

**Evaluation of the First Phase of the Washington Digital Learning Commons:
Critical Reflections on the First Year**

*Submitted to the Board of Directors
Washington Digital Learning Commons*

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Introduction

The Washington Digital Learning Commons (DLC) is an ambitious project to improve access to educational opportunities and learning resources throughout Washington State. The project is just over a year old, and is now entering its second phase. In the first phase, seventeen schools/programs participated, and in the second, 32 schools/programs were added. The notion of a commons has importance to many participants in the sense of shared sense of purpose and work in a division of labor among equals. In this division of labor, the DLC is the provider of resources, source of training, and convener of project participants; educators are experts in identifying needs of students; and school and district leadership define the crucible in which this experiment in education takes place.

The Board of Directors was established in June 2003 and has enjoyed substantial support from Governor Gary Locke. The DLC has had two CEOs; the most recent, Judy Margrath-Huge, was appointed in August 2004, and the founding CEO was Louis Fox.

Guiding Questions

Five questions guide the assessment of the DLC. They have been formulated and refined following a thorough review of the goals of the DLC, as well as broad consultation among board members, funders, and stakeholders. These questions are:

1. Whom does the DLC best serve? How are they best served?
2. What are the conditions within a school that promote the successful use of DLC resources for individual students, teachers, parents, and schools?
3. What effect, if any, does access to online courses have on student academic performance and test scores more broadly?
4. What kinds of policies and arrangements make for the most effective relationship between the DLC and participating schools?
5. What is the best fiscal model for the long-term success and sustainability of DLC?

These five questions have provided an organizing principle for reviews of training, discussions with school leaders and teacher/mentors, and provide focus for the assessment.

Overview of schools and students

Initial pilot schools

Seventeen pilot schools were selected for the initial phase of DLC training and involvement. They were selected on the basis of a number of criteria, including: interest on the part of school leadership (principals, etc.); economic, geographic, and ethnic diversity; and willingness to schedule training for students and teachers. It is important to note that these schools were not selected on the basis of technological resources or savvy.

There is considerable variation among the pilot schools. They include a small tribal school (Quileute), a school for the blind (Washington State School for the Blind), a large conventional high school (North Kitsap), a small alternative school (PAL), and numerous others of diverse characteristics. The enrollments in these schools range from 10 to 2000+. These schools are quite diverse on a number of other counts, as well, including economic disadvantage, ethnicity, and gender.

These schools also differ in terms of their programmatic and technological readiness to participate in DLC. The number of computers available to students varies enormously, as does connectivity and staff resources related to information literacy for students.

Initial students

In the first phase, DLC staff selected 23 UW students to serve as trainers in each of the initial seventeen schools. These UW trainers then trained students and teachers in the pilot schools. After each training session, students at the schools were asked to fill out an online questionnaire with 40 questions. The first set of questions asked factual data about their computer and internet access at home. The second set asked about their own capability in using a computer. The third set asked about their use of computers and the internet. Finally, there were a few “quiz” questions related to material that had been presented in training.

Analyses of the 2010 responses from students offer several observations worth noting:

- 85%+ of the students rate their computer expertise as intermediate, advanced, or expert.
- More than 80% of the students report having a computer in their homes; more than 70% report having internet access from home.
- Roughly 35% of the students report never having tried an on-line tutorial to learn something new
- 70%+ report using the computer to communicate with their teachers

Students were also asked an open-ended question about the most important thing they got from their training. ECOS was frequently mentioned as a valued new source of information. One senior at Forks reported: "...being told of a new site in which I can find needed information for much effective use of the internet, more information for assignments, and ability to save information that can be used for the future. In the future when I get married and have kids I will introduce them to this new place as well." In his view, at least, the DLC is here to stay!

Initial teachers

Just as the DLC seeks to expand resources available to students, so too does it seek to make a wide range of curricular resources available to teachers. Teacher satisfaction with DLC is important on two counts: first, to enhance their teaching repertoire, and second, to encourage their students to take advantage of DLC resources.

