

## THINK TANK Highlights: Academic Year 2012-2013

### Executive Summary:

During the 2012-2013 academic year the THINK TANK continued to support student retention at the University of Arizona. **It is the mission of the THINK TANK to empower UA students by providing a positive environment where they can master the skills needed to become successful lifelong learners.** Those skills contribute to persistence, retention, and graduation. This report is a brief summary of some of the highlights of the contributions of the THINK TANK to the retention efforts.

Since its inception in 2009 we have seen students who make use of the THINK TANK services do better than students who do not use the services. The 2012-2013 year was no exception. First-time full-time freshmen who used the THINK TANK were **retained at an 86.15% rate**. The non-user retention rate was 77.08%.

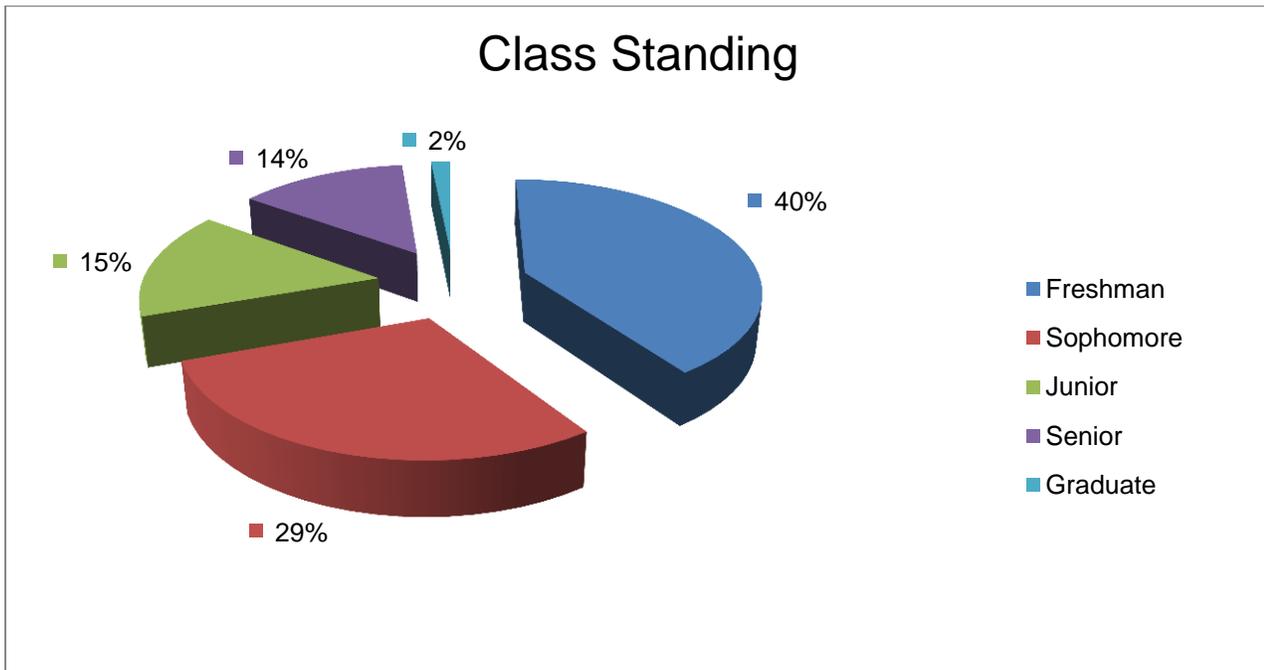
The retention rates for students that participate in the **Supplemental Instruction** program demonstrate how transferable skills, which are the key learning outcomes of the program, contribute to ongoing persistence and retention. Over time the retention rates show a dramatic difference in terms of students continuing on at the UA. It is typical to see a **10% difference in the retention** rates in the first year. That difference in the retention rate of users versus non-users increases to **15% in the second year**. We see **a spread of 24 percentage points in the third year retention rate**.

