





NATIONAL SCIENCE FOUNDATION STEM Talent Expansion Program (STEP)

STEM Student Enrollment and Engagement through Connections

SEEC Engineering Transfer Student Profile

Spring 2009









STEM Student Enrollment and Engagement through Connections

Office of Community College Research and Policy (OCCRP)

The Office of Community College Research and Policy (OCCRP) at Iowa State University is focused on creating, sharing, and applying knowledge in the context of community college education.

The mission of the OCCRP is to articulate and analyze the issues affecting policy and practice by conducting rigorous research which impacts students, faculty, administrators, and policymakers. The OCCRP is committed to sharing our research with diverse constituents through dissemination efforts such as publications, conference presentations, and professional workshops.





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Objectives

- To systematically collect and report pre- and post engineering transfer student data from DMACC and ISU College of Engineering on an on-going basis;
- To develop a reporting mechanism that highlights preengineering, transfer enrollment, retention/persistence, graduation, etc.;
- To utilize data to inform program improvement, practice, policy, and research; and
- To cultivate a "culture of evidence" by using data to foster institutional transformation





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Organization of SEEC Transfer Profile

- Student Enrollment
- Student Characteristics
- Retention Data: DMACC, CC Transfers vs. Native Students
- Engineering 100
- Entering Engineering Student Characteristics: AP Credits, Dual Enrollment
- Transfer Student Questionnaire (TSQ)



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DMACC Transfer to Engineering Retention Data: 2004-2007

Enter Fall	#	Still in dept	% Still in dept	Other Engr	Still Engr	%Still Engr	Other College	% other college Other	total at ISU	% @ ISU
	38	9	23.7%	0	9	23.7%	6	15.8%	15	
2004	Grad	6		0			5		11	_
		15	39.5%	0	15	39.5%	11		26	68.4%
2005	21	4	19.0%	0	4	19.0%	2	9.5%	6	
	Grad	7		0			0		5	-
		11	52.4%	0	11	52.4%	2		11	52.4%
2006	22 Grad	5 0	22.7%	2 0	7	31.8%	5	22.7%	12 0	
		5	22.7%	2	7	31.8%	5		12	54.5%
2007	32	12	37.5%	4	16	50.0%	8	25.0%	24	75.0%







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Student Retention:

Community College vs. ISU Native Students (2004-2006)

			2 Year St	till Enrolled			4 Year Still Enrolled						
Year	Entry #	Still Enrolled	% Still in Engr	% Other College	% @ ISU or grad	Still Enrolled	% Still in Engr	% Other College	% @ ISU or grad	Still Enrolled	% Still in Engr	% Other College	% @ ISU or grad
2004	112	42	37.5%	17.0%	58.0%	25	22.3%	11.6%	61.6%	8	7.1%	1.8%	38.4%
	1016	754	74.2%	14.9%	89.1%	618	60.8%	20.2%	81.0%	581	57.2%	20.7%	77.9%
2005	106	52	49.1%	16.0%	66.0%	55	51.9%	1 3.2 %	85.8%				
	967	689	71.3%	16.1%	87.4%	587	60.7%	21.6%	82.3%				
2006	109	62	56.9%	14.7%	71.6%								
	1048	793	75.7%	12.3%	88.0%								







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Open Ended Questions

Question 1: What factors helped you to adjust (or made your transfer unsuccessful) to ISU?

Question 2: What might the CC done to enhance transition?

Question 3: What advice would you give to other community college transfers?





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Question 1: What factors helped you to adjust (or made your transfer unsuccessful) to ISU?

Community College/University Faculty and Staff/Advisor

"Other than my own initiative, I accidentally met one of my instructors from DMACC one day at the grocery store, shortly after transferring into ISU. He told me I would be fine here. That was an enormous help."

"I had a good advisor and good teachers."

"I feel that advisors helped me adjust very well and made it easy to start classes."

"I think the best thing for me was having a set student advisor in my program. She was always around and would answer my questions whenever. "

Campus Resources/Programs

"It went good because I reached out to others and took advantage of all the offered services and groups that I wanted to."

"The introductory classes, such as a ConE learning community, are also good."

"Utilizing the support offered and my leadership skills from tutoring high level math at DMACC were helpful."

