

DIGITAL LEARNING COMMONS

EVALUATION REPORT

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DIGITAL LEARNING COMMONS YEAR 2 EVALUATION

BACKGROUND

The Digital Learning Commons (DLC) is completing its second year of operation and “proof of concept phase.” In January, 2005, the DLC contracted for an independent evaluative review of specific aspects of the program. This evaluation is intended to add to the existing knowledge on program effect to date, and to provide insights that will inform further program development. Findings are intended to supplement, but not replace, the ongoing internal and other contracted assessments.

Evaluation activities included the following:

- Online surveys with three sets of key DLC constituents: students enrolled in online courses, faculty serving as Teacher/Mentors (T/Ms), and those school librarians using DLC resources.
- Analysis of grades and completion rates for students enrolled in DLC online courses.
- Interviews with selected teachers, librarians and administrators, which were used primarily to develop survey questions.

FINDINGS SUMMARY

The surveys and interviews yielded extensive and rich data about program outcomes and operations. At the same time, the findings raise additional questions and uncover new areas that should be further explored. Findings for each of the three surveys are summarized in this report, and complete survey findings are available in the Appendix. We have noted some points relevant to the program’s “guiding questions” below, followed by additional selected highlights. We feel that the best way to “make meaning” of these results will be for them to be further discussed among DLC staff and the board, and placed in the context of other evaluative work and ongoing programmatic developments.

What are the conditions within a school that promote the successful use of DLC resources for individual students, teachers and schools.

The evaluation looked at feedback from key faculty players whose role is integral to DLC success—Teacher/Mentors (T/M) and Librarians. The extent to which these faculty members can be supported may be critical to DLC success.

- Although almost half of the T/M survey respondents receive class time, or compensated time, for T/M duties, most also reported conducting DLC related tasks on their own time. Further work must be done to ensure that schools are recognizing and supporting their work.
- Librarians play a key role in integrating online resources at the school level. Librarians work with all faculty and all students. Furthermore, directing faculty and students to access high quality online resources is already part of their job description. The librarians who responded to this survey recognize the value of what DLC has to offer, but need some assistance in learning to use DLC resources and in encouraging teachers to work with them.

- Other concerns relating to conditions in the school that promote successful use of DLC resources include availability of computers and technology for students; and access to sufficient and high quality technical support. While providing this support is up to the school or district, the DLC can play a role in making sure that its constituents have a clear understanding of technology and support needed to engage successfully with DLC resources.

Whom does the DLC serve and how are they best served?

The evaluation addressed the question of “who is served” only in the context of the online courses, not other DLC services. In other words, we collected information about the student experience only by surveying those enrolled in online courses. However, we did receive some relevant comments that shed light on the range of how DLC resources in general reaches students. For example, one librarian wrote, “*We have a large group of ELL Hispanic speakers. They have found the information in the Grolier Online Encyclopedia - La Nueva Encyclopedia - helpful.*”

- In the surveys, T/Ms and students alike reported that the main reason for offering the online courses was to allow student access to courses they could not otherwise take. Other reasons, such as offering online courses for credit retrieval, received far fewer responses. However, this should be verified by examining the registrars’ course enrollment and drop reports.
- Constituents are using the online course opportunity in innovative ways. For example, some students were using the online opportunity for career exploration, and some teachers used it as supplemental material for their AP classes.

What are the outcomes for students enrolled in online courses?

The evaluation focused on examining outcomes of online courses, and not the range of DLC services. In terms of measuring outcomes through completion rates and grades, the findings are problematic, in part due to the fact that the seven course providers don’t provide student record data in a uniform manner. Current provider reports show a very high withdrawal/failure rate, and it is impossible to tell from the data alone why this is. However, the survey findings, including responses to open-ended questions, were overall positive about the online experience, and shed light on benefits perceived by individual students, such as having access to AP courses, or the benefits to ELL students. Although we did not find an overall theme to the comments, reading through them gives an appreciation for the complex range of individual impacts. For example, one wrote:

I think that this online course I am taking is good because it helps me learn more about computers and I also learn many different words I never heard of because English is not my first language. the only thing is that some times I don't receive the full credit in some of my assignments because of the fact that there is some things that I don't understand. I still think this online course is great, not only we can work during school time, but also after school and during the weekend which is very helpful if someone is not on track!!!!

Additional Highlights

Teacher/Mentor Findings

- Overall, T/Ms reported satisfaction with the support and communication they receive from the DLC.
- T/Ms reported conducting their duties as part of their regular schedule as well as outside their regular school duties.
- T/Ms provide a wide range of support to online students, including technical support, and connecting students with the other DLC offerings such as the Digital Library Resources and ECOS.
- About 1/5 of T/Ms were not using the online training modules or the T/M webpage.
- About 1/4 (26%) reported that they had never taken an online course themselves.

Librarian Findings

- Most librarians in DLC schools have set up a link to DLC resources on their school or library website.
- Over half (62%) of the librarians surveyed reported using DLC resources daily or weekly.
- Almost all survey participants share DLC Library resources with students on an individual (91%) or small group (84%) basis; nearly three-quarters share DLC Library resources with faculty members on a one-on-one basis.
- Responses about access to training opportunities are somewhat unclear. Only 35% of respondents said they know how to use Digital Library Resources. Although most (71%) said that the DLC had provided sufficient opportunity to learn to use the resources, 41% agreed that lack of sufficient training opportunities have been a barrier to learning the resources.
- Librarians reported that the most significant barrier to promoting use of DLC resources in their schools was that, “teachers are too busy to meet with me.”

Student Findings

- The most helpful support for online course students was having a computer available to them at school. It is likely that those with a computer available were taking the course during a regular class period rather than outside of regular school time.
- Assessing online course outcomes for students is problematic. The evaluation found a high withdrawal and failure rate. However, at present there is wide disparity in how outcomes are reported by course providers, and the fact that schools may have been experimenting with the courses may account for some of the poor outcomes.

ISSUES TO CONSIDER

This evaluation collected significant feedback from students and school faculty. For the most part, there was an optimistic cast to their survey responses and comments about the use of DLC resources. At the same time, there is a clear undercurrent that more needs to be done to make this opportunity a successful student and school experience.

