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# Digital Learning Commons

## *High School Seniors Online Course Taking Patterns in Washington State*

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Fouts & Associates, L.L.C.



# **Digital Learning Commons**

## *High School Seniors Online Course Taking Patterns in Washington State*

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# TABLE OF CONTENTS

## EXECUTIVE SUMMARY

### RESEARCH DESIGN..... 1

    Procedures and Data Collection ..... 1

    Data Sources ..... 2

    Observations about Data Collection..... 3

### RESULTS..... 4

    Research Question 1: Course Availability ..... 5

    Research Question 2: High School Graduation..... 6

    Research Question 3: College Eligibility..... 7

    Research Question 4: College Prepared ..... 7

    Research Question 5: Student Ethnicity ..... 8

    Observations about Implementation ..... 8

    Barriers to Student Course Completion ..... 9

    Individual School Vignettes..... 10

    Sustainability ..... 11

### SUMMARY AND RECOMMENDATIONS..... 12

    Summary ..... 12

    Recommendations ..... 13

### REFERENCES..... 15



# EXECUTIVE SUMMARY

The purpose of the research project was to determine what role online courses play in (1) enabling students to graduate from high school; (2) making high school graduates college eligible; and (3) enhancing high school graduates preparedness for college. For the project, we identified a sample of 115 graduated seniors who completed 151 DLC courses from 17 participating schools during the 2004 – 2005 school year. We gathered a variety of qualitative and quantitative data, including information from school coordinators, student achievement data, student transcripts, and DLC documents/materials to answer five questions. We list the findings below.

1. Was this course otherwise available to this student? If so, how?
  - Approximately 76% of the courses were not otherwise available. These courses primarily consisted of electives or advanced classes, such as personal finance and AP physics.
  - Approximately 24% of the courses were available in the schools as a regular class or as an independent study. According to school coordinators, students often choose to take these classes through DLC because of scheduling conflicts or because they did not want to take a previously failed course with underclassmen.
2. Would the student have graduated without this course?
  - Approximately 67% of students would have graduated without taking DLC course(s), and 33% of the students would not have graduated without taking DLC courses(s).
  - Of those students who would not have graduated without taking DLC course(s), 45% needed extra credits to graduate, 26% made up classes for previously failed courses (i.e., Pacific Northwest History), 24% had scheduling conflicts, and 5% opted to take core classes at a higher level (i.e., AP U.S. History instead of U.S. History).
3. Would the student be “college eligible” without this course?
  - The vast majority of college eligible students met four-year college admission requirements without the DLC courses. Approximately 49% of the students in the sample were not eligible for college, 46% were college eligible without DLC courses, and 5% became eligible by successfully completing DLC courses.

4. Would the student be “college prepared” without this course?

- Out of all the courses taken, 32% were at the advanced level and 26% could help students earn college credits.
- More than half of the students *who were college eligible* took DLC classes to become more college prepared. The disaggregated data show that 61% of the students who were college eligible took at least one advanced level DLC course and that 48% took at least one DLC course that could help them earn college credit (i.e., AP courses).

5. Do these results differ by student ethnicity?

- We were not able to explore this question because of the small sample size. Of the 115 students, 76% were Caucasian, 10% were American Indian/Alaskan Native, 5% were Hispanic, 4% were Asian, 2% were African American, and 3% were of mixed ethnicity. All ethnic categories had fewer than 10 students, except students classified as Caucasian ( $n = 87$ ) and American Indian/Alaskan Native ( $n = 12$ ).

Although the scope of this research was not to evaluate individual school programs, we made a few observations about the strategies used in schools to promote successful completion of courses. These strategies include screening and monitoring students, providing a structured classroom environment, and making DLC courses part of an existing program. The barriers to course completion include lack of identified staff support and resources, lack of student skills, and technical and course issues. In summary, students did better in their DLC courses when teachers embraced DLC as a part of their overall program, when administrators allocated resources to the program, and when coordinators connected with students for screening and monitoring.

# Digital Learning Commons High School Seniors Online Course Taking Patterns in Washington State

## RESEARCH DESIGN

In their Digital Learning Commons Year Two Evaluation, Cohen and Royer (2005) made three recommendations for the continued analysis of DLC as future evaluation steps: (1) to “standardize definition of withdrawal across all DLC providers;” (2) to “assess registrar response for add/drop of online courses;” and (3) to “conduct case studies, interviews, and site observations.” In this final recommendation, one focus was to gain “an understanding of how DLC benefits students.”

