The Laptop Component in the Learners' Community

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Abstract

Universities can significantly increase the potential for academic success and degree completion for students who may be fearful of failing or have had toxic experiences with the traditional academic environment during their freshman and sophomore years in college. This positive result can be achieved by developing an infrastructure of student support delivered through learners' communities that include an interpersonal mentorship component, laptop computers, and a high-tech component that includes a web of learning networks. Building such a network of learning communities allows students to function in an environment that sets them up for success rather than failure, that gives them the emotional assurance that they won't need to either fight or take flight, that they are not being set up for failure and further learned helplessness.

Introduction

At a four-year public university, located in a large metropolitan area, students have been randomly selected to participate in a Learners Community initiative. As a part of this Community, students were given laptop computers, based upon course linkages between either English 1302 (Freshman English 2) and CIS 1301 (Introduction to Computers) or English 1302 and History 1305 (American History before 1877).

Findings

In reviewing the statistics generated for these technologically enhanced experiences, we discovered that the retention rate, after the first year, was much higher for Learners Community students. For all other semesters, LC students' retention fared better than the control group. The Learners Community is established, initially, as a

freshman year experience. In light of this reality, the 80.95% retention rate of Fall 2001 (see Table III) Learners Community laptop students is a serious indicator of the learning, ability, and retention boosts provided by the laptop program. We acknowledge the anomaly of Fall 03 when the retention rate for the laptop students fell below the retention rate for the control group (see Table II). This unique moment stands against every other semester from Fall 01 until Fall 05 (see Tables I & III). The greater statistical pattern is that this freshman year intervention makes a substantial contribution to all statistics, even to four year graduation percentages. Membership in the Learners Community only increases your four year graduation rate by approximately about 3%. On the other hand, membership in the Learners Community Laptop Project increases your percentage of graduates by almost 10%. It appears that laptops boost learning. The laptop project, nested inside the freshman experience, Learners' Community is the perfect interface of dual functioning learners' communities. Adding a computer component to the Learners' Community experience, seriously enhances the freshman level experience.

Table I

Retention of Learners' Community Students

Semester Entered LC	N	# of Declared Major	% Declared Major	# of Graduates	% Graduates	Retained			
						1 year	2 years	3 years	4 years
Tenneco Scholars	53	20	37.74%	15	28.30%	69.81%	58.49%	39.62%	22.64%
Fall 01	122	26	21.31%	3	2.46%	71.31%	46.72%	36.07%	29.51%
Spring 02	31	6	19.35%	1	3.23%	45.16%	29.03%	25.81%	
Fall 02	170	40	23.53%	0	0.00%	69.41%	48.82%	40.59%	
Spring 03	21	0	0.00%	0	0.00%	61.90%	28.57%		
Fall 03	144	16	11.11%	0	0.00%	60.42%	34.72%		
Spring 04	63	7	11.11%	2	3.17%	55.56%			
Fall 04	163	7	4.29%	0	0.00%	66.87%			
Spring 05	48	0	0.00%	0	0.00%				
Fall 05	163	3	1.84%	0	0.00%				
Total Served	978	125	12.78%	21	2.15%				

Table II

Retention for Learners' Community Control Group Students-

(non-Learners' Community students)

Semester Entered LC	N	# of Declared Major	% Declared Major	# of Graduates	% Graduates	Retained			
						1 year	2 years	3 years	4 years
Fall 01	144	28	19.44%	7	4.86%	56.25%	32.64%	25.00%	18.75%
Fall 02	112	20	17.86%	1	0.89%	54.46%	27.68%	22.32%	
Fall 03	194	24	12.37%	0	0.00%	54.64%	39.18%		
Fall 04	294	9	3.06%	0	0.00%	59.52%			
Fall 05	92	1	1.09%	0	0.00%				
Total Served	**836**	**82**	**9.81%**	**8**	**0.96%**				

Table III

Retention for Learners' Community Laptop Students

Semester Entered LC	N	# of Declared Major	% Declared Major	# of Graduates	% Graduates	Retained			
						1 year	2 years	3 years	4 years
Fall 01	42	12	28.57%	6	14.29%	80.95%	54.76%	35.71%	28.57%
Fall 02	77	18	23.38%	0	0.00%	62.34%	41.56%	33.77%	
Fall 03	73	10	13.70%	0	0.00%	60.27%	36.99%		
Fall 04	22	3	13.64%	0	0.00%	68.18%			
Fall 05	23	1	4.35%	0	0.00%				
Total Served	**237**	**44**	**18.57%**	**6**	**2.53%**				

In so many studies, it has been impossible to find long-term advantages to technological intervention. Here evidence is presented for the long-term utility of laptop projects. What some studies see as "distracting technology" or even "technological giveaways" are programs which allow for serious catching up in skill levels necessary for success in college. At least two researchers presenting their findings at the American Education Research Association's annual meeting in San Francisco in 2006 questioned the use of tax-supported school computer programs in public school. Researchers from Michigan State and Syracuse University studied a laptop program implemented in Ohio in 2003. Jing Lei of Syracuse

University suggested that the purchase of computer equipment may or may not be worthwhile. At the same conference, Steven Edward Higgins of Newcastle University in England also suggested that computers might have only a short-lived effect on skills. Perhaps because the student in our project was learning to write, use technology and research at the same time and to combine those skills, we were successful. Perhaps another reason is that the professor-teacher does not see the student's work on the computer as "distracting" the student from what the teacher might be attempting to cause them to learn. Another factor may be that the students learn to see themselves as technologically able and resource ready. When USA Today's Gregg Toppo reported on Lei and Higgins' research, he lead one paragraph with the following statement "laptop giveaways are the latest educational fad…" He continued by suggesting that perhaps low income schools were more connected than "typical schools." He had already suggested that taxpayer supported school computer and Internet giveaways are political gold, but studies have questioned whether they actually help students learn. Amazingly, we still must justify e-learning environments.

Conclusion

Computer assisted learners' communities, like those with laptops, have a great potential to reduce prejudices against genders, races, and perceived and self-perceived outsiders. The architecture of the community network has to be designed so that it can expand with expanding enrollment and an expanding list of members in the learners' communities' network. Students who spend more time at the university and feel more connected evolve into students who graduate. The learners' community networks hold a wealth of university-related information in electronic forms as well as a staff, professors, mentors, tutors, and students who participate in the individual village. We are creating learning relationships both by design and by accident and long term partnerships for academic and professional development on the village-level through village-level, school-based events aimed at improving learning through peer-group supports and set-up hubs.

What are the forces and the blueprints that have helped students gain the strength to change into students who can succeed and how can they be formed into an

interlocking system? This is what is being examined herein. Rather than being satisfied with meager graduation rates, universities must be willing to change the architectonics of the undergraduate years and to create supportive, vitalizing network constructs, a true challenge because we have to undo constructs and unlearn theories (MacKay, 2003).

This paper does not declare that Marshall McLuhan's “global village" has arrived, but, nonetheless, there is a revolutionary shift possible through the creation of a network of university-based learners’ communities which includes the computer component. Systems of learning or learners’ communities that include tools like the laptop component are programs which help students survive the sometimes fearful environments of undergraduate colleges.

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