The Year 1 evaluation noted the importance of improving the school structures that support the use of DLC resources. Even sites that are excited and onboard may be underutilizing DLC resource opportunities if they lack sufficient structures. Examples of school-based support include providing training and time for Teacher/Mentors, librarians, counselors and other staff to work with online students and with DLC resources; setting up internal communication mechanisms in order to track student progress; and ensuring sufficient technical support. Attention to scheduling issues, such as allowing students to take an online course during a class period, may be key.

Although it is not the DLC's responsibility to improve school-based support of DLC resources, it is to DLC's advantage to do as much as possible to guide schools in establishing effective structures and support. This might happen in several ways.

- The DLC could prepare materials to share with school leadership. These materials might include conducting presentations/workshops, especially at conferences where school leaders are already convened
- In the surveys, Librarians and Teacher/Mentors expressed interest in having DLC staff come to their schools to provide technical assistance and training.
- The DLC could sponsor faculty to present at conferences on topics such as best practices incorporating the DLC Library Resources into the curriculum. Other thoughts:
- The DLC might work more closely with principals in identifying which faculty should serve as T/Ms, since most T/Ms reported that they took on this task after being invited to do so by their principal.
- Develop "Success Tip Sheets." These would have accessible, replicable practices for schools to adopt. They could describe innovative examples of how teachers have integrated DLC resources into units, or ways that schools are providing training, support and communication. For example, one Librarian developed a one-page handout, "Do You Need Help With Your Research Paper?" that provides students with links and information to DLC resources. This is distributed to students, teachers and parents.

Supporting Success in Online Courses

The learning for me has all revolved around the on-line classes. It is imperative that the students a) know how to keyboard b) are college level readers c) are self-motivated d) are good problem solvers and e) think working on a computer is fun. Without these elements, the student is doomed for failure. Even with credit retrieval courses, students need almost one on one tutors to work through the problems and to stay motivated. –T/M Survey Comment

Try and make sure the students who sign up use a class period to work on their class. Preferable with the mentor teacher in her or his room during the time the mentor has been assigned—T/M Survey Comment

The Year 2 evaluation focused most of its efforts on assessing outcomes related to the online courses. The dramatic increase in online enrollment experienced over the two years the DLC has been in existence confirms the strong student interest in online learning. As distance education increasingly becomes a critical element of college education, as well as of the continuous learning process on and off the job, preparing students early to effectively work in an online environment is vital. Even though most students can be successful online learners, studies have shown that some students are less prepared to succeed online and need more support. Based on online student surveys, it has been shown that the skills that make online students successful are self-discipline, organization and motivation. These skills tend to be strengthened with age and are less likely to be strongly exercised by the majority of high school students. High school experience with online learning may prepare students for similar experiences in college and the workplace. However, if the online experience is negative and/or impacts ability to graduate or college acceptance, this may be a disservice to students.

The DLC can play a role in advising schools in how to better prepare students to succeed in online courses. In some cases the DLC may want to take the lead, while in others, the responsibility will be up to the school. In the cases where the responsibility lies with the school, the DLC can develop “tip sheets” such as a checklist to see if a student is ready to take an online course, or one that summarizes replicable exemplary practices. Although there are many success stories on the DLC website, it might also be useful to develop some hard copy packets for principals, Teacher/Mentors and library staff to review together.

One of the schools provided an example that illustrates how this might be accomplished. In their first year with DLC, students were encouraged to try out online courses without penalty. So, if they dropped the course, or received a poor grade, this did not show up on their transcript. In the second year, grades and withdraws were treated like any other class. However, also in the second year, the school instituted several protocols for screening students for readiness to take online courses. This included mandatory sign-off from a teacher in the content area, the Teacher/Mentor, the academic counselor and a parent. These protocols could be reviewed and shared with all DLC constituents.

Following are other possible strategies:

- Inform the prospective online students of the negative impact on their transcripts of withdrawing/failing an online course.
- Advise students on the rigors of online learning and give them tools to measure their preparedness to study online. For an example of information and tools, see <http://distance-ed.bcc.ctc.edu/itsforyou.asp>
- Offer stronger oversight to identify struggling students early on and bring them support and remediation.
- Provide better training to Teacher-Mentors on regarding the difficulties of online learning and how to help students succeed in an online environment.
- Reinforce the role of the student mentor
- If practical, the DLC may consider offering hybrid courses (part of the time online, part of the time in the classroom) for high schools students who have no prior online experience, who have failed online, or who are not adequately prepared based on set criteria.
- Allow students to “audit” their initial online course and thereby avoid a withdrawal or failing grade on their transcripts.

FUTURE EVALUATION STEPS

According to Dr. Judy Margrath-Huge, CEO, in the first two years of DLC operation, constituent schools were encouraged to experiment with offering online courses, without over-concern for student completion rates. The emphasis was on experimentation and trying out this new resource. However, now it is time to learn from that experimental phase. It is critical to establish a uniform, clear reporting system across the providers in order to assess student outcomes. Dr. Margrath-Huge reports that DLC staff, following the suggestions of the Year 1 evaluation, has been working with providers to address this complex issue. If providers cannot be persuaded to share individual student outcomes with the DLC, they should at least be willing to share aggregate data by categories such as course or high school that will allow the DLC to measure student success. In addition, as noted below, the issue of a standard definition of what constitutes a “withdrawal” must be addressed. The Year 3 evaluation should continue the surveys and analysis of student outcomes, but also engage in case studies and in-depth interviews at the site level. Specific suggestions follow:

- Standardize definition of withdrawal across all DLC providers. From provider records it appears that some of the students who received a failing grade were really students who dropped out of the course. Because there is a lack of clarity over what constitutes a withdrawal, and to what extent the definition varies among providers, we recommend that the DLC work with each provider to assure a uniform definition of, and reporting strategy for, withdrawals. Student outcomes cannot be documented accurately until this is in place.
- Assess registrar response for add/drop of online courses. This will allow the program to better understand why students are taking online courses, and if they drop, why they do so.
- Conduct case studies, interviews, and site observations. This will amplify an understanding of how DLC benefits students, how challenges to implementation are effectively addressed, and identify strategies to support this model.

EVALUATION METHODOLOGY

Evaluation findings are drawn from online surveys, an analysis of student grades in online courses, and structured interviews. The instruments were developed to capture a snapshot of outcomes representing a specific point in time. As a result, survey findings and student grade data may be best used in establishing a baseline; and as the program develops, future success can be measured against these outcomes. Evaluation strategies are detailed below.