**Schedule for Success** is a program specifically for students that test into pre-college mathematics. Our findings show that students who met with their assigned Learning Specialist were **retained at a rate nearly 20% higher** than students who chose not to meet with the Learning Specialist. Furthermore those same students were more likely to use math tutoring at the THINK TANK.

Our focus group findings illustrate the usefulness of the services in empowering students to develop self-efficacy, metacognitive skills and cognitive strategies (our learning outcomes) that can be used throughout life. We have included a section of **student voices**, thereby letting them tell their story.

**THINK TANK Visits at a Glance:**

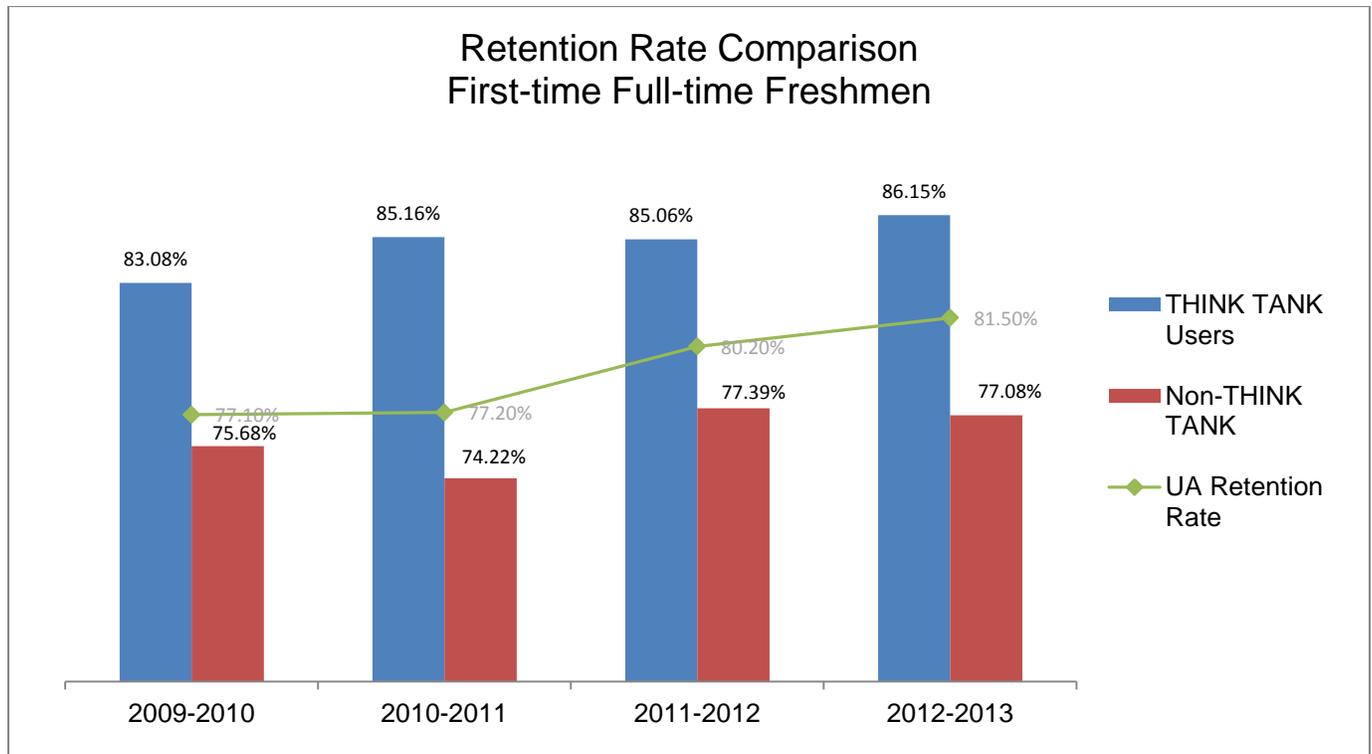
Total number of visits	46,191
Total number of hours	52,699
Total number of students	7,619
Total number of courses supported	778



First and second year students make up approximately 7 out of 10 THINK TANK users. The majority of services and course support is aimed at these two critical years. However, academic support is not limited to the first two years of college. Usage data shows that 53.6% of the juniors and seniors who used the THINK TANK in 2012-13 had used THINK TANK services in previous semesters (dating back to Fall 2009).

