PERKINS TUTORING PROPOSAL 2014

Computer Systems Technology

1. Introduction:

Retention rates for first year students for CityTech Associate degree CIS program is quite low. With the help of the previous Perkins grant, we implemented successfully the tutoring/mentoring program in the Fall 2013/Spring 2014 semesters and saw an increase in the grades and the retention of first year students. The senior students who mentored and tutored the freshmen shared their journey and also helped the freshmen students understand technical aspects of the courses.

Most freshmen students at the CST department find it challenging to deal with the two initial courses – CST1100 (Introduction to Computer Systems) and CST1101 (Problem Solving with Computer Programming). In our mentor model, a faculty coordinator would match students to potential mentors (senior students), and these mentors regularly contact their students to provide help and support as they take these two initial courses and as they continue through their first year in school.

Freshmen students in the first semester have to adapt to the college learning culture in addition to adapting to the new college life. Our students struggle with their classwork because of lack of exposure to the academic rigor. Additionally many students do not have role models who can guide them through the academic process or the career choices. Having tutors (who have themselves taken the courses) who are specialized in certain fields would help them considerably. Because of the tutor's background knowledge, conversations between tutors and students are both individualized and focused on success in school. Tutors would typically hold "office hours" in an open lab and help answer the specific questions by the students.

To summarize, we successfully implemented a program that has mentors and tutors who contact students regularly to develop a clear vision of their goals, guide them in connecting their daily activities to their long term goals, and to support them in building skills, including time management, self-advocacy, and study skills.

2. Results from past year:

We saw an increase in the grades of the students (after the mentoring model was implemented) by at least 3 percentage points in the introductory courses as shown in Fig 1 below:

Spring 2013:			
Cource Code	**%Pass (D or better)**	**%Pass (C or Better)**	**% Fail**
CST1100	83.30%	77.60%	3.60%
CST1101	84.00%	81.40%	4.10%
CST1201	76.70%	72.00%	10.10%
Fall 2013:			
Cource Code	**%Pass (D or better)**	**%Pass (C or Better)**	**% Fail**
CST1100	86.30%	82.60%	4.70%
CST1101	86.80%	83.00%	3.30%
CST1201	80.00%	69.80%	6.50%

Fig 1: Comparison of grades before (Spring 2013) and after (Fall 2013) introducing our program.

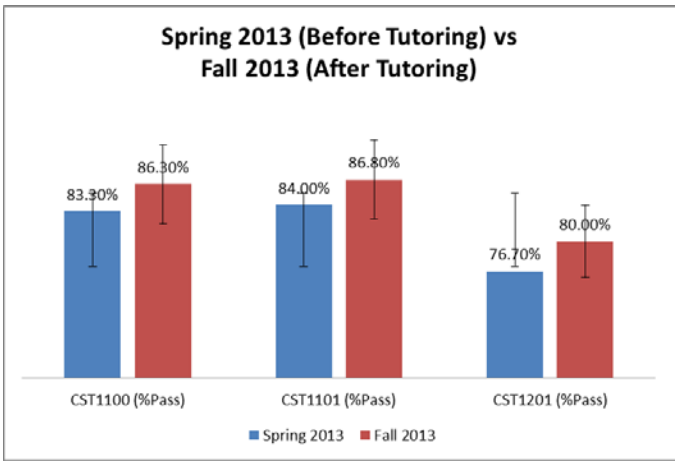

Fig 2: Graph with error bars comparing the % of students passed in the Spring and Fall 2013 semesters of students taking the 3 introductory courses.

3. Changes to the previous proposal:

We did notice a tremendous interest in the tutoring program, but not much interest in the mentoring program. We therefore would like to have only the tutoring program with more tutors who also perform the role of mentors and guide freshman students. As a result of this change, this allows us to hire more tutors, who could spend time at the open lab and address the needs of other students.

4. Major Effort objectives (quantified where appropriate):

Computer Systems Technology admits approximately 110 students yearly who certified in reading, writing and math. Our goal is to provide tutors and guest speakers for all new students for the first year to increase the retention rate of students in CST 1100 and CST 1101.

5. Activities to achieve the objectives:

Tutors will be available in the open lab, N928 on scheduled hours for CST1100, CST1101 and other introductory courses. Industry speakers from IT companies will be able to encourage students on the importance of keeping up a good academic record, develop a passion/enthusiasm and what to expect in their particular part of the IT industry.

6. Lab Space Limitation & Laptops Requirement

Due to the limited desktop computers at the open lab (Room N928) which are used by the students of CST, we would like to use 2 laptops for the tutors which they can use for tutoring the students. All the necessary software would be installed on the 2 laptops. This arrangement would allow the desktops to be used by the students at the lab.

7. Major Effort timeline, noting significant activities, month-by-month.

Date	Person Responsible	Activity	Comment
Summer – July, August	Coordinator	Audit students' schedule. Select Tutors Hire Tutors/Develop Schedule Send emails to students to advertise the tutoring program. Target specific students with lower grades Meet with the selected students, tutors as a group. Gather data of grades from the previous year and analyze them.	If students are not registered for both CST1101 and CST1100, investigate reason and correct. If students do not register for both classes it will delay them for one semester.
September/ October	Tutors Coordinator	Meet with Tutors and finalize schedule. Open lab opens for tutoring and Tutoring begins. Invite guest speaker from IT industry	
November-December	Tutors Coordinator	Tutoring continue Invite guest speaker from IT industry Wrap up meeting with students and tutors.	Gather data on the success of the program.
January-February	Coordinator Tutors	Hire Tutors/Develop Schedule Meet with the selected students, tutors as a group. Tutoring begins.	Creating a community with the new group of students.
March	Tutors Coordinator	Continue weekly meetings with tutoring students. Invite Guest Speaker from IT Industry	
April-May	Tutors Coordinator	Continue with tutoring Invite Guest Speaker from IT industry Wrap up meeting with students and tutors.	Gather data on the success of the program.

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8. Major Effort Evaluation

Evaluation Measure	Anticipated Outcome
1. Retention rate first year fall to fall CIS program students. Fall 2010 39.6% of students were retained in program.	1. At least a 45% retention rate for CIS enrolled students who participate in program.
2. Increase in Pass% of students enrolled in the first year introductory courses	2. At least 2 percentage point increase in pass % of students who participate in the program.

9. Major Effort Staff:

	Name	Title	Time	Salary
1.	Prof Ashwin Satyanarayana	Coordinator	1 month(August) summer salary	???
2.	TBD(10)	Tutors	19hrs/wk $18 hr 900 hrs	$48,000

Major Effort Budget

Category	Code	Major Effort Costs
Professional Salaries	15	$??? (One month faculty coordinator summer salary)
Non-Professional Salaries	16	$48000.00
Purchased Services	40	$400.00 - Honorarium for guest speakers
Supplies and Materials	45	$2000.00 – 2 Sony VAIO Duo 13 Intel Core i5 laptops
Travel Expenses	46	$0
Employee Benefits	80	$0
Indirect Costs	90	$0
Minor Remodeling	30	$0
Equipment	20	$0
Major Effort Total		$??????