Analysis of Online Course outcomes

- The analysis of online course outcomes covers two semesters: Spring, 2004 and Fall, 2004. There were 220 records for the Spring semester, and 907 for Fall.

Surveys

- Teacher/Mentor surveys were sent only to those who served in this position in Fall semester, 2004. Surveys were sent to 64 participants, 43 responded for a 67% response rate.
- Librarian surveys were sent to librarians in 2004-05 participating schools. Surveys were sent to 51 participants and responses received from 34, for a 67% response rate.

- For Teacher/Mentor and Librarian surveys, we excluded faculty from home-schooling organizations as the questions were not relevant to their circumstance.
- The Online Course Student Survey was sent to all students who had enrolled in a course in Fall, 2004. This included completers, noncompleters, and students who withdrew from the course. Surveys were sent to 931 students; 240 responded, for a 26% response rate.

Interviews and Observations

- A total of nine telephone interviews were conducted with librarians, T/Ms, and principals.
- Observation of DLC Board meeting, which included the presentation on DLC Library Resource use.

DLC TEACHER MENTOR SURVEY FINDINGS

I have had students taking online Running Start courses under my supervision for several years now. Having the DLC course available this year meant that other high school students - those either not interested in Running Start or those not eligible for Running Start - could experience online learning. Since I believe online learning will be integral to many of our students' future success, I am glad we could provide this opportunity for them. – Teacher/Mentor survey comment

Teacher/Mentors play a key role in successful integration of DLC resources at school sites. They are the primary support for students enrolled in online courses, and are in a position to promote DLC offerings in general. Teacher/Mentor survey findings contribute towards an understanding of the DLC guiding question, “What conditions in a school promote successful use of DLC resources?”

Survey Background

The survey was sent to 64 teachers, and responses were received from 43, for a 67% response rate. Findings provide information on the following:

- The characteristics and background of current Teacher/Mentors, including personal experience with technology.
- The scope of T/M responsibilities in serving students enrolled in online courses.
- T/M assessment of support provided to online course students.
- T/M assessment of the support they received from their own school and from the DLC.

Characteristics of Teacher/Mentors

About half (56%) of the respondents were classroom teachers, the rest serve in a variety of positions ranging from administrator to librarian. Most respondents (70%) had served as a T/M for two or more semesters. Respondents said the primary reason they chose to serve as a T/M was because they were asked by their principal or an administrator (44%), or wanted to assist students whose academic needs were not otherwise met (23%).

In terms of their own proficiency with technology, they reported frequent use of email (95%) and the Internet (72%); however, 63% reported that they had “never”, or “infrequently” enrolled in an online course themselves.

Of the 43 respondents, 16 said they planned to serve as a T/M in the future, seven did not plan to do so, and 20 were unsure. Of those who were unsure, many commented that they were unsure of building commitment/plans regarding the DLC at the time the survey was administered.

T/M Responsibilities

T/Ms reported supporting online course students in multiple ways. In addition to direct assistance related to their online courses, 70% noted helping students access other DLC resources (Table 1). Most respondents had two semesters of experience and have grown into their roles. As one said: *“As the year progressed, I understood my role as the teacher/mentor more”*.

Table 1

T/M Support to Online Students

Type of support	Survey respondents providing support (%)
Monitored student progress towards course completion.	91%
Conducted troubleshooting for problems such as missing logins and textbooks.	84
Helped students select online courses.	79
Recruited students to inform them about online courses.	74
Provided technical support for computer-related problems.	72
Helped students access DLC resources such as digital library materials and ECOS.	70
Helped connect students with DLC Student Mentors.	49
Proctored tests for online courses.	47

While not an identified T/M responsibility, it is important to note that T/Ms did play a role in promoting DLC resources within their school, primarily by sharing DLC communications with fellow T/Ms. In addition, some set up DLC resource trainings for students or faculty, or connected with T/Ms at other sites. (Table 2)

Table 2

T/M Role in Promoting DLC Resources

Type of assistance	% of survey respondents who provided the assistance
Passed on DLC communications to other Teacher/ Mentor(s) in my school building.	63%
Set up DLC resource trainings for students at my school.	35%
Set up DLC resource trainings for fellow faculty at my school.	30%
Advised other Teacher/ Mentor(s) in a neighboring school or district.	23%

About half of the respondents (51%) reported conducting their T/M duties “as part of a dedicated time in my work schedule.” However, only 44% of respondents reported being provided with either a class period, compensated time, or a stipend. About 60% reported that they conducted at

least some of their T/M tasks outside of their regularly scheduled duties and/or during their planning period. Most (58%) said that their school provided them with adequate technology to conduct T/M tasks.

Rationale for offering DLC online courses and Assessment of School Support

When asked to choose the one most important reason for offering the online courses, T/Ms overwhelmingly (67%) selected “Providing courses students otherwise couldn’t access at my school, including accelerated classes.” Other reasons such as helping students make up failed credit and alleviating schedule conflicts were selected by only a few respondents. We checked to see whether this view held true among respondents from the following school types: rural, urban, small, medium or large schools. We found no statistically significant difference in responses among these groups. (Table 3).

Table 3

Most Important reasons for Offering Online Courses

Reasons	% of survey respondents who selected as most important
Providing courses students could not otherwise access at my school, including accelerated classes	67%
Meeting the needs of students who work best in an online environment	14%
Helping students make up failed credits	7%
Other	7%
Alleviating schedule conflicts	5%

T/Ms were asked to assess how well their school supports students enrolled in online courses. As noted in Table 4, most respondents felt that students had “very adequate” access to computers and necessary technology (72%), and time to take online courses during the school day (65%). About half felt that the school provided “very adequate” guidance in selecting courses (53%), and tech support at school (49%). However, the majority felt that school support was only “somewhat” or “not adequate” in three areas: providing oversight of student success while enrolled in course, advising students when to drop a course, and communicating about student progress among faculty and staff. We recognize that these types of support may be only “somewhat adequate” for students enrolled in regular classes as well. It may be worthwhile next year to see if teachers perceive a difference in how these types of support are provided for students enrolled in online courses compared to those enrolled in regular classes.

