

**BUILDING TRADES PROGRAM
PROGRAM REVIEW REPORT
2011-2012**

**PREPARED BY:
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Executive Summary

Program Description Summary

Sitting Bull College offers an Associate of Applied Science and a Certificate in Building Trades which will provide students with the instruction and skills required for entry-level carpenters and remodeling of residential or other light –framed buildings. The Building Trades program was developed in 1997 with the idea that our Building Trades students would be provided with the opportunity to gain self-worth by learning a trade and giving back to the community through construction projects and actively participating in the Sitting Bull College Building Trades program. The success of the program led to the development of the Sitting Bull College Construction Company which employs Building Trades students and graduates. The Building Trades Program and the construction company both instill pride and a sense of accomplishment for the students and employees by providing residential housing and renovations for the communities of Standing Rock. At present, the faculty consist of one, Dave Luger.

Since 1997, enrollment in Building Trades has remained steady with an average of thirteen students per semester. The program has moved from a two room trailer at the old campus into a new 10,500 square foot complex in the fall of 2010 which we feel will boost enrollment in the future due to a better learning environment. Retention is poor at best as many of our students receive some training then return to the work force (48 at my last count). Most of our students are employed throughout Standing Rock with four that I know of starting their own construction companies.

The program follows the National Center for Construction Education and Research (NCCER) guidelines for curricula and testing. Funding for most of our program needs is self generated through our construction company revenue.

Our advisory board consists of local contractors and educators that meet twice a year to provide recommendations for improvements.

Role of Program within Sitting Bull College

Mission statement as stated in the Sitting Bull College Bulletin:

Construction, as in many other occupations, is becoming a field of specialists.

SBC's Building trades Program follows curriculum guidelines set forth by the Associated General Contractors of America and the National Center for Construction and Education Research (NCCER).

This program will provide students with the instruction and skills required for entry-level carpenters and remodeling of residential or other light-framed buildings. Coupled with "hands-on" experience work at off-campus construction sites, the curriculums provide the necessary theory as well as instruction in blueprint reading, estimating, safety and the use of newly developed equipment and materials. Extensive experience is gained in building layout, framing, sheathing, roofing, exterior and interior finishing.

Students who successfully complete the program leave with a solid foundation as entry-level carpenters. Jobs that await them are many as demand is high for motivated individuals here locally and elsewhere with building contractors, lumber yards and maintenance shops.

The courses provided to meet Sitting Bull College requirements for Associate of Applied Science Degree and Certificate in Building Trades are provided in the college bulletin and include:

BTT 101 Technical Trade Math	BTT 201 Concrete Technology
BTT 105 Framing and Exterior Finishing	BTT 215 Construction Practicum III
BTT 111 Fundamentals of Carpentry	BTT 222 Construction Estimating
BTT 115 Construction Practicum I	BTT 232 Energy-Efficient Construction
BTT 142 Construction Practicum II	BTT 242 Construction Practicum IV
BTT 162 Interior Construction	BTT 251 Architectural Drafting
	BTT 262 Interior Finishing

Program Personal

At present, the faculty consists of one:
Dave Luger, Building Trades Instructor, Full-Time

Significant changes occurred in 2007 when one full time instructor and one crew foreman was lost due to low revenue with the construction company and have not been replaced.

Program Productivity

Enrollment in Building Trades for the reporting period (Fall 2006-Fall 2010) remains steady with a average of thirteen students per semester. During that time all students were enrolled in the two year Associate of Applied Science (A.A.S.) degree plan. If we look at graduation as a measure of success, there is little as only five have graduated with A.A.S. degrees during the reporting period. In that light retention is poor.

The big picture is that many of our students after a year in school I believe have found confidence in their abilities as carpenters (and a need to provide for their families) have joined the work force either with construction companies, maintenance jobs or by starting their own business. Forty eight students at my last count have been employed in building trades. Had those students been enrolled in the nine month Certificate plan, many would have received a completion certificate compared to the one during this five year reporting period. Due to these assessment findings all incoming freshman are now enrolled in the Certificate plan.

