Minnesota Tech Prep Project Proposal FY 05
Project #1: Assessment of College Readiness among Tech Prep Students
ANNUAL REPORT

Consortia Name: Pine to Prairie (fiscal agent), North Country, North Borders Contact Name: Murray Turner, Truman Jackson, Bev Arnston Project Name: Research on Accuplacer and Math Improvement in Alternative School Settings

Participating High School(s):	Contact Name(s)	Grade Level	# TP Students to be involved
Ada-Borup	Murray Turner	10-11	10
Cass Lake	Truman Jackson	10-11	17
Thief River Falls	Bev Arnston	10-11	18
Participating College(s):	**Contact Name(s)**	**Title**	
Northland Community and Technical College- Thief River	Dean Dalen	Director of Special Needs/ Resource Center	
Bemidji Technical College	Shraron Fruetel	Counselor	

Project Report:

This project involved 53 (45 was the target) students at 3 small Area Learning Centers, one from each of the three Tech Prep consortia listed in the grant. The goal was to do some research with students in a small setting to determine effective strategies to improve student scores in Accuplacer. After a review of A+dvancer, developmental texts from the college, and Skills Tutor, we decided to use Skills Tutor because of the reports the program can generate and because the special education cooperatives were willing to allow us to use their license for the ALC students. Because we could collaborate with the special education coop regionally, we had more money to provide supplemental materials to augment Skills Tutor instruction. Four ALC teachers and one ALC administrator was trained in the use of Skills Tutor in August, 2004. We worked with Northland Community and Technical College and MN State Community and Technical College to provide Accuplacer testing for students and to advise us on effective instruction. Supplementary materials were selected by ALC math staff in collaboration with college faculty recommendations.

We gathered data on math in this pilot. We have data from the ALC's in Cass Lake and in Crookston, and from one ALC class in Thief River Falls that is structured in a more traditional classroom, block schedule, one quarter class. In Crookston, five students post-tested in Accuplacer. All of them showed improvement in scores. In this setting, students self selected whether or not they wanted to be involved in the Skills Tutor program. The teacher there reported that students who have moved frequently from one district to another benefited greatly from the systematic approach of Skills Tutor. In Cass Lake, which has the largest enrollment, we evaluated results over an 8 month period. 15 students improved on the Test of Adult Basic Education. Four scores were available for the Basic Skills Test. All four students improved their BST scores. On the pre and post test Accuplacer, 8 of 10 students who took both the pre and post tests improved their scores. All except two of those 8 improved their scores by over 10 points. One student doubled their Accuplacer score. In Crookston, seven students chose to participate and 5 re-tested; all five improved their scores. In Thief River Falls, 10 students were

involved in the second quarter block scheduled class. All retested and 7 out of 10 improved. In the next quarter, eight were involved and six improved their scores. We have learned many things about how to structure the instruction using Skills Tutor and we have tried different approaches with students. Here is a brief summary of what we have learned from this pilot:

- Skills Tutor generates excellent reports showing student time on task, time spent working at home and at school, percentage scores on learning areas etc. We can clearly see that students who did not improve generally did not put in much time on task. We know from this that structuring the amount of time spent is important.
- Crookston gave students a choice about whether or not they wanted to participate. Nearly all chose to do so because students like computer based work and liked that Skills Tutor allowed them to stop and begin where they left off earlier. Thief River Falls and Cass Lake put all students on the computer. It may be true that some students do not like or cannot make much progress with computer based work and we may need to give students a choice about how they improve their math scores (as long as the choice doesn't include not improving the score!)
- Instructors in a credit based, grade generating class must decide how to give classroom "credit" for Skills Tutor work. All of the teachers said this was the biggest question they had to address, and each of them approached it a different way. Crookston generated credit by the quantity of items accomplished. Cass Lake and Thief River Falls focused more on the amount of time on task. In Thief River Falls, we learned that giving points or classroom "credit" for time on task doesn't necessarily generate the most improvement. We are beginning to think that giving credit for more progress through different sections of Skills Tutor regardless of amount of time on task will result in greater improvement in scores.
- All teachers report that students make a connection between taking a college placement exam, studying to improve on that exam, and the notion that studying math in school is important. One teacher said, "It is a very good way to get kids to know that they will be faced with math later in life".
- Teachers reported that Skills Tutor is an excellent tool to help students who have had attendance problems in their school history. One teacher said that Skills Tutor "fills in the learning gaps" in math, and students who "think they can't do math, discover that they can because Skills Tutor keeps cycling back through it until they get it right."
- Using supplemental materials with Skills Tutor is critical. Some students need more teacher instruction than others. In Thief River Falls the teacher started out by using Skills Tutor without much supplemental materials and that proved to be ineffective.
- All of the sites reported that they would like to use the reading portion of Skills Tutor also. All sites believed it was a helpful tool.

