

Classroom Connections December 2008 Report to the Interim Appropriations Committee

Number of Laptops, Trained Personnel, Funding Provided by the State, and Funding Provided by the Local School Districts by District

CC Year	School	# Laptops	# Trained Personnel	Amount From State	Amount From Districts*
1	Bonesteel-Fairfax	56	11	\$ 22,512	\$ 215,419
1	Castlewood	103	13	\$ 41,406	\$ 122,775
1	Chamberlain	335	27	\$ 134,670	
1	Chester	146	28	\$ 58,692	
1	Corsica	73	12	\$ 29,346	\$ 161,388
1	Deuel	198	20	\$ 79,596	\$ 394,517
1	Dupree	100	16	\$ 40,200	
1	Faith	89	12	\$ 35,778	\$ 113,451
1	Flandreau	232	33	\$ 93,264	\$ 172,937
1	Frederick	81	14	\$ 32,562	
1	Hamlin	212	21	\$ 85,224	\$ 177,336
1	Hill City	222	24	\$ 89,244	\$ 261,834
1	Kadoka	125	17	\$ 50,250	
1	Lemmon	121	15	\$ 48,642	\$ 220,207
1	Mitchell	908	82	\$ 365,016	\$ 474,725
1	Newell	151	17	\$ 60,702	
1	Spearfish	745	38	\$ 299,490	\$ 42,648
1	Wagner	239	32	\$ 96,078	\$ 103,499
1	Watertown	1365	84	\$ 548,730	\$ 1,333,925
1	Wessington Springs	41	16	\$ 16,482	\$ 110,677
2	Conde School District 56-1	30	8	\$ 12,060	\$ 48,260
2	Doland School District 56-2	40	18	\$ 16,080	\$ 107,450
2	Elk Point-Jefferson School District 61-7	258	20	\$ 94,248	\$ 191,736
2	Estelline School District 28-2	152	16	\$ 47,191	\$ 91,685
2	Eureka School District 44-1	95	14	\$ 38,190	\$ 150,131
2	Gettysburg School District 56-1	130	17	\$ 36,762	\$ 121,339
2	Huron School District 2-2	795	41	\$ 319,590	\$ 1,127,153
2	Lead-Deadwood School District	305	18	\$ 122,610	\$ 445,612

CC Year	School	# Laptops	# Trained Personnel	Amount From State	Amount From Districts*
2	Madison Central School District	433	30	\$ 128,530	\$ 63,241
2	McCook Central School District	185	22	\$ 74,370	\$ 296,428
2	Menno School District	93	18	\$ 37,386	\$ 144,365
2	Miller School District	200	21	\$ 80,400	\$ 286,754
2	Parker School District	125	17	\$ 50,250	\$ 215,419
2	Parkston School District	251	28	\$ 78,526	\$ 448,146
2	Pierre School District	964	48	\$ 287,822	\$ 579,003
2	Platte School District	163	23	\$ 65,526	\$ 191,559
2	TriValley School District	297	23	\$ 119,394	\$ 442,850
2	Viborg School District	100	12	\$ 28,530	\$ 105,854
2	Wall School District	129	14	\$ 51,858	\$ 180,423
2	Warner School District	103	15	\$ 32,370	\$ 99,891
2	Winner School District	320	27	\$ 99,861	\$ 200,152
3	Andes Central	96	20	\$ -	NA
3	Armour	61	14	\$ -	NA
3	Baltic	135	16	\$ -	NA
3	Bridgewater/Emery	109	17	\$ -	NA
3	Britton/Hecla	185	28	\$ -	NA
3	Canistota	95	14	\$ -	NA
3	Custer	300	66	\$ -	NA
3	Deubrook	140	31	\$ -	NA
3	Faulkton	90	15	\$ -	NA
3	Hoven	50	14	\$ -	NA
3	Lake Preston	59	17	\$ -	NA
3	Langford	62	12	\$ -	NA
3	Waubay	55	14	\$ -	NA
3	White Lake	58	13	\$ -	NA
3	Wilmot	62	17	\$ -	NA
TOTAL		12,267	1,290	\$ 4,049,437	\$ 9,442,789

*Local is self reported by districts as of 6/30/2008

Classroom Connections December 2008 Report to the Interim Appropriations Committee