Table 4**Level of Support to Online Students from the DLC T/M School**

Type of support	% of survey respondents who selected the support as			
	Very adequate	Somewhat adequate	Not adequate	Unsure
Provide students with computers and technology needed to complete online coursework at school.	72%	23%	2%	2%
Provide students with time to take online courses during the school day.	65%	9%	14%	9%
Provide guidance in selecting online courses.	53%	33%	7%	7%
Provide students with tech support at school.	49%	40%	7%	5%
Provide sufficient oversight of student progress while enrolled in the course.	35%	51%	7%	7%
Provide oversight in cases where students should be advised to drop an online course or change a registration.	35%	47%	7%	12%
Provide a structure to communicate about individual student enrollment and progress among faculty and staff including counselors and registrar.	23%	49%	19%	5%

The DLC cannot dictate to what extent schools offer support to students enrolled in online courses. However, it can provide schools with information and guidance in school-based strategies that best support a successful online course experience. Survey findings may be useful in establishing a checklist of how schools can best support student success. As one T/M wrote: *When we initially got onboard with DLC I don't believe our administration truly realized what the commitment was. And along with that, buy-in by the teachers was not cultivated. I was virtually a one-person DLC team by the end.*

T/M Assessment of DLC support

The DLC offers T/M support via email communications, telephone calls, and webpage content. DLC email communications and assistance in troubleshooting problems with providers were rated as the most useful. However, as noted in Table 5 below, most types of assistance currently

provided were rated either “very” or “somewhat” useful.” Several respondents volunteered comments noting appreciation for staff support.

The DLC staff has been very helpful to me during the year and I could always rely on a timely answer to my questions.

I find the DLC to be very open to suggestions and whenever possible implementing them if it will help others as well. The willingness to help with any and all glitches when they arise quickly has also been very good.

I have to say thank you to Leslie St. Pierre's help on an emergency late start for a (School name) World History class. She communicated with us from afar and even when ill. We appreciate her efforts.

Table 5

Support for the DLC Teacher/Mentor

Type of assistance	% of survey respondents who selected the assistance as			
	Very useful	Somewhat useful	Only a little useful	Did not request/ use this assistance
Email communication from DLC staff.	65%	23%	9%	2%
Help from DLC in troubleshooting problems with course provider (e.g., contacting the provider if my student doesn't hear from them, or doesn't receive textbooks).	56%	35%	0%	9%
Initial orientation.	49%	33%	5%	9%
Communication with online instructors.	44%	42%	5%	9%
Assistance from DLC in troubleshooting problems at my school (e.g., technology set up).	44%	30%	7%	19%
DLC online Teacher/Mentor training modules.	37%	35%	7%	21%
DLC Teacher/Mentor Webpage on areas such as guidelines and indicators for success in online courses.	33%	37%	12%	19%
Use of DLC Library, Digital Tools and Professional Development Resources.	30%	44%	5%	21%
DLC Course Support phone meetings.	21%	35%	14%	28%

Assistance provided to my students by DLC Student Mentors.	7%	35%	23%	35%
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Open-Ended Comments

We thought these comments provided some useful feedback regarding the T/M experience in general as well as specific suggestions. The full list of T/M comments is included in the Appendix.

I need some training in how to set up and use first class email, or some training like VHS is done where the mentor has to learn step by step what the student will encounter by taking an online course.

The process for tracking student progress for several students in different courses from different providers is convoluted and frustrating. I should be able to log onto the DLC site and access all my students info from one location. Frankly I think this is way to much work.

Compared to the standards I set for myself, I do not think I was highly successful in being a Teacher/Mentor. For me one of the greatest obstacles in being effective was not having the credit retrieval students in the room with me when I was allotted time to work on DLC, The fact that credit retrieval students are often not organized or motivated, does not help either. (You can lead a horse to water....) Sometimes my DLC time was just putting out fires, to do with technology glitches or textbooks. Regarding use of DLC resources in the classroom, I think our school did not get the running start we needed to integrate DLC resources into curriculum. (Although I do think they ARE wonderful resources) It is hard for teachers to use online resources in their teaching, too, because we have one lab on a sign up basis and it is hard to get time in that lab. There are about 3-4 computers per classroom but a very well structured lesson is needed to use those effectively in a lesson plan for 30 kids. I do believe DLC has ALOT of potential. I think the main resource I lacked toward implementation was dedicated time to come up with a plan and to organize or motivate other teachers to use the resources.

I think the DLC has incredible potential at my school... - especially when combined with our tech levy rollout and providing all teachers with the equipment necessary to utilize the tools. However, staff training and time are the biggest hurdle (which is to be expected). For example, I make extensive use of the Corbis image library for both my U.S. History and English classes. It has saved so much time. But few teachers know of this resource, and few computers at our school have a program to uncompress .zip files - so teachers have given up. As for the mentoring, we have a ways to go in that as well. Right now, I am mentoring 4 students - sort of. They aren't in my SLC, and are usually at the other end of the school, so I never see them. Since they are high achieving and working together, I'm not too concerned with their progress, but such an arrangement would not normally make sense. In short, we as a school need more time to integrate the DLC both into our curriculum development and our scheduling. We heard a lot about DLC at the beginning of the year but it has gotten lost since then in the day-to-day. I really hope that we are able to find the time/resources/support to keep the DLC around.

DLC LIBRARIAN SURVEY FINDINGS

In our new American Studies unit, using the Corbis image collection for the photographs showing the Civil War battle scenes, soldiers, commanders, made the names in the history book come alive. In one of our biology classes, getting them into NetTrekker as a search engine for images and video helped in their presentations about genetic diseases. In Contemporary Problems and English 12, the ability for students to find primary sources on Social Security, immigration, population, global economy, the war in Iraq—making use of Sirs, Grolier and, NetTrekker has been invaluable. In the case of the Senior Culminating Project, getting into ECOS to do job search and career and college planning has been the key for those students.

—DLC Librarian response to survey question: “Please share one example of something you were able to do with teachers or students that you would not have been able to do without the DLC Library Resources.”

Librarians play a key role in integrating DLC resources to the school community. They engage directly with students and with teachers in one-on-one, as well as group, settings. Many not only use the DLC Library Resources, but are also key in implementing DLC services throughout the school. For example, over half (53%) of the librarians responding to the survey are serving as Teacher/Mentors. Nearly half (44%) arrange for DLC trainers to provide site-based staff training, and encourage staff to participate in the online training opportunities. Most (68%) promote the use of DLC resources by providing a link on the school or library website.