"I joined the WISE transfer team when I enrolled and it was really nice to have that group of girls to meet and feel a part of a group. Along with that program, I was placed in an apartment with all transfer students, which I think really helped me adjust to the university."





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Question 1: What factors helped you to adjust (or made your transfer unsuccessful) to ISU?

Parents/Family/Friends and Current Students

"I had a friend who had attended ISU before."

"My friends who already were at ISU helped me adjust."

"My fraternity, because I knew them from previous visits. My best friend and brother were already here also."

"I also think my friends and family made it easy because I knew what to expect."

Living with other students

"When I moved into the fraternity, I immediately had a social life when I had none at the community college."

My first year here I moved into Sterling University where they placed me into an apartment with girls I didn't know. I actually still live with one of them. It was a great opportunity to meet people in the apartment complex as well as on the bus to and from classes."

"My roommate, who had been at ISU for two years, was helpful."





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Question 2: What might the CC done to enhance transition?

Nothing, needs were met

"My community college experience was amazing and I knew that nothing could compete with it and they did everything to help me out with transferring."

"Did enough already. At Kirkwood I had great instructors that challenged me just as much as at ISU."

"I feel that DMACC did everything they could; however, I changed my major and this has caused me to have to go back and repeat some classes I took 20 years ago."

"I'm satisfied."

"The instructor was very helpful and attentive of helping me on my problems. Their office hours are flexible."

Provide more rigorous and challenging courses

"Make school harder because at the community college I spent an average of 3 hours a week doing homework and at ISU it's around 25 hours a week. Also the community college should create more group projects."

"Have harder classes at the community college."

"IWCC could have had more demanding academics that would have even better prepared me for ISU."

"Make the classes harder. I needed a challenge and my community college didn't give that to me so I slacked and my grades showed."

"Have more difficult course work."

"Expect more detailed, higher quality work."





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Question 2: What might the CC done to enhance transition?

Prepare students for ISU experiences

"Offer study learning classes."

"Teach us what it's like to be in a class like EM324 where a large percent of students fail."

"I think that more of the classes could have had us do homework on the WebCt system."

"Visit more and look around more. Sit in on a class before attending."

"Put a little more emphasis on competition in the classroom."

Assist in the transfer process

"Have a better understanding of degree requirements and transfer credit evaluations. Some classes do not match up 1 credit to 1 credit."

"If there had actually been someone to help me find out more about ISU and what it takes to transfer. I joined TRIO for help during classes and their counselors are the ones that helped transfer. Other than that, I had almost no help whatsoever."

"Help with the transfer process more."





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Question 3: What advice would you give to other community college transfers?

Study and work hard

"Don't expect to blow off classes like at a community college. Take notes and review them after the class is over. Try to explain the lecture to other students to retain and gain comprehension."

"Learn everything 100%, don't just do enough to get by. It can come back to bite you pretty hard."

"Study more!"

"Just do your homework and study."

"If you can, study, study, study and gain good habits before you get to ISU."

"Don't put off school work when you reach ISU."

Be optimistic/You can do it

"If anybody at ISU says the standards at DMACC are over and you will struggle, don't believe them. Your own aptitude defines your success here. Some will struggle because they didn't try hard enough early on in their education. If you attempt to learn in the beginning you will do fine, no matter what institution you started at."

"Don't be afraid of going somewhere new or different and don't be afraid of things getting more difficult; if you want to do it, do it for yourself and you will be fine."

"Try not to be overwhelmed by the university and the classes. It takes time to adjust, but it's easy to feel like a part of the university after just a short while."

"Go for it, don't quit."





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Question 3: What advice would you give to other community college transfers?

Take as many courses at the community college that you can

"Get math classes finished at the community college."

"Try to take the proper courses for your field of study."

"Take as many classes, required for your degree, as you can."

"Take as many classes as possible at the community college, as they are cheaper, smaller class sizes, and English speaking instructors are the norm at the CC."

Be Proactive

"Ask question and look up for information"

"Don't trust your instructors at ISU to notify you about important information, you do it yourself, and find out yourself."

"Look into your own classes and do not always take advisor's advice as set in stone. Sometimes there are slight mistakes that you should catch especially when transferring credits that do not match up."





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Next Steps

- Obtain feedback from DMACC and ISU colleagues about the SEEC Transfer Student Profile
- Continued collaboration between DMACC and ISU College of Engineering
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