FINAL REPORT ON OBJECTIVES: Original grant objective is in plain type and report information is in bold.

Objectives	Strategies (include the requirements described on attached Request for Project Proposals)	Outcomes/Measures (include how data will be analyzed)
1. To provide local data to 45 students in three rural ALC's that they need to improve math skills in preparation for Tech Prep post-secondary instruction.	1. Pre-test 45 students at three Area Learning Centers (one from each of the three consortia named) to establish student readiness for college math. **We have pre-tested 53 students at three learning centers in math.** 2. Increase student awareness about the importance of math in college Tech Prep studies. **All sites report that students are more aware of the importance of learning math to get ready for college.** 3. Provide program requirement information to students about necessity for math instruction. **All students are aware of college placement score requirements.**	FY 04 Pre-test 45 students from 3 Area Learning Centers in math readiness on the Accuplacer (local college placement exam). **Actual: Pre-tested 53 students at three learning centers.**
2. Improve math scores on post-secondary placement testing and increase 45 ALC students' readiness for college.	1. With assistance of Technical College faculty, select and purchase appropriate supplemental math instruction tools to improve student performance. (Review A+vancer, Skill Tutor on-line, and college developmental text materials.) **Accomplished as stated. Skills Tutor was selected** 2. With college faculty assistance, provide training to ALC math staff in supplemental instruction. **Accomplished as stated. Training took place in August, 2004** 3. Provide supplemental math instruction to 45 students at 3 area learning centers. **Instruction has been provided to 53 students.**	FY 04: Improve 45 ALC students Accuplacer math scores by implementing math instruction in three ALC's. **Actual: We post-tested 30 students and 94% of those students who have been retested have improved their scores and average of 6.8 points or 17%. Definitely the longer the time on task the better the results. We had difficulty getting both pre and post test results at the ALC environment because of the transient nature of the students.**

	4. Provide post-testing on Accuplacer for students. **We had difficulty with post testing because of the transience of the students.**	
3. Evaluate results of staff training, student testing, and resources used for student math improvement to influence future practices in high school math instruction.	1. Compare pre and post assessment student scores. **Tech Prep coordinators have met with each teacher at each site and reviewed results and make recommendations for improvement. We have applied for a second round of grants and are implementing Skills Tutor in traditional classrooms in four schools.** 2. Prepare and report state and local consortium reports on research results. **Accomplished.** 3. Make future modifications as necessary. **We have made modifications. One example is the use of more supplemental instruction in Thief River Falls. We have implemented all of the things we have learned in the "next step" Tech Prep project.**	FY05: Report findings to 40 school districts in NW Minnesota and to state agency. **Actual: Through Principal, Superintendent and Leadership Board meetings all 40 districts have been informed of the results of this project.** **Actual: In our next steps project we are recommending more time on task and students receiving credit for completing skills tutor assignments.**

EXP/REV GUIDELINE
PINE TO PRAIRIE COOP #985
PERIOD ENDING JUNE 30, 2005
TECH PREP COLLEGE ASSESSMENT GRANT

		ANNUAL			Remaining
FUND	**DESCRIPTION**	**BUDGET**	**Year to Date**	**%YTD**	**Balance**
300-380-444-305-123-539	TP Special Proj 5000 Consulting	$1,500.00	$1,500.00	100.00%	$0.00
300-380-444-366-123-539	TP Spec Proj 5000 Travel	$500.00	$478.72	95.74%	$21.28
300-380-444-433-123-539	TP Spec Proj 5000 Instruc Supplies	$3,000.00	$3,021.28	100.71%	-$21.28
	TOTALS	$5,000.00	$5,000.00	100.00%	$0.00