Survey Background

The DLC Library Survey findings address the guiding question, “What conditions in a school promote successful use of DLC resources” by providing information on the following:

- Levels of engagement with the DLC and its services
- Assessment of usefulness of DLC Library Resources
- Perceived barriers in using DLC Library Resources
- Preferred ways to access training and support in using the Library Resources

The survey was sent to 51 Librarians in DLC-affiliated schools, selected by the DLC to primarily represent certified teachers who hold a school library media endorsement, along with a few selected classified staff who have been active in “GEMCATS.” Responses were received from 34 for a 67% response rate. Of the 51 respondents, just under half (24) hold a library or teacher certification. The respondents were representative of the varying levels of engagement with the DLC.

In What Ways Librarians Engage With DLC Library Resources

Most participants access DLC Library Resources frequently, with 62% reporting they use resources daily or weekly. Although librarians are more likely to demonstrate the resources to students than to fellow faculty members, almost three-quarters said they are sharing resources with faculty on a 1:1 basis (Table 6). Librarians have also found some creative ways to promote resources as noted in the quotes below. The DLC might want to consider sharing these tips as part of training.

- *I have mentioned in numerous curriculum and technology committee meetings what the DLC Library offers and have highlighted some of the especially useful resources.*
- *I've typed up a page entitled, "Do You Need Help with Your Research Paper?" and have included what DLC offers on their website with passwords, etc. and distribute this to all students at the beginning of research projects*

Table 6
How Librarians Share DLC Library Resources

I demonstrate DLC Library Resources to:	% of "yes" responses
Students working individually in the library.	91%
Small groups of students working in the library without their teacher.	82
Faculty members on a 1:1 basis.	74
Entire classrooms in the library during library classes (with their teachers).	56
Teachers and students together in their classrooms or a lab.	41
Faculty members at staff or departmental meetings.	32
Entire classrooms in the library during library classes (without their teachers).	27
Faculty members at special trainings just for DLC resources.	27

Accessing Training and Support

Respondents were asked about their current engagement with training and support (Table 7), and what they would like to have available in the future (Table 8).

- Most (71%), agreed that DLC has provided sufficient opportunity to learn to use the Digital Library.
- Only 35% said they know how to use all of the current resources
- Nearly two-thirds said they were "highly likely" to use online tutorials for the databases (if made available).

• Respondents indicated that they were highly/somewhat highly likely to use the following: Email reminders of Web training opportunities (91%); Someone from the DLC to come to my school and work with me and my teachers (82%); and a Quarterly newsletter (71%). One participant said: *"The quarterly newsletter would be helpful if it had information which is easy to reproduce and share with staff. It would be a good reminder to my staff about the resources."*

Table 7**Experience to Date with Training and Support**

Please indicate to what extent you agree or disagree with the following statements	“Strongly agree” or “Agree”	“Disagree” or “Strongly disagree”	“Neither agree nor disagree”
The DLC has provided sufficient opportunities to learn to use the Digital Library.	71%	6%	21%
I would like to participate in training, but have conflicts with the scheduled phone meetings.	50	21	29
I prefer to wait and see if my school will be part of the DLC in the future before committing to training.	47	24	29
I already know how to use all the DLC Library resources.	35	35	29
I have found the DLC GEMCAT phone support meetings useful.	32	12	56
Overall, I have found the GEMCAT group useful in enabling me to effectively use the DLC Digital Library.	29	9	62
I have found the DLC Web training events (e.g., Grolier online training) useful.	27	9	62
I consider myself an active member of the GEMCAT group.	27	44	29

Table 8**Interest in Future Training and Support**

In addition to current DLC support, what further support would you be likely to use?	“Highly likely”	“Somewhat likely”	“Not very likely”	“Not sure at this time”
Online tutorials for each database	59%	29%	12%	0%
Someone from the DLC to come to my school and work with me and my teachers	38	44	12	6
Email reminders of Web training opportunities	35	56	6	3
Trainings that you could attend in person on a staff development day	35	27	29	9
Quarterly newsletter	24	47	24	6
GEMCAT in-person meetings held in conjunction with other conferences	24	38	29	9
Training session in how to work collaboratively with faculty in identifying their library resource needs	24	21	44	12
GEMCAT online discussion board	21	44	27	9

Perceived Barriers in Using DLC Resources

Respondents were asked about perceived barriers to using DLC Library Resources in two ways. First, they were asked to identify barriers that they themselves face in learning to use DLC resources effectively. Second, they were asked about barriers in sharing the resources in their schools. Responses are shown in Tables 9 and 10 below.

In terms of using to learn the resources themselves, fewer than half of the respondents felt that they faced any of the stated barriers in learning to use the DLC Library. However, 44% did say that they preferred not to take the time to learn the resources until they knew they would be available to them in the future. (Table 10). One commented, that the “*DLC is very eager and willing to help with any questions, problems, or training we require.*”

Table 9
Barriers in Using DLC Library Resources

To what extent have any of the following issues been a barrier in learning to effectively use the DLC Library yourself?	“Strongly agree” or “Agree”	“Disagree” or “Strongly disagree”	“No opinion”
I prefer not to spend time learning the Digital Library resources until I am sure they will be available to me in the future.	44%	47%	9%
I have other, more immediate priorities than learning to use the Digital Library resources at this time.	41	38	21
Lack of sufficient training opportunities.	41	56	3
I lack the time to learn a new set of databases.	32	56	12
I prefer the database resources that are already available to me.	26	47	27
The databases are too complicated to use.	3	91	6

In terms of barriers in promoting schoolwide use of the Library Resources, librarians said that the greatest barrier was that faculty didn’t have the time to meet with them. This was the only “major barrier” and it was selected by just 29% of respondents. The most significant “moderate barriers” were:

- It is difficult to effectively organize and present online resources to teachers
- It is difficult to assess the information needs of teachers in my school.
- I’m too busy to meet with teachers.

Two comments on barriers are included below:

Time is the biggest issue. I have too many responsibilities with building and district committees and meetings to add something else currently. Our teachers need more training on the DLC tools. But we need to be able to pay them to come to a training. There are other online programs that are more of a priority for them to learn right now such as online grading and attendance. So library databases fall down the scale. They are important however and I am committed to training the staff on these types of resources. There is an issue though, of training them on databases that will go away next year. The subscriptions I pay for have been steady for 4 years so I have to concentrate on those first as well as those available from the Seattle Public Library--since those are not likely to change either. Under these conditions, we have done what we can to encourage staff and students to use DLC resources and I have shown them to many groups and classes when they sign up to use library.