Enrollment by Degree Plan

	FA 06	SP 07	FA 07	SP 08	FA 08	SP 09	FA 09	SP 10	FA 10
A.A.S. Building Trades	15	20	14	12	11	19	9	11	10
Nine Month Certificate	0	0	1	0	0	0	0	0	0

Graduates by Degree Plan

Graduates	05-06	06-07	07-08	08-09	09-10	10-11
A.A.S. Building Trades	3	0	0	1	1	0
Nine Month Certificate	0	0	1	0	0	0

All Building Trades Graduates in the work Force

	Self-Employed	Working for others	Unknown
Graduates	4	13	4

Program Revenue

The North Dakota State Vocational and Technology Education Department also helps with salaries and gives the Department a small \$1,000-\$2,000 grant each year for equipment or tools.

The dollars generated by the Building Trades Construction Company is our only other source of revenue we have to maintain our program.

	Fall Tuition	Spring Tuition	ISC	Total
2008-2009	\$35,775	\$55,871	\$42,056.94	\$133,702.94
2009-2010	\$16,200	\$17,993.58	\$68,637	\$102,830.58
2010-2011	\$17,075	\$15,286	\$76,547	\$108,908

SBC Construction Company
General Ledger

Fiscal Year - January 1st to December 31st		Calendar Year 2007	Calendar Year 2008	Calendar Year 2009	Calendar Year 2010
Dept	Sales				
1	Revenue	\$ 364,242.91	\$ 204,145.18	\$ 362,823.45	\$ 692,563.33
2	Accounts Receivables	\$ 60,198.00	-	-	
	Total Sales	\$ 424,440.91	\$ 204,145.18	\$ 362,823.45	\$ 692,563.33
	Cost of Goods Sold				
3	Construction Materials	\$ 97,771.39	\$ 75,265.05	\$ 128,219.99	\$ 189,463.04
4	Sublet Construction	\$ 150,802.21	\$ 57,201.35	\$ 159,449.86	\$ 258,464.93
5	Fuel Costs (equipment) Gas Diesel	\$ 14,911.78	\$ 13,608.96	\$ 7,212.84	\$ 9,717.20
	Total Cost of Goods Sold	\$ 263,485.38	\$ 146,075.36	\$ 294,882.69	\$ 457,645.17
	Gross Profit				
	Sales Less Cost of Goods Sold	\$ 160,955.53	\$ 58,069.82	\$ 67,940.76	\$ 234,918.16

	Operating Expense				
6	Salary Exempt Staff	\$ 32,737.47	\$ 9,210.54	\$ 5,127.64	\$ 16,356.80
7	Salary Hourly Staff	\$ 25,562.28	\$ 1,044.90	\$ 13,425.00	\$ 16,595.00
8	Salary Temporary Staff Hourly/Benefits	\$ 13,150.25	\$ -	\$ 977.00	\$ 52,792.50
9	Group Life/Dis	\$ 322.63	\$ -	\$ -	\$ -
10	Retirement Contribution	\$ 2,731.39	\$ 501.32	\$ 256.24	\$ 817.60
11	Group Health	\$ 4,718.61	\$ (136.23)	\$ -	\$ -
12	Suta Taxes Expense	\$ 302.94	\$ 11.79	\$ 57.67	\$ 468.66
13	Workman's Compensations	\$ 9,115.63	\$ 7,997.47	\$ 3,341.51	\$ 1,776.12
14	FICA Taxes	\$ 4,912.05	\$ 725.23	\$ 1,476.45	\$ 6,557.38
16	Office Supplies	\$ 109.97	\$ -	\$ -	\$ -
17	Utilities Expense	\$ 2,880.00	\$ -	\$ -	\$ -
18	Insurance Expense	\$ 4,063.00	\$ 1,575.00	\$ 1,088.00	\$ 1,097.00
19	Vehicle Repairs and Maintenance	\$ 635.33	\$ -	\$ -	\$ 741.25
20	Telephone	\$ 1,203.37	\$ 1,013.34	\$ 841.22	\$ 743.70
21	Subscription, Dues, Fees, License	\$ 2,462.00	\$ -	\$ -	\$ -
22	Materials/Tools/Equipment	\$ 3,500.00	\$ -	\$ -	\$ -
23	Miscellaneous Exp	\$ 5,834.45	\$ 3,061.11	\$ 13,630.24	\$ 12,563.10
	Total Operating Expense	\$ 114,241.37	\$ 25,004.47	\$ 40,220.97	\$ 110,509.11