Like students, teachers have a wide range of experience with computers. Following their own training, teachers were asked to fill out an on-line survey of 33 questions. Not surprisingly, there was considerably more diversity among teachers than among students in their use and comfort with computers and on-line resources. Some findings of note include:

- Overall, 70% of teachers report using the internet to prepare teaching materials at least on a monthly basis.
 - There is, however, significant school-by-school variation. In one pilot school, 80% of the respondents reported that they drew on the internet for teaching purposes "rarely". In another school, 80% reported that they did so monthly or more often.
- 80% of teachers report using a computer to communicate with students.
- Of the 110 respondents, 35% thought that their computer knowledge exceeded that of their students, while 35% thought that the students' knowledge exceeded their own.
- 75% of teachers report asking their students to use online resources for assignments (but again, there is considerable variation among schools)

Question #1: Whom does the DLC best serve, and how?

One fundamental motivation for the DLC is to extend educational opportunity to all students throughout the state. In this sense the DLC offers the hope of a corrective for the inequities of the distribution of educational resources and riches throughout the State. For instance, a number of people have mentioned the rural-urban divide, and the ways in which DLC potentially extends resources across that divide.

There is also the sense that the philosophy of the DLC is consistent with the highest and best principles of education, allowing schools the capacity to respond to the individualized needs of their students. There is also a sophisticated recognition that both

students – and the schools they attend – vary considerably in terms of their needs and aspirations. Some students benefit from course completion opportunities, while others are hungry for AP or language courses. Gene Schmidt, Superintendent of Bridgeport, remarks: “The opportunity for a seemingly unlimited variety of courses for small rural schools is now a reality. Suddenly there is a purpose for the internet connectivity that has come to our community.”

A number of participants have remarked on the valuable opportunities DLC makes possible in order to respond to the individualized needs of students:

- *Credit recovery courses*: “Your course offerings expand the opportunities our students will have. As we face the daunting task of ensuring all students pass the WASL in order to graduate, we know we will need courses that address credit recovery and supplemental support.” (Susan Wistrand, Asst. Principal, North Kitsap HS).
- *AP courses not able to be offered by the district*: Better selection of electives that may expand a student’s college opportunities. (Marilyn Wigen, Librarian, Oakesdale HS)
- *Accelerated progress for college-bound students*: courses that would not otherwise be available (Susie Piper, teacher/mentor, N Kitsap HS).
- *Reaching alternative students*: “This is an area I am particularly interested in exploring. Can we, through the DLC, reach alternative school students who tend to be outside the mainstream? They are often behind on credits and have strong competing forces in their lives – children, jobs, family issues. We have not been very successful in tapping into the intelligence and talent of these students...I want to see if the resources of the DLC can help. (Frank Walter, Superintendent, Quillayute Valley SD)
- *Making good on promises to students, particularly with respect to college readiness*:
 - Given available resources, schools sometimes express concern that they will be unable to meet the promises that they make to students to prepare them for next steps. Both the on-line courses and ECOS have had some effect on their ability to make good on these promises:
 - At Harbor High School: “DLC will bolster school’s efforts to meet individual student needs by expanding resources and opportunities not otherwise at their disposal...having the opportunities, trained support, and encouragement will enable students to go to the next higher level of success....The ECOS tool will prove particularly helpful as “the career program is a big component and access to ECOS twill help kids exposed to potential options before they graduate...”

- At Forks (Steve Quick, Principal, Forks HS): “DLC has allowed us to expand on what we are currently doing...without the online learning tools that have been offered, online courses, and training, I’m not sure that we would be able to fully accomplish our goals. One of our main goals is to have our students graduate from high school college ready...”
- *A sense of expanded possibilities:*
 - Tita Mallory, Curriculum Specialist, Aberdeen: “We are using DLC in two of our schools. Harbor High is finding the ECOS system very useful. We haven’t fully taken advantage of all it can offer. We believe, though, that the portfolio option and other resources will be a key component – especially as we work to help students meet the new graduation requirements – portfolio, plans, project, pathways...”
 - In another school, there is a plan to integrate ECOS with the counseling program: at North Kitsap HS, the counseling department has been looking at ways to integrate ECOS into their normal counseling services, recognizing the power this resource will have for students as they plan their education and career paths out of high school.

DLC staff have adopted a “can-do” attitude with respect to the needs of the participants, be they schools, teachers, librarians, counselors, or students. Their flexibility has been exceptional. At the same time, the very same staff members are anxious to ensure that all participants are aware of and trained to use the full range of DLC offerings.