State Funding Sources of Payment to the School Districts for Classroom Connections

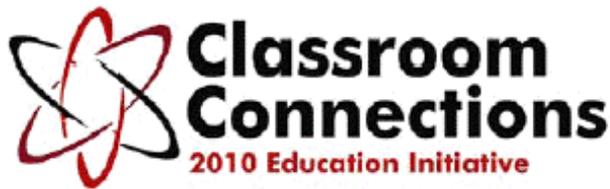
FY2007				FY2008			
	General Funds	Citibank	E-rate	General Funds	Citibank	E-rate	
Year 1	\$ 1,130,140.98			\$ -	\$ 260,992.84	\$ 373,000.00	
Year 2	\$ -			\$ -	\$ 1,423,801.79		
Year 3	\$ -			\$ -			
Total	\$ 1,130,140.98			\$ -	\$ 1,684,794.63	\$ 373,000.00	
		\$1,130,140.98			\$2,057,794.63		

FY2009				Total			
	General Funds	Citibank	E-rate	General Funds	Citibank	E-rate	
Year 1	\$ -	\$ 463,750.17	\$ -	\$ 1,130,140.98	\$ 724,743.01	\$ 373,000.00	
Year 2	\$ -	\$ 397,751.38	\$ -	\$ -	\$ 1,821,553.17	\$ -	
Year 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ 861,501.55	\$ -	\$ 1,130,140.98	\$ 2,546,296.18	\$ 373,000.00	
		\$861,501.55			\$4,049,437.16		

Classroom Connections December 2008 Report to the Interim Appropriations Committee
 Expenditures by the Department to Support the Classroom Connections Program

Classroom Connections As of 10/31/2008	FY2006			FY2007			FY2008			FY2009			Total		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Professional Development	743.80			180,622.79				231,613.08			22,374.93	10,000.00	181,366.59	253,988.01	10,000.00
Evaluation of the Program				150,386.71			145,336.17			44,027.12			339,750.00	-	-
BIT Development Costs				1,483.50									1,483.50	-	-
Wireless Site Surveys				13,600.00	14,400.00							8,000.00	13,600.00	14,400.00	8,000.00
Payments to Schools for 1/3 of cost				1,130,140.98			633,992.84	1,423,801.79		463,750.17	397,751.38		2,227,883.99	1,821,553.17	-
Computer Hardware	151,950.00			31,816.00	192,660.00			-	78,876.00			9,440.00	183,766.00	192,660.00	88,316.00
Computer Software	207.00			86,524.48	69,272.10			48,621.00	17,120.00				86,731.48	117,893.10	17,120.00
Total	152,900.80		-	1,594,574.46	276,332.10	-	779,329.01	1,704,035.87	95,996.00	507,777.29	420,126.31	27,440.00	3,034,581.56	2,400,494.28	123,436.00
Total Combined Years	152,900.80			1,870,906.56			2,579,360.88			955,343.60			5,558,511.84		
General				1,594,574.46	153,003.54		32,849.17	-					1,627,423.63	153,003.54	-
Citibank	152,900.80				123,328.56		633,992.84	1,396,128.62	95,996.00	463,750.17	420,126.31		1,250,643.81	1,939,583.49	95,996.00
E-Rate Funds							112,487.00	307,907.25		44,027.12		27,440.00	156,514.12	307,907.25	27,440.00
Total	152,900.80			1,870,906.56			2,579,360.88			955,343.60			5,558,511.84		

0.00



Executive Summary
Survey/Interview Data for Classroom Connection Year Two
Spring 2008

The following executive summary describes the second year data from the Classroom Connections survey. The survey is given to the 20 schools in the original pilot year of the Classroom Connections project. These second year findings are inconclusive as the study is a three year examination of the effects of the laptop program. The evaluation is being conducted by Technology and Innovations in Education (TIE) using student, and teacher surveys along with focus group interviews of teachers, students, principals and technology coordinators. The survey 2008 N size for teachers was 232, for students, 2980.

The goal of Classroom Connections surveys and interviews is to understand if teachers and students are using the technology to:

1. increase student learning of core subject areas
2. advance 21st century literacy/content skills
3. improve thinking and computer literacy skills
4. improve instruction, curriculum and assessment

The evaluation also seeks to understand if technology goals are being supported in the one-to-one environment.