	Net Income/Loss Before Taxes				
	Gross Profit Less Total Operating Expense	\$ 46,714.16	\$ 33,065.35	\$ 27,719.79	\$ 124,409.05
	Balances without Administrative Fee and Carryover	\$ 46,714.16	\$ 33,065.35	\$ 27,719.79	\$ 124,409.05
	Administration Fee	\$ -	\$ 600.00	\$ 600.00	\$ 600.00
	Less Administration Fee	\$ 46,714.16	\$ 32,465.35	\$ 27,119.79	\$ 123,809.05
				\$ 59,585.14	\$ 123,809.05

Program Budget

Construction dollars are used for supplies, equipment, tools and equipment and tool repairs. Construction dollars (\$17,931) were also used to furnish tools and equipment in our new Trades Center. Construction dollars are also used for any additional personnel and/or subcontractors needed to complete tasks assigned to us.

Building Trades Five Year Budget

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
General Fund					
Salary	\$ 25,640.00	\$ 53,080.00	\$ 18,500.00	\$ 19,500.00	\$ 19,500.00
Fringe Benefits	\$ 12,108.00	\$ 26,369.00	\$ 14,021.00	\$ 13,360.00	\$ 12,332.00
Field Trips	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00
Travel	\$ 500.00				
Total	\$ 38,648.00	\$ 79,849.00	\$ 32,921.00	\$ 33,260.00	\$ 32,232.00
General Fund Faculty Overload					
Salary	\$ -	\$ -	\$ 10,450.00	\$ 10,450.00	\$ 8,800.00
Fringe Benefits	\$ -	\$ -	\$ 1,321.93	\$ 1,321.93	\$ 1,113.20
Total	\$ -	\$ -	\$ 11,771.93	\$ 11,771.93	\$ 9,913.20
State Voc Ed					
Salary	\$ 23,080.00	\$ 23,080.00	\$ 23,080.00	\$ 23,080.00	\$ 23,080.00
Supplies	\$ 1,000.00	3,500.00	\$ -	\$ 2,978.00	\$ 1,337.00
Travel	\$ 750.00	2,500.00	\$ -	\$ 1,536.00	\$ -
Total	\$ 24,830.00	\$ 29,080.00	\$ 23,080.00	\$ 27,594.00	\$ 24,417.00
Grand Total	\$ 63,478.00	108,929.00	\$ 67,772.93	\$ 72,625.93	\$ 66,562.20

Advisory Committee

Our Building Trades program has an advisory board made up primarily of local contractors and educators that give input concerning our curriculum, community involvement and the Construction Company. This also keeps us in contact with the local high schools Building Trades program.

Terry Brownotter, Graduate SBC, Standing Rock Grant School, Building Trades Instructor

Ron Kunkel Standing Rock Grant School, Industrial Arts Instructor

Tom Fischer Plumber/Contractor

Russ Saylor Electrician

Tony Vetter Contractor

Advisory Meetings

Meetings are held twice a year, one during the fall semester and another in the spring. Occasionally informal specials are called to discuss current issues. Our main focus has been our new building and how it might improve enrollment in our departments and how the Grant School and the college better serve our building trades students. Currently we have had no students come to us directly out of high school. We are also working on a co-op with the Grant School where their students would hold their classes out here with us. Currently the Grant School Building Trades students spend time with us during our practicum to gain some hands on experience.

Program Self-Evaluation

Faculty

At the present time we are a faculty of one. I stay current with new techniques and technologies in the field by attending construction meetings, building trade's shows and green built construction seminars as they become available. I'm also consistently interacting with people involved in the construction industry. I also serve on the Finance and Resources Committee for the college.

The Building Trades program does not use adjunct faculty. I currently teach 17 credits in both the Fall and Spring semesters during the school year. However the current Grant School Building Trades instructor (a SBC graduate and former crew leader of Construction Company) will bring over his high school students during our practicum hours from time to time and we team teach for the afternoon.

From 2000 to 2007 we had a second instructor who shared teaching duties in the class room and was a part of the construction company. Due to cash flow issues with the construction company which paid for his salary and the construction crew leader's position, both were encouraged to look for a more secure position which they did.

At current enrollment numbers the faculty is sufficient in number and adequately trained to provide effective instruction in the Building Trades program. At some point another staff member would be needed if enrollment exceeded 15 students in the Practicum.

Student Relations

Faculty in the program far exceeds the required number of office hours required to ensure that students have reasonable access to them on a daily basis. I'm here Monday through Friday at 8:00 am until at least 4:40 pm. Our open door policy extends to evenings and weekends as well.