Thus, there is an interesting tension inherent in the philosophy and practice of DLC. The philosophy of DLC promotes a kind of pressure for ubiquitousness: everywhere, for all students and teachers, all the time. In practice, this has meant a kind of urgent expansionism, bringing schools in and training students and teachers just as quickly as possible. However, that kind of ruthless inclusion may not, in fact, be the proper application of the most basic principles of DLC. Instead, in order to achieve its social justice goals, it may well be that DLC must follow a much more strategic application, in which those students, teachers and schools with the greatest need are served first -- with the full and undivided attention of the DLC staff.

Furthermore, in an operational sense, this has given rise to a training regimen that is simply too much for most to handle. Feedback from participants on the training has included – from the beginning – a sense of too much, too fast. One participant in a recent training noted: “Too much info in a short time for my middle-aged brain.” Additionally, participants have requested time and again follow-up training: “The two trainers did an excellent job of providing an overview of the DLC resources. To use the DLC resources to their full capacity, especially the online course options, we all would need further

training.” This would be difficult for the DLC staff to achieve, given the demanding training schedule they have created for new participants.

These tensions give rise to a set of policy questions which have, at their heart, issues of the fundamental philosophy and politics of the DLC. They are well-suited, therefore, for Board consideration.

Question #2: What are the conditions within a school that promote the successful use of DLC resources for individual students, parents, teachers, and schools?

At the heart of the organizational structure of DLC is the relationship between core DLC staff and school staff. From the very first discussions of training to the Sleeping Lady workshop, to various email exchanges, there has been a finely-tuned ear to that which enhances that relationship. This is especially important now, as DLC prepares to bring on additional schools. What have we learned that would help as new schools are added to the mix.

There seem to be four fundamental requirements for a successful relationship:

1. Leadership support. Without someone in a key leadership position embracing participation, there is insufficient focus to introduce something new into an already complex system. It can be a superintendent or a principal, but has to be one or the other.

The role of the principal is part of the story again and again. And, as is well-appreciated, the turnover of principals is not good for innovation. When there is a highly involved and motivated principal who is not only excited, but also has put into place the necessary team and organization, then it is much easier to make DLC work for the students and their schools. But a highly involved, motivated, organizationally savvy and stable principal is not the norm, by any means.

2. Conducive organization. Organizations within schools are quite variable. Some are more hierarchical than others; some have people doing multiple jobs; etc. All arrangements can work, provided that one person is designated as the key contact within the school. If that is left unspecified, the kinds of problems that can arise in any new venture cannot be effectively addressed.

Teacher-mentors

In the structure of DLC as it is presently conceived, teacher-mentors are key, and deserve special mention. Again, it is the same story as for principals, but more so. Some teacher-mentors are highly motivated, and have enthusiastically embraced the task. Others are overburdened, and see this responsibility as one more in an already overfull basket of

responsibilities. There is no question but that this impacts students' experiences in a negative fashion.

There is also significant turnover in teacher-mentors. Sometimes when a teacher-mentor leaves a school, there is no thought given to the replacement. There are only four schools out of the first group that have not had turnover in this position. This is clearly a problem, but beyond the scope of the DLC to fix. Nonetheless, *the DLC may have to formulate plans to provide continuity and reliability even when the schools cannot do so.* This is a significant burden, but may be essential to the future of the DLC.

Furthermore, it is important to note that there are two responsibilities for the teacher mentor: support for students, and registrar. In some schools, it may be possible and advisable to divide the role between making things work administratively, and working with students. It must be said that the failure to institute a reliable, working course registration system is a constant source of trouble for all involved. It precludes even the most basic tracking.

Finally, there is significant variation in understanding and training among the teacher-mentors. It is often unclear to the DLC staff whether the teacher-mentors understand the demands of the position. Unfortunately it is the case that sometimes teacher-mentors are simply thrown into the job without interest, preparation, or compensation.

To the extent that DLC requires both high-touch and high-communication, the teacher-mentor is perhaps both the most important, and the weakest, link in the chain. It may help to make the point by contrast. The experience for the librarians has apparently been significantly different. Their role is clear. What DLC requires is for them to extend the work that they already do, rather than adding to it. Librarians have much less turnover in their ranks. Moreover, DLC offers them a valuable professional benefit: the opportunity to come together with librarians from other schools.

3. Effective communication channels. All participants – DLC and school staff alike – have called for more and better communication since the beginning. There is a great appreciation for the DLC staff among schools, so this should not be taken as veiled criticism. However, the speed at which the pilot schools were inducted into the effort, and the need for quick responses on a variety of issues, requires unproblematic communication channels. This will no doubt require constant attention as personnel on both sides change.
4. Adequate technology: both machines and staff.