2008 Teacher and Student Responses

Value Rating and Impacts:

- More than 95% of teachers and students say the laptop project is a good thing and they do not want to be without the laptops.
- Teachers rate the value of the laptop project an average 3.8 on a 5 point scale while students rate the value of the laptop project an average 3.7 on a 5 point scale. Sixty- three percent of both teachers and students rated the value of the project a 4 or 5 on a 5-point scale.
- When asked to rate their confidence in their ability to integrate technology based on a six-level scale ranging from an awareness level(Stage 1) to creative application(Stage 6), 70% of the teachers rated themselves at Stage 5 or Stage 6, while less than 2% of the teachers rated themselves at Stage 1 or Stage 2.

Writing

- Students and teachers say students write more often and are assigned writing tasks by teachers who previously did not ask students to write.
- The availability of productivity tools on the laptops results in students being more willing to write, edit and re-write papers.
- The quality of student writing is dependent on the expectations of the teachers, student motivation and good instruction on writing skills. Teacher and student responses are mixed in regard to an increase in the quality of student writing.

Research

- Students and teachers say students definitely do more research.
- Ubiquitous access to information because of the laptops facilitates students going more in-depth with their research because more information is available to them and they can access it at any time. They also use multiple sources and research topics they might not have previously studied because of lack of access to resources.
- The efficiency provided by laptops and word processing tools results in students being more willing to write research papers that are longer, more in-depth and adhere to higher standards of citations as required by individual teachers.
- The quality of student research is dependent on the motivation and commitment of students and the expectations and guidance/instruction of the teacher.

Impacts on Teaching Content Knowledge

- Students and teachers say students gain more knowledge because of easy access to information and instructional approaches used by teachers.
- Students and teachers give some examples of impacts on teaching in math, science, reading and social studies. Geometer Sketchpad is the software most often identified as having a positive impact on geometry skills learned by students.

Impacts on Communication

- Teachers and students say communication among teachers, students and parents has increased as a result of having laptops.
- Teachers and students indicate that more parents access student grades and are aware of student work and progress than before laptops were available. Access to DDN Campus information and school websites are contributing factors to an increase in parent awareness and involvement.
- Teachers and students say communication is primarily limited to the use of e-mail. Chats, blogs, wikis, and other communication tools are either blocked from use or used on a limited basis by teachers and students.

Impacts on Collaboration

- Teachers and students give mixed responses as to whether or not students engage in more collaborative projects as a result of having laptops.
- The description of collaboration given in most examples is dividing up the work for a task among students and putting the individual pieces together for a final product. A small number of teachers and students report they collaborate with other students outside their school classrooms.
- Students said the laptops make it easier to work in teams and share projects because they can each prepare their part and then e-mail it to the team member putting it together. This applies to Power Point presentations as well.

Technical skills

- Teachers reported students computer skills were improving
- Teachers strongly agreed know how to use a computer is a worthwhile skill and agreed that computers increase the motivation of students
- Students and teachers rated themselves high on proficiency in post areas involving computer use

Other Academic Findings

- Approximately half of the teachers indicate the most frequent use of computers by students on a weekly basis is for the purpose of exploring topics that interest them, strengthening basic reading and math skills, and improving computer skills. Students report they use laptops most for note-taking, engaging in research in which either they or the teacher determines the resources, and for writing longer compositions, essays or papers.
- About 60% of the students report their school has done a good or excellent job of teaching them to speak and write clearly and effectively, be a good reader, analyze and solve math problems, learn effectively on their own and think critically about ideas, problems, and current events.
- Both students and teachers indicate they enjoy using computers and are comfortable and confident in using them for learning. They say that knowing how to use computers is a worthwhile skill and that computers can enhance creative activities. Teachers say computers help them learn, help provide a better learning experience and that e-mail provides better access to the instructor.