## Using the THINK TANK Impacts Retention

For the last four enrollment years, first-time full-time freshmen who made use of THINK TANK services have demonstrated higher institutional retention rates (4-8% higher) than the official UA rate. When compared specifically to first-time full-time freshmen who do not utilize THINK TANK services, there is an even larger jump in retention (7-11%).



## Retention Rates for THINK TANK Users by Class

	Fall 2012	Enrolled Fall 2013	Retention Rate
ALL STUDENTS	4,827	4,088	84.69%
Freshmen*	2,841	2,328	81.94%
Sophomores	1,187	1,079	90.90%
Juniors	547	499	91.22%
Seniors**	474	426	89.87%

\*This analysis includes all students classified as freshmen, not limited to FTFT

\*\*This figure includes enrollment and/or graduation (294 seniors graduated prior to Fall 2013)

## Retention Rates of students who utilize Supplemental Instruction

When looking at the last three fall semesters, retention rates for UA students who participated in Supplemental Instruction (SI)\*\* were higher than the students in the SI supported courses who did not use the service. Another emerging trend is the increase in popularity of SI among students enrolled in courses with SI support. Over the last three years, a growing percentage of students enrolled in SI courses have attended sessions (Respectively: 8% in 2010; 23% in 2011; and 38% in 2012).

		1-Year Retention	2-Year Retention	3-Year Retention
Fall 2010 Cohort	SI (N=208)	87.02%	79.33%	71.15%
	Non-SI (N=2,603)	77.79%	64.66%	47.06%
Fall 2011 Cohort	SI (N=444)	87.39%	75.90%	-
	Non-SI (N=1,950)	77.59%	65.08%	-
Fall 2012 Cohort	SI (N=620)	87.26%	-	-
	Non-SI (N=1,653)	80.64%	-	-

\*\*\*SI is an academic support model founded at the University of Kansas-Missouri. It is a service that provides regularly scheduled, out-of-class study sessions. SI is provided for free for UA students.

## The Impact of Professional Academic Support on Students in pre-college Math

Schedule for Success is a program at the University of Arizona that provides specialized courses, tutoring, and academic support to help students in pre-college math become eligible for College Algebra in a shorter timeframe. Students in the program are provided one-on-one appointments throughout the year with a professional Learning Specialist (LSPEC) at the THINK TANK. Retention rates for students with Learning Specialist support were nearly 20% higher than those of students enrolled in the same pre-college math course who opted not to meet with a Learning Specialist. Students who met with a Learning Specialist also outperformed their peers in a series of other important comparisons (see Table 1).

Students who met with a Learning Specialist in 2012-13 were twice as likely to incorporate other THINK TANK services into their learning lifestyle and twice as likely to utilize math tutoring. Out of the cohort of 383 students, 63% of students who used LSPEC support visited the THINK TANK for a service other than regular

meetings with their Learning Specialist and logged in more than 1,200 visits. In contrast, only 28% of the students in the program who opted out of using the THINK TANK LSPEC support\*\*\*\* sought tutoring or academic support, and only 15% of this group sought math tutoring.

\*\*\*\*13 students in the “No LSPEC” category are SALT students. The UA SALT Center provides students with tutoring and Learning Specialist support.