Building upon the previous evaluation, the purpose of the present research project is to determine what role online courses play in (1) enabling students to graduate from high school; (2) making high school graduates college eligible; and (3) enhancing high school graduates preparedness for college. For this research project, we identified a sample of 115 graduated seniors who completed 151 DLC courses from 17 participating schools during the 2004 – 2005 school year. Between January and April 2006, we gathered a variety of qualitative and quantitative data, including school coordinator interviews, student achievement data, student transcripts, and DLC documents/materials to answer the following:

1. Was this course otherwise available to this student? If so, how?
2. Would the student have graduated without this course?
3. Would the student be “college eligible” without this course?
4. Would the student be “college prepared” without this course?
5. Do these results differ by student ethnicity?

## Procedures and Data Collection

### *Participating Schools*

We collaborated with DLC program staff to select 18 DLC high schools (Table 1) for research activities, which included a school coordinator interview and the collection or site review of graduating seniors’ transcripts and test scores. We selected these 18 schools because they represented schools with the highest numbers of students enrolled, according to DLC records. After selecting the 18 participant schools, we visited each school to become familiar with each school’s delivery system, online course taking policies and procedures, and graduation requirements, and to identify the DLC courses completed on each student’s transcript.

**Table 1**  
***DLC Schools Visited***

<i>Selected DLC Schools and number of students in study (n)</i>	<i>Type</i>	<i>Enrollment</i>	<i>F/R lunch</i>	<i>% White</i>	<i>% Non-White</i>
The Center School (6)	9-12	293	7%	81%	19%
Columbia High School (13)	9-12	428	36%	72%	28%
Forks High School (11)	9-12	339	38%	69%	31%
Garfield High School (5)	9-12	1,625	25%	43%	57%
Glenwood Secondary (6)	7-12	46	49%	63%	37%
Granger High School (4)	9-12	301	84%	12%	88%
Juanita High School (20)	10-12	1,051	14%	78%	22%
Nathan Hale High School (2)	9-12	1,073	17%	62%	38%
North Kitsap High School (9)	10-12	1,469	16%	83%	17%
Ocosta Junior/Senior High (8)	7-12	355	46%	83%	17%
Omak High School (5)	9-12	516	37%	60%	40%
River Home Link (1)	K-12	376	NA	91%	9%
Squalicum High School (3)	9-12	1,291	27%	79%	21%
Stevenson High School (8)	9-12	421	36%	89%	11%
Timberline High School (5)	9-12	1,275	24%	69%	31%
Tonasket High School (4)	9-12	375	59%	80%	20%
Wellpinit High School (0)	9-12	109	60%	5%	40%
Yakima Nation Tribal School (5)	7-12	100		0%	100%

## **Data Sources**

To answer the research questions, we gathered and analyzed data from multiple sources, including school coordinator interviews, student achievement data, student transcripts, and DLC documents/materials. Overall, 30 people participated in research activities.

### ***School Coordinator Interviews***

We conducted interviews with a school coordinator (e.g., principal, assistance principal, teacher, librarian) from each of the 18 schools selected for the study. During the interviews, we asked the school coordinators questions about program components, plans for continued involvement, and method and level of DLC implementation. In addition, we gathered student achievement data from the coordinators.

### ***Student Transcripts***

We collected final transcripts of the 115 students who completed the DLC course(s) and who graduated from high school. In addition, we obtained course catalogues describing each school's classes. To assess college eligibility, we analyzed the transcripts to determine if the courses taken met the Washington State four-year college and university admission standards. Although there is some variation among colleges, the general "college eligibility" requirements include:

- Four years of English, which must include three years of literature.
- Three years of mathematics, which must include an introduction to trigonometry. Usually advanced algebra or integrated mathematics III satisfies this requirement.
- Three years of social studies.
- Two years of science, which must include at least one laboratory science class.
- Two years of foreign language with a grade of C or better in the second year.
- One year of fine arts (some colleges).

### ***DLC Documents and Materials***

Throughout the project, we examined applicable materials, including DLC course information, online resources, and previous evaluation reports. We also conducted a thorough search of the literature regarding online learning, which provided us background knowledge and insight while gathering data and interpreting results.

