



Notes from the Researchers

Volume 3 – Second Quarter, 2011

Recent Projects from the Department of Institutional Effectiveness Research and Planning

Research for: Basic Skills
Research Lead: Aeron Zentner

Objective:

The following report presents the impact of the SmartThinking (ST) online tutoring tool on success, retention and persistence for students enrolled in an English (ENGL) 095, 097, and 099 courses during the 2010-2011 academic year.

The data on ST users was gathered through student usage reports obtained from the ST website. The data was matched to students who were enrolled during the 2010-2011 academic year. Term code variables were linked to ensure the students participated in ST during the term of the ENGL 095, 097 or 099 course enrollments. Additionally, an analysis was conducted to determine if ST influenced success, retention and persistence. The data was split into three ENGL groups (e.g., 095, 097, and 099) in order to identify the impact at each level.

Definitions:

Success is defined as a student receiving a letter grade of A, B, C, CR (credit), P (pass). If the student did not receive any of the grades indicated, they were deemed unsuccessful. To increase the accuracy of the study, RD (no record) grades were removed. RD codes indicate a grade was not entered and therefore cannot be determined.

Retention is defined as students who earned a grade other than W (withdraw). To increase the accuracy of the study, RD (no record) grades were removed. RD codes indicate a grade was not entered and therefore cannot be determined.

Persistence is defined as students who enrolled in the fall term and subsequently enrolled in the spring term.

The following table presents the population of students enrolled in basic skills ENGL courses for the 2010-2011 academic year. The data suggest that close to 15% of basic skills ENGL students utilized ST.

TABLE 1	Summer 2010		Fall 2010		Intersession 2011		Spring 2011	
	Non-ST	ST	Non-ST	ST	Non-ST	ST	Non-ST	ST
ENGL 099	107	38	523	101			611	74
ENGL 097	72	26	384	129			370	46
ENGL 095	22	12	173	32	67		241	
TOTAL	201	76	1080	262	67	0	1222	120



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Results:

Success

The following table presents a comparison of success for students who utilized ST in comparison with non-users. The comparisons shows a strong impact on student success during major terms with ENGL 095 having over a 30% higher rate of success and ENGL 097 and 099 having over 10% higher rates of success for ST users.

TABLE 2	Summer 2010		Fall 2010		Intersession 2011		Spring 2011	
Success	Non-ST	ST	Non-ST	ST	Non-ST	ST	Non-ST	ST
ENGL 099	50.7%	71.1%	51.7%	67.3%			48.0%	63.5%
ENGL 097	52.2%	69.2%	51.8%	71.3%			50.6%	63.0%
ENGL 095	70.0%	83.3%	53.2%	84.4%	80.6%		51.5%	

ST influence on Success

An additional statistical analysis was conducted in order to determine if success in ENGL 095, 097 and 099 was dependent upon ST participation. The results of the Chi-squared analysis, utilized for determining such a relationship, confirmed that success in ENGL 095, 097, and 099 is in fact dependent upon participation in ST.

Retention

The following table presents a comparison of success for students who utilized the ST tool in comparison with non-users. The results indicate a higher rate of retention for students utilizing ST. Most notably, ST users had over a 10% higher rate of retention in comparison with non-ST users during major terms.

TABLE 3	Summer 2010		Fall 2010		Intersession 2011		Spring 2011	
Retention	Non-ST	ST	Non-ST	ST	Non-ST	ST	Non-ST	ST
ENGL 099	88.4%	100.0%	80.1%	93.1%			77.3%	87.8%
ENGL 097	73.9%	80.8%	79.6%	93.0%			85.5%	97.8%
ENGL 095	90.0%	100.0%	79.4%	90.6%	92.5%		78.8%	

ST influence on Retention

An additional statistical analysis was conducted in order to determine if retention in ENGL 095, 097 and 099 was dependent upon ST participation. The results of the Chi-squared analysis, utilized for determining such a relationship, confirmed that retention in ENGL 095, 097, and 099 is in fact dependent upon participation in ST.



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Persistence

The following table presents a comparison of success for students who utilized the ST tool in comparison with non-users. The results suggest ST participants have a 5% higher rate of persistence in ENGL 095; nearly 13% higher rate of persistence in ENGL 097 and nearly a 6% higher rate of persistence in ENGL 099.

TABLE 4		
Fall 2010 to Spring 2011		
Persistence	Non-ST	ST
ENGL 099	82.5%	88.1%
ENGL 097	73.3%	86.0%
ENGL 095	73.0%	78.1%

ST influence on Persistence

An additional statistical analysis was conducted in order to determine if retention in ENGL 095, 097 and 099 was dependent upon ST participation. The results of the Chi-squared analysis, utilized for determining such a relationship, confirmed that retention in ENGL 097 and 099 is in fact dependent upon participation in ST. The analysis also suggests that persistence in ENGL 095 is not dependent on the use of ST.