As student trainers have indicated from the start, there are significant challenges of a technological variety during the en masse training. The difficulty with these kinds of problems is not the actual problems themselves, but the degree to which they may discourage users from future consideration of DLC resources. Comments about technological breakdown are fewer over time, but they nonetheless pepper the

feedback received in a variety of venues. While technological sophistication was, for philosophical reasons, not a criterion for selection of schools, preparing an adequate base at each site will continue to be important for future successes.

Question #3: What effect, if any, does access to online courses have on student academic performance and test scores more broadly?

From the very beginning, the online courses offered both the most promise, and, in implementation, the most frustration. Every aspect of the courses has been problematic, in one way or another, from registration, to quality of course offerings, to completion rates. Kathy Eko, a teacher/mentor at Aberdeen Homelink, even expressed worry about the efficacy of a biology course: Students had to spend an inordinate amount of hours surfing the web for information...also, home scholars are not being monitored daily and there is more of a temptation to “let things go”.

In the first round of course offerings in fall 2003, there were approximately 64 students who registered for online courses. This was, of course, fewer than anyone had anticipated: the schools themselves had requested 247 of the 306 available seats. Fewer than half of the students completed their courses, although that may not be alarming in comparison to national norms. In the course of the year, 183 students completed a course, but not all of them received credit. For those who completed the courses, roughly 70% passed, and there was a nearly bimodal distribution of grades over the course of the year. In fact, there were more Fs (52) than any other grade, but the next most common grade was an A (37).

What does this odd distribution of grades mean? One possibility is that, when an on-line course meets a particular, well-defined need of a highly motivated student, the DLC lives up to its promise in just the way that its architects had hoped. But in cases where the course is not meeting a specific need, the student is not particularly motivated, and/or advising support is absent, it is worse for the student than if it had not been available at all. A failing grade is evidence not of a poor student necessarily, but of a broken advising system. A student taking an on-line course who is failing in that course should be advised to withdraw from it: this is one of the administrative advantages. Thus, the high number of failures suggests an inadequate advising system, at least in some schools. Given the turnover in teacher-mentors noted above, this is not so surprising.

From the students' point of view, taking online courses may also be problematic. They may have heard about an opportunity to take a course on-line, perhaps even been approached by the teacher-mentor. What does the student need to know in order to make a thoughtful decision? Again, advising is key, and again relies on the teacher-mentor.

To underscore this point, imagine the basic questions of a student taking an online course: Suppose I run into trouble? Where do I turn? The provider is remote. The teacher-mentor may or may not be available, and may not even be the same as the one

who signed me up. Whom should I call? Suppose the course itself is of poor quality? Who is accountable?

Students are missing allies, for want of a better term. This may provide a very important clue to that odd distribution of grades. Students who never needed help did just fine. Those who did need help might not have been able to find it, thereby dropping or failing. This is one important reason for the addition of student mentors in the second phase.

Variations in provider quality are also an important part of the story. Some vendors are flexible and responsive to students' needs; others are notably inflexible. Some are highly professional operations, others less so. Some have inadequate staff to meet both the DLC staff's needs, as well as the students'. The top criterion, however, is whether there is a high-quality and responsive instructor associated with each course, and that is remarkably difficult to ascertain. All of the accountability in the system is on the shoulders of students, and very little on the shoulders of the provider. Whereas there is a great deal of disagreement over just how much accountability teachers in schools are asked to provide, there is still less in this arrangement.

It is important to note that this kind of observation is not unique to DLC. The University of California Prep Initiative (UCCP) noted that there were a nontrivial number of online teachers whose responsiveness to students was below acceptable levels, and, indeed, one of the recommendations of their evaluation was to "establish a set of standards for instructor practices and closely monitor the performance of online teachers." (WestEd evaluation of the UCCP, 2000) The same should be considered for the DLC.

It is essential that the DLC demand, at a very minimum, consistent and timely information from each and every provider as a condition of future participation. The failure to do so – even after repeated requests -- has meant poorer service to students than is consistent with DLC standards.

There is little question but that the performance of all parties with respect to online courses has fallen short of expectations. There are many factors which contribute: the absence of an adequate registration system even to this day, a rotating cadre of teacher-mentors in the schools, variation in instructor quality and responsiveness and variation in provider quality and responsiveness, and student motivation and work ethic. Which of these contributes the most to the picture? It is, of course, hard to tell. Comparative data from the second year will be exceptionally important to help tease out some of these issues, but only if some of the fundamental infrastructure issues (e.g., registration) are functioning adequately.

