests!



Communication and Determination



We all MUST talk to each other
Don't take no for an answer!
Divide and conquer – capitalize on team strengths!

CP – Language of Success



Common Language is Key

- Our students
- Scholars
- Program not scholarship

Degree completion assumption

Transparency

Tell them what we are telling them

**The reason why
Rump Roast
is called
Rump Roast is
because nobody
would eat it if it
was called
Cows Ass.**



Faculty Relationships Key



Faculty to faculty

Recruiting

Access to classrooms

Advising across institutions

Advice to each other



Facilitating introductions for faculty in other disciplines

We know who to call when issues arise.

Mentoring & Tutoring



Mentoring

Student support includes an ESU peer mentor while still at community college

Ideally peer mentor still on campus when student transfers.

Grant Coordinator also serves as a mentor/"mother".

Tutoring

Rapid and proactive assignment of tutoring (grant paid)

Cross institutional tutoring

Success Seminars



Traits Associated with Academic Success
Scholar Success Seminars – flexibility!

Literature

Grit

Academic Self Efficacy

Professional Future Sense of Self

CP and Green

Help Seeking Behavior

Oppositional Mindset

The greatest
pleasure
in life is
doing what
other people
say you
cannot do.



PDA Advising Model



Proactive

Developmental

Advocacy



Reverse Transfer



Transfer ESU (four-year) credits to community college to complete Associate degree

“It’s Not Over” partnership between ESU, another four-year school, and two community colleges.



Curriculum Coordination

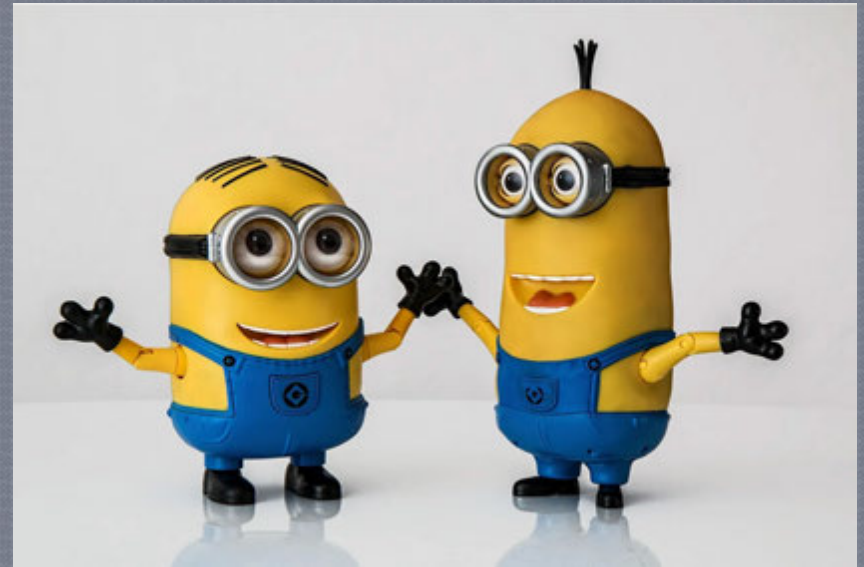


Faculty to faculty again

Examples
Biotech

Computer Science

Math Secondary Education





THANK YOU!



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