Courses are delivered to ensure that all students with a variety of learning styles are given the opportunity to succeed. Our in-house student survey shows that students feel comfortable performing tasks after completion of our course work. Course instruction is provide through lectures, lab activities for proficiency tasks and informal discussions on related topics.

Most students stay in close contact with faculty for technical advice on problems related to construction and life in general.

Curriculum Content, Design and Delivery

Our program and its courses follow curriculum guidelines set forth by the Associated General Contractors of America and the National Center for Construction and Education and Research (NCCER) to prepare students for employment in the construction field. Carpenters make up the largest building trades occupation in the industry and those with these all-around skills are in high demand. Job opportunities for carpenters are expected to be excellent over the next decade nation wide, particularly in North Dakota with the oil boom and power plants in need for those with the most skills. North Dakota Job Service (2-10-12) lists a 20,000 manpower shortage in the state.

Our Building Trades Curriculum uses the NCCER Core Curriculum (Introductory Craft Skills), Carpentry Fundamentals Level One and Carpentry Framing and Finishing Level Two as its main text books for the two year program.

FALL COURSE WORK 1ST YEAR

BTT 101 Trades Math
BTT 105 Framing and Exterior Finishing
BTT 111 Fundamentals of Carpentry
BTT 115 Practicum I

SPRING COURSE WORK 1ST YEAR

BTT 162 Interior Construction
BTT 142 Practicum II

FALL COURSE WORK 2ND YEAR

BTT 201 Concrete Technology
BTT 215 Practicum III
BTT 251 Architectural Drafting

SPRING COURSE WORK 2ND YEAR

BTT 222 Construction Estimating
BTT 232 Energy Efficient Const.
BTT 242 Practicum IV
BTT 262 Interior Finishing

Our program uses the NCCER standardized exams and proficiency performance in each skill area taught to measure student comprehension. Students must score 70% or higher on exams and pass the proficiency performance to receive recognition from NCCER. All students have the opportunity to retest as many times as they choose to reach 70%. In addition to the classroom instruction, hands on instruction is given in each phase of home building as the students participate in the building of a house each year start to finish. Text books and reference materials are updated as they become available through NCCER. The program also follows guidelines used in the year ending program assessment presented to the Sitting Bull College Assessment Committee.

Institutional Support

The program was the last one to make the move from the old campus to the new Trades Center last October. Classrooms and the teaching facilities are excellent. With the help of the construction company, tools and equipment used by the program are top line equipment used in the industry today.

The student services seem to be adequate, though we are many times left out of college activities because of our location to the rest of the campus. The library resources, tutors, the 7th Generation Academic Excellence Center and our own computer lab provide service if the student pursues the help offered.

The college has been supportive of professional development activities for faculty member when requested. The past few years I have gone to Energy –Efficiency Building seminars and work shops on Geothermal heating systems.

Importance to the College and other Programs

The program and its students and graduates are highly visible through out Standing Rock and Indian country with the addition of our construction company. We work closely with the tribe in assisting the neediest of the needy with much needed home repairs and new housing. Our program is called upon time and time again by the tribe and various individuals for technical assistance, building materials and help in repairs. Our construction company also provides cash flow for the business office.

Successes and Highlights

Our primary role is to provide the student with the instruction and skills required in today's fast changing world of work to succeed in the construction industry. As we travel around Standing Rock we see hundreds of new homes that Sitting Bull College Building Trades students and graduates helped construct. Sitting Bull College Construction has built 70 homes and has done hundreds of renovations and repairs for tribal members. Four of our graduates are self-employed as contractors, 48 students have worked for contractors here or off the reservation and others as maintenance workers for agencies and business. We have two who have gone on and become educators in the field of Building Trades. In addition the Building Trades Program is self-sufficient.

Program Planning

Trends

We hope for an increased enrollment. With the growing opportunities in western North Dakota from the oil fields, construction workers are at an all time high with demand out pacing supply. Associated General Contractors of North Dakota in Bismarck ND have listing of jobs that are endless in all construction trades from building man camps to new housing to maintenance on the rigs (2-10-12). Opportunities await those who will seize the moment.

Revised Goals and Objectives Due to Program Review

The Building Trades Program is solid so goals and objectives are to remain the same. In the future a plumbing course could be added to enhance our program.

Additional Resources Needed

The program has no immediate concerns. Long-term needs would be additional faculty and clerical support if funds were available.