I understand that district-level tech support will be included in the picture next year for schools who elect to participate. That will be helpful!

Table 10

Barriers in Promoting the Use of the Digital Library Resources

To what extent have any of the following issues been a barrier <i>in promoting the use of the Digital Library Resources in your school?</i>	“Major barrier”	“Moderate barrier”	“Minor barrier”	“Not a barrier”
Teachers are too busy to meet with me.	29%	38%	21%	12%
I'm too busy to meet with teachers.	9	21	50	21
It is cumbersome for our students to get into the DLC resources.	9	15	44	32
It is difficult to effectively organize and present online resources to teachers.	6	27	41	27
It is difficult to assess the information needs of teachers in my school.	6	21	35	38
Conducting "reference interviews" with teachers is outside of my job description.	6	15	12	62
I'm not sure how to effectively use DLC resources with teachers at my school.	3	12	32	53

Open-Ended Comments

The following responses to open-ended questions provide further insights on successes and challenges for librarians in institutionalizing DLC resources in their schools. The full set of comments is included in the Appendix.

As with anything -- local lobbying in district and community in support of seamless technology integration in all classes as is appropriate.

Since this was our first trial year as a member of DLC, my administration and I agreed that it would be too time intensive to train all of our students and staff on how to use the DLC library resources effectively, especially since we might only have them for remainder of 2004-05. However, now that we know that we are going to subscribe for the 2005-06 school year, I plan to launch an extensive all school training program for DLC resources starting next fall.

We will be seeing a rather large turnover of staff this year with retirements and movement to another position. It would be very important to provide training for the new staff and certainly a refresher for the present staff. Much is forgotten without us.

I discovered this too late to help my teachers this year, but if it is available next year, the Corbis collection will help 11th graders find images for their video quilt project. Many of my teachers will find the Current Issues helpful once it is demonstrated in conjunction with their unites. As soon as it is determined if this resource will be available to us next year, there are several things I plan to do to pitch it to teachers who will become power users.

SIRS and Facts on File helped me work with our Civics classes on a classroom-based assessment on current social controversies.

World history students always do a compare/contract project using two historical figures. We ALWAYS get Mother Theresa and Princess Diana, Hitler and Stalin, Kennedy and Churchill, etc. Using NetTrekker / Social Studies / World History / Famous People and sorting by era, our

students found some amazing people and had to do some reading about them before deciding who to compare and why. We were able to sort the lists so they could choose a woman or man, etc. This is a minor example, but I think it illustrates the power of the DLC to improve smaller assignments, not just the large projects.

I like the services and I have not even explored all of them! I do think that Discovering Collection is a great database for my needs and if it was in DLC then that would be a benefit for me not to have to pay for something twice. I don't find SIRS that useful--I like Proquest better. But maybe that is because I need more training on how to use SIRS.

I'm disappointed (and so are the students!) that DLC will probably not be available to us next year because of the cost. More financial support (via legislature and/or corporate sponsorships or grant opportunities) would have been great to bring the DLC w/in our financial means.

DLC ONLINE COURSE STUDENT SURVEY FINDINGS

Survey Background

The DLC Online Student Survey was administered in February, 2005. The survey was emailed to a total of 931 students who were identified as having enrolled in an online class in the fall of the 2004-05 school year. Students were asked to complete the survey whether or not they dropped the course. Responses were received from 240 students, for a 26% response rate.

The survey is one way of collecting data about student and program outcomes, and findings are best understood in conjunction with other data. The survey addresses the guiding question, “Whom does the DLC serve, and How are they best served,” and provides insights into the following:

- Why students choose to enroll in the DLC courses
- What types of support have worked best for students and therefore may contribute to student success
- Why taking an online course did not work for some of the students who enrolled

Why Students Enrolled

Students were asked to select the one most important reason they enrolled in the online course from six possible choices, as well as an “other” category. Overall, the two most common reasons cited were: “this course was not available at my school” (35%), and, “this course would help me earn credit I need to graduate” (23%). These findings correlate with the T/M survey findings where most said that the most important reason for offering online courses was to provide academic opportunities not otherwise available. (Table 11).

We note some differences with those students who enrolled in more than one course. Of the students who responded, 23% have taken more than one online course through DLC (1% have taken more than two courses). We found that students who had enrolled in more than one course were more likely to say they needed the credit to graduate.

First course responses only

- This course was not available at my school (38% of respondents)
- This course would help me earn credit I needed to graduate (20% of respondents)