Documented Benefits of Laptops

- Increased computer skill attainment
- Increased writing, and research skills
- Increased organizational skills
- Increased communication especially between teachers and students, but also with parents
- Limited increase in collaboration
- Increased confidence in using technology by students and teachers
- Documented examples of increased student engagement and motivation to use technology

Areas for Improvement/Challenges

- On a scale ranging from strongly disagree (-2.0) to strongly agree (+2.0), teachers indicate the professional development supports the goals of the Classroom Connections project at a +0.8 average or slight agreement. Using the same scale, teachers indicate an average of -0.4 (slight disagreement) that they have adequate opportunity to meet with one another for professional development opportunities.
- Classroom management with laptops remains a challenge for some teachers. Using management software has been effective for some, but other teachers report difficulties.
- Students say that whether or not the laptops have had an impact on higher order thinking skills depends on the teacher.
- A significant number of both students and teachers say the laptops have made no difference in higher order thinking skills development in classrooms.
- A few teachers and students gave specific examples of activities students engage in to foster higher order thinking skills. The majority of examples were in schools where “senior projects” are a part of the curriculum.
- Less than 20% of the students say they work on multi-disciplinary projects, participate in community or work-based projects or internships. Students report they spend less time solving real world problems, working on complex problems or working collaboratively with other students.

2008 High School Principal Responses

Positive Impacts of the laptop project

- Principals say the benefits far outweigh the negative impact of the laptop project.
- Principals identify better and different learning, some not otherwise possible; credit recovery; more organized teachers and students; better communication among teachers, parents and students; access and use of resources; development of student technology skills, major improvements in writing and changes in instruction as positive impacts of the project.

Sustainability

- Principals indicate their district would be able to sustain the laptop project if DOE funding is not available after year 3.
- Principals say they hope the state can fund additional schools and that when people come to visit their school and find out it is a laptop school, “it is a big deal

Vision

- Principals say they are committed to “keeping students on the cutting edge” by ensuring they gain technology skills.
- Principals describe pieces of 21st century learning and skills rather than a comprehensive vision of 21st century learning that incorporates the use of laptops.
- Principals indicate they want to move their schools toward a paperless system.
- Principals describe laptops as tools to access information, increase communication skills and enhance the learning process.
- Principals say online learning and placing curriculum resources online are part of their vision.
- Principals want to increase teacher use of laptops each year and move from teacher centered to student centered classrooms.

Teacher Commitment

- Principals indicate teacher commitment to the laptops program ranges between 90-100%.
- Principals say classroom management is the obstacle to full commitment for some teachers.
- Principals say professional development is the greatest need and the biggest challenge.

Principal Implementation Role

- Principals describe themselves as “cheerleaders”, especially during Year 1 of implementation.
- Principals say they have a variety of roles during Year 2 of implementation, including supporting teachers as they try new things, making certain resources are available, observing teachers, managing the project, taking care of student discipline, monitoring and enforcing policies, and serving as the curriculum person.

Teacher Expectations

- In Year 1 principals expected teachers to learn about technology and in Year 2 they expect teachers to integrate laptops more and will expect more integration in Year 3.
- Principals say their expectations of teachers vary because teachers have different skill levels.
- Principals in high schools where a writing program or the High Schools That Work program have been adopted expect teachers to use the technology required in those programs.
- Teacher evaluation processes are varied among CC schools in regard to how the use of laptops is included in the process.
- Principals expect teachers to keep progressing in their learning of new technology skills rather than remaining stagnant.

Classroom management

- Principals say technology coordinators assume the primary responsibility of monitoring student activity and inform teachers of student violations.
- Principals and teachers have different opinions about whether Synchroneyes is effectively used as a classroom management tool or as an instructional management tool.
- Principals say many teachers who had classroom management issues before laptops still have classroom management challenges. The level of classroom management problems varies with the teacher.

Professional Development

- Principals have incorporated a variety of professional development strategies into the Classroom Connections project. They include attendance at the TIE Conference, 1 to 1 Summer Institute, making modifications to the school calendar to extend the number of professional development days, weekly sharing sessions, the use of an integrationist, partnerships with ESAs, and stipends for target work by individual teachers or content areas.

Negative Impacts of the laptop project

- Principals say time lost because teachers and students don't manage the technology well is a negative impact.
- Principals indicate "rumors", perceptions and inaccurate information in the community can have a negative impact.
- Principals acknowledge that bandwidth, maintenance response time and monitoring access to appropriate websites are challenges.