It should be possible to carry out careful analyses on this score: at least five of the schools in Phase One (and possibly more) had registrations and enrollments in Fall 2003 and again, in greater numbers in Fall 2004. Fortunately for future analyses, these include a range of types of schools: Forks, Foster, Harbor Homelink, North Kitsap, and the Washington State School for the Blind.

Question #4: What kinds of policies and arrangements make for the most effective relationship between the DLC and participating schools?

Over time, the relationship between the DLC and the involved schools will deepen, as expectations and trust are developed, and staff work in partnership in service of students.

At the second Sleeping Lady retreat, DLC staff asked the school participants a very important question: Which of your schools' goals do not have matching DLC resources? There were three clear answers:

- Better prepare students for the WASL and improve WASL scores
- Improve AYP (Adequate Yearly Progress)
- Align courses with EALRs (Essential Academic Learning Requirements) and GLEs (Grad Level Expectations)

These are all key accountability measures for schools, yet DLC is presently unaligned with them. This is a choice. If the goals of DLC and the schools remain unaligned, DLC will always be discretionary, and frankly, expendable. But aligning has its own potential costs. If aligned, how responsive can DLC really be to students' needs, as against schools' needs? To become part of an accountability mandate may undermine one of the greatest promises of the DLC, namely, to be truly responsive to the individualized needs of students.

In turn, these are questions of priority-setting for DLC activities which, in turn, demand a clearer sense of just who is to be served...first.

Question #5: What is the best fiscal model for the long-term success and sustainability of DLC?

This question is key, of course, but the DLC remains in an experimental mode, and thus it is impossible to assess whether there is, in fact, a sustainable financial model. That the courses and other resources are free to the schools and students is, on the one hand, a terrific gift. It encourages a willingness to experiment, a willingness that was, with little doubt, absolutely essential to the initial launch of DLC. On the other hand, there is no cost to using the DLC resources carelessly: dropping classes, failing to follow through on the benefits offered by ECOS, and so forth.

Still another resource issue has to do with perceived and actual longevity of DLC. Kathy Kugler, teacher/mentor and librarian at Foster HS sums up a worry expressed also by others: "My main concern is that we will become depending on the DLC resources and then lose them in a couple years. For instance, students are reluctant to set up accounts with personal information in the ECOS system if they will not be able to send their portfolio to colleges when they become seniors in three years." Also, "there has been

discussion about hiring someone to help mentor and support our on-line students, but already the question has been raised about what to do if we don't have free on-line classes in the future.”

The transition to a fee-based system will have to be handled with great care and forethought. Only after that transition has occurred, however, will it be possible to understand the financial viability of DLC in the long-run.

Key future considerations for the Board of Directors:

1. The DLC has adopted an approach of involving as many participants as possible: bringing on more schools, training more teachers and counselors, adding more courses, training more students. One potential cost of this strategy is that those who are participants aren't getting the kind of attention they expect and need in order to be successful. Should a more targeted and strategic approach be adopted for the future? What would be the costs of that strategy?
2. At some point, it appears that it will be necessary to begin to ask schools, districts, and/or parents to begin to assume some of the costs associated with DLC resources. This change may be quite profound and disruptive to the entire project. What is the correct model? Which groups/individuals need to be consulted? Has sufficient time been allotted for this transition to be carried out thoughtfully? How will this transition best occur?
3. In the most recent Sleeping Lady retreat, participants reaffirmed that the primary focus should remain on students (rather than teachers, schools, and parents). But are students really the DLC's top priority at present? If so, who speaks for the students? A clear statement of the priority client of the DLC would seem to be in order. It would then be good practice to establish benchmarks for the project that reflect this priority statement, whatever its content.
4. How will the quality of courses be assured? How will students be protected from poor quality courses or unresponsive instructors? At a very minimum, vendors simply must begin to provide data on a regular basis in a format agreed upon with DLC leadership.
5. In the long run, building a reliable infrastructure for the DLC will be essential for its success. This must include a course registration system, a routinized method for data collection, and a rational communications system for all participants. However, building infrastructure is difficult in the beginning of a project, especially one as ambitious as this, because it is effort that is hidden from view, and therefore unrewarded. What priority should be given to infrastructure building at this point in the project?