Second course responses only

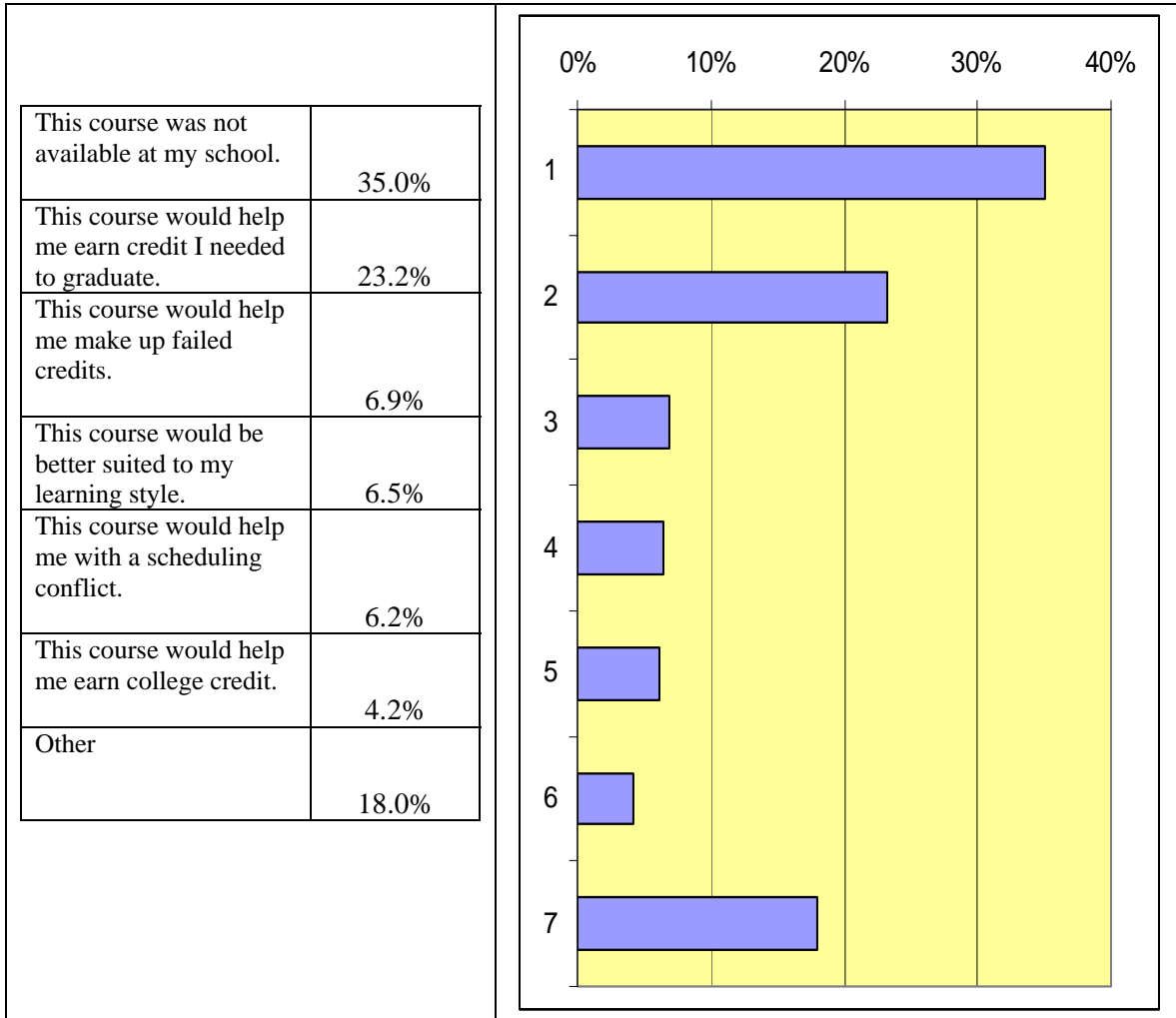
- This course would help me earn credit I needed to graduate (32% of respondents)
- This course was not available at my school (30% of respondents)

It is also interesting to note that in the question regarding why students enrolled in the online course, several of the comments fell under the following categories, indicating that students took advantage of this opportunity for a wide variety of reasons.

- Signed up for the online course to use the material as an additional resource for an on-campus course.
- Signed up for the online course for career exploration.

Table 11

Reason for Taking Online Course



Student Feedback on Support

Students were asked to rate both the availability and usefulness of ten types of support (Tables 12 & 13).

- Most students reported having a computer available to them at school, and that this support was “very” or “somewhat” helpful. Students who said they have a computer available at school are likely those who were able to take the online course during a class period.
- There were also extensive comments relating to support both from students who experienced severe problems accessing academic and technical support and from those who received sufficient help.

Table 12**Use of Course Support**

	Survey respondents who used this service	Survey respondents who did not have this support available to them
Having a computer available to me in my school.	88.8%	2.6%
Interaction with my online instructor.	86.7	14.2
Contact with my teacher/ mentor in my own school.	83.7	5.6
Assistance/ directions in getting started with online courses.	80.7	7.7
Assistance with technical problems (e.g. computer crashing, logging in, submitting my work).	72.5	9.9
Knowing other students at my school who were taking the same online course(s) as me.	64.8	14.2
Assistance from a school counselor or teacher in selecting the course most appropriate for my needs.	61.4	7.3
Training/ assistance provided at school in how to be successful in taking an online course.	57.1	22.3
Interaction with other online students (e.g. chat rooms).	48.1	14.2
Interaction with my DLC student mentor.	47.2	14.6

Table 13**Satisfaction with Course Support**

	% of survey respondents who rated this service Very or Somewhat helpful	% of survey respondents who rated this service Very helpful
Having a computer available to me in my school.	96.1%	79.2%
Assistance/ directions in getting started with online courses.	84.5%	35.6%
Assistance from a school counselor or teacher in selecting the course most appropriate for my needs.	81.2%	33.6%
Contact with my teacher/ mentor in my own school.	82.1%	42.6%
Interaction with my online instructor.	79.2%	36.6%
Knowing other students at my school who were taking the same online course(s) as me.	78.2%	46.4%
Assistance with technical problems (e.g. computer crashing, logging in, submitting my work).	75.8%	36.7%
Interaction with my DLC student mentor.	71.8%	22.7%
Training/ assistance provided at school in how to be successful in taking an online course.	71.5%	28.6%
Interaction with other online students (e.g. chat rooms).	55.4%	15.2%

Course Completion Findings

Nearly all (81%) of the respondents expected to complete their online course. However, it is important to note that students who dropped are most likely under-represented in the survey.

- 52% of respondents expected to complete the course by end of Fall semester
- 29% had not completed but plan to finish
- Only 13% did not plan to complete the course

We did not find one dominant factor for those who said they did not plan to complete the course. Students were offered six categories in which to identify why they would not be completing. Although 43% of the students selected the “other” category, and there were no clear themes in their responses.

Table 14

Reason for not Completing Course

Difficulty in starting and/or navigating the course.	16.7%
Lack of on-site support (Teacher/Mentor assistance, scheduling...)	11.7%
Didn't like learning online.	10.0%
Change in school schedule or scheduling conflict.	8.3%
Too many commitments this term.	8.3%
Insufficient access to a computer.	1.7%
Other	43.3%

In Their Own Words: Student Feedback on Online Course Experience

At the end of the survey, students were invited to add any other comments on their experiences. The answers below were selected to provide insights into the complexity and range of their individual experiences (typos were corrected). The full set of comments is included in the Appendix.