Table 1: Comparison for Schedule for Success Students: LSPEC v. No LSPEC Support

	LSPEC (N=305)	No LSPEC (N=78)	All (N=383)
Grades of ABC in MATH100AX in Fall 2012	259 ( <b>85%</b> )	56 (72%)	315 (82%)
Fast-tracked to MATH100B in Fall 2012	151 ( <b>50%</b> )	29 (37%)	180 (47%)
Completed MATH100B (with grade of A,B, or C) by end of Spring 2013	169 ( <b>55%</b> )	29 (37%)	198 (52%)
Completed Math course higher than 100B by Spring 2013	32 ( <b>10%</b> )	3 (4%)	35 (9%)
Enrolled Fall 2013	217 ( <b>71%</b> )	41 (53%)	256 (67%)
Cumulative GPA above 2.0 at end of Spring 2013	221 ( <b>72%</b> )	51(65%)	272 (71%)
Avg Cumulative GPA end of Spring 2013	<b>2.33</b>	1.91	2.25
Registered for Math >100 Fall 2013	61 ( <b>20%</b> )	12 (15%)	73 (19%)

MATH100AX (Preparation for University Level Mathematics) and MATH100B (Preparation for University Level Mathematics part B) are pre-college math courses students are expected to complete prior to enrolling in College Algebra and/or other math courses required as part of their major. Math requirements by major are available at [degreesearch.arizona.edu](http://degreesearch.arizona.edu).

### Learning Outcomes Qualitative Data – Student Voices

1. *As a result of using one or more services at the THINK TANK, students will self-report an increase in their academic self-efficacy.*

“I went in struggling, not really understanding the material; and then when I left I understood. Everything had started to click. So I did feel a ton more confident when I left.” (Exam Prep Focus Group, Spring 2013)

"My experience with my Learning Specialist and the THINK TANK has been awesome! The THINK TANK has definitely helped me build confidence with my math, writing and studying skills." (Chelsea W., Freshman, Psychology major)

“I loved our meetings. They were always more than helpful and always made me more confident in myself and school work. ” (Megan S., Freshman, Pre-Business major)

“Only doing multiple logic games didn't necessarily make me more confident - but rather learning HOW to approach them – did” (LSAT Prep Course Participant, Fall 2012; course evaluation)

- 2. As a result of using one or more services at the THINK TANK, students will have a self-reported or observable increase in their metacognitive skills by identifying their learning strengths and applying them to their study habits to become more successful learners.*

“I think that [individual tutoring] helped figure out where my deficiency is ... If you’re continuing to do the same thing incorrectly over and over again they will point that out. So it helps you see what’s going on if you make the same mistakes.” (Individual Tutoring Focus Group, Spring 2013)

“I love the THINK TANK because they are giving me really great comments towards the essay and help me understand my mistakes.” (Yougjin J., Freshman, Pre-Pharmacy major)

“Every time we had a meeting, I knew by the time it was over that I would walk out of the building feeling more confident and in control of my academic life at the U of A. I know you probably have realized that you helped me a lot this year, but I guarantee you have helped me way more than you think. In a way, you have helped re-shape my mind and way of thinking when it comes to school. I am now more responsible and diligent when it comes to school. I actually wonder where I would be sometimes if I did not have someone so dedicated and concerned with helping me and making sure that I am a successful student. I appreciate all the help you have given me.” (Johnny S., S4S Freshman, Pre-Business major)

“The THINK TANK has really helped me improve my problem solving skills and it has reflected in my exam scores.” (Alex W., Freshman, Physics major)

- 3. As a result of using one or more services at the THINK TANK, students will self-report use of transferable cognitive strategies.*

“[I learned] to read the question thoroughly. Not rushing to conclusions when you’re going through a math problem. Just take it piece by piece and don’t rush because you’re stressed about time.” (Exam Prep Focus Group, Spring 2013)

“I’ve learned a lot at the Writing Center. They taught just how to condense it, structure better, how to finish your conclusions, make better thesis statements. For me it’s been a really big help... I have a good GPA and I credit a big portion of that to learning at the Writing Center.” (Writing Center Focus Group, Spring 2013)

“Thank you for challenging me to use the 8 day study plan. It has been helpful thus far, and I no longer procrastinate like I did in high school.” (Jisselle V., Freshman, No major selected CLAS)

“Regarding the study plans you gave me on our last meeting I would like to thank you a lot because they have helped me a lot when it came to studying for tests. To this day I am still using them for quizzes and exams. I have been even telling some of my friends to give it a try when we occasionally get together to study for the same exam.” (Feedback provided to an Academic Skills Tutor via email)