- *My teachers were very helpful. They were very nice and always responded to any questions had very quickly. The DLC program has been a good experience and I plan to take more courses this way.*
- *Over all, I enjoy taking classes over the Web very much. I love the flexibility of the schedule, and the fact that I can keep track of all of my assignments electronically. I also love the fact that I can take a course even though it isn't offered at my school.*
- *The online course is working very well. The information is easy to read and the interactive diagrams are perfect for my learning style. My teacher is great.*
- *This online class was very helpful and I enjoy it a lot. I also think that it was a great opportunity to get the credit that I failed my sophomore year.*
- *When I first began the course online, I was afraid, yet I felt as if I were right at home with my best friends doing school work and chatting. I love the service that I got. The only thing I wish, is that the courses could be cheaper. If they were, I would consider taking another course. I love it.*
- *My biggest problem with the online course was that since late work was not counted against me, I tended to put off my work for my online class and put other things higher on my list of*

priorities, and so I got behind and have ended up with a lot of extra work that I've had to do to catch up.

- *My online mentor was great and explained things a lot to me but I just needed an actually person here next to me to show me how to do problems and I never got that help.*
- *I think that they were difficult to get used to and my instructor was not patient enough with me to be able to get used to all the logistics of a computer class. It was very hard because no one could help me with my work either. Even with all this though, I enjoyed the course in how much I learned and the skills I acquired.*
- *Some of the explanations given in your AP Calculus BC course are either incorrect (taken to Calculus teacher and checked with book) or are just confusing/misworded. Also, the final/midterm test has questions on it which are of a nature NOT covered in the quizzes and material given to us to study. The books supplied are not very helpful because the book does not follow the course very well and jumps around a bit.*
- *I think that this online course I 'am taking is good because it helps me learn more about computers and I also learn many different words I never heard of because English is not my first language. the only thing is that some times I don't receive the full credit in some of my assignments because of the fact that there is some things that I don't understand. I still think this online course is great, not only we can work during school time, but also after school and during the weekend which is very helpful if someone is not on track!!!!*
- *I took two online courses, AP Calculus AB and AP Physics B. In calculus my teacher was incredibly helpful and always responded to e-mail questions. My physics teacher was the opposite and was completely unresponsive to e-mail questions. He also did not provide an office phone number like my calculus teacher. I would say that Calculus has been a good experience and physics has not been.*

Note on Interpreting Student Survey Findings

There was a relatively close match between the types of courses in which respondents enrolled, and the enrollment pattern of DLC students overall (see Appendix). However, beyond that, we do not assume that the respondents are necessarily a representative sample of DLC online course students. For example, we don't know how many respondents were homeschooled compared to the DLC population at large. Other examples of why the survey sample may not be representative include:

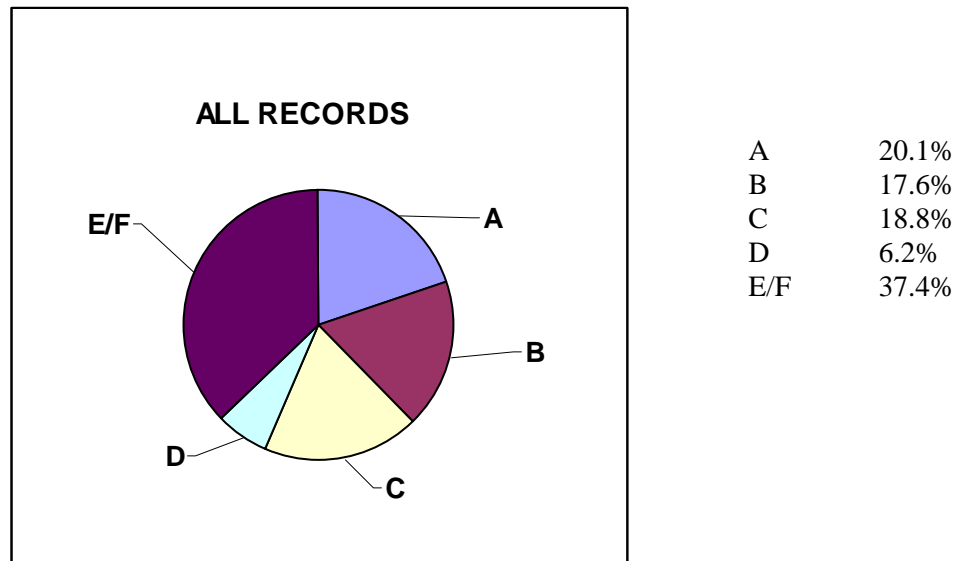
- In some cases, an entire class enrolled in an online course as a supplement to their regular classroom work, completed the survey. It is not clear if these students then stayed in the course. One comment from a student who dropped said, "not required to get credit since class taken in school." This use of DLC courses is not representative as whole.
- In a few cases, the surveys appear to have been filled out by adults rather than students.
- Based on comparing the number of withdrawals reported by providers, we suspect that students who dropped their online course are under-represented in this survey. If the survey is conducted again next year, the protocol can control for some of these special cases.

ONLINE STUDENT GRADE DATA FROM COURSE PROVIDERS

Grade data from four online providers were available for Spring and Fall '04, and from one online provider for Fall 04 only. A total of 1,127 records were included. The majority of the records (69%) came from one online provider. There was a significant increase in the number of online students between Spring '04 and Fall '04: 220 records for Spring '04 and 907 records for Fall '04, a 412% increase. Some online providers gave account of student participation throughout the duration of the course, while others reported only final grades. Looking at the information that provided student participation over time, it appears that there were inconsistencies between withdrawals and F grades, as some of the students who had received F grades showed no participation in the course or their participation ended early on in the course. It is therefore possible that some of the F grades are in fact withdrawals.

- 57% of all students who received a grade (not including withdrawals) received a passing grade (C or better). It would be interesting to compare this result to grade distribution for similar on-campus courses.
- Based on the findings from the online student survey, there is indication that some students register in an online course with no desire to complete the course, but rather to use the online material as supplement for an on-campus course, or to explore the topic area in support of making career or college choices. This may explain in part the large number of student withdrawals.

Table 15
Distribution of Online Grades —Spring and Fall '04*



*Please note that grades are available for only five of the seven online course providers

Table 16**Course Withdraw Reports**

Course Provider Name	Number of records	Number of withdrawals/ drops
AVENTA (Spring & Fall 04)	80	21 (26%)
AMDG (Spring & Fall 04)	74	7 (9%)
APEX (Spring & Fall 04)	169	74 (44%)
FWIA (Spring & Fall 04)	776	368 (47%)
VHS (Fall 04)	28	7 (25%)
Summary	1127	477 (42%)