### **Observations about Data Collection**

During site visitations, we found no consistent practice of maintaining course completion or transcript records in the schools. DLC personnel provided records that indicated 232 students completed courses in the 18 schools selected for the project. However, after reviewing transcripts and interviewing coordinators, we found only 115 students completed DLC courses *and* graduated from high school. These represent the students in the study. Additionally, credits earned for completed courses varied between schools. At some schools, a DLC course would earn a .50 credit, and in other schools, a similar DLC course would earn 1.0, 1.5, or even 2.0 credits. In the schools where courses received “extra” credit, the addition normally coincided with the delivery system (e.g., block schedule class = 1.0 credits). Finally, although school personnel from all schools made transcripts available, several declined to provide student achievement data or only provided partial data for readily available items.

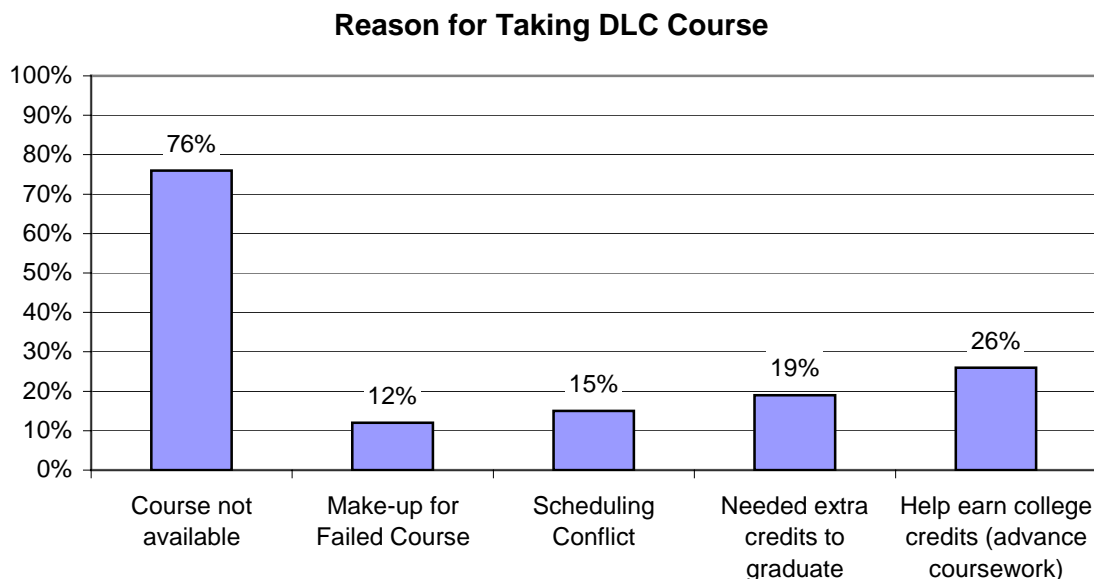
## RESULTS

Our original intent of study was to determine the course taking patterns of over 200 students in 18 schools. The original design called for the analysis of documents related to the 2005 graduating seniors who had taken DLC courses. However, once we visited schools, we determined that there were not nearly as many students eligible for the study as originally thought. After a thorough screen of the list of participants, the final analysis included 115 students from 17 of the 18 schools. In one school, no graduating seniors completed a DLC course (see Table 1).

Of the 115 students in the study, approximately 72% took one DLC course, 26% took two DLC courses, and 2% took three or more DLC courses. The majority of these students (96%) graduated “on-time,” that is, within four years. Three percent graduated late (more than four years), and one student graduated early. According to several school coordinators, the majority of students who failed to graduate in the 2004 – 2005 school year also failed to complete their DLC courses.

Students choose to take DLC classes for a variety of reasons, with the most frequent being that the courses were not otherwise available at the school (see Figure 1). In many cases, coordinators cited two reasons for students taking DLC course(s): (1) a student might decide to take a course for college credit (e.g., AP English), *and* (2) the course is not available at the school. These findings are consistent with previous research.

Students took a variety of DLC courses in different subject areas, including 17.9% social studies, 16.6% science, 15.9% elective, 13.9% English, 12.6% fine and performing arts, 11.9% math, and 11.3% world language. The course level also varied. In general, the course level was determined from a review of the Digital Learning Commons website. Approximately 67% of the courses were considered at standard, 32% were advanced level (AP, college level courses, and core courses taken beyond college admission requirements), and 1% were below standard level.



**Figure 1. Reasons for taking DLC courses**

### **Research Question # 1: Was this course otherwise available to this student? If so, how?**

The first research question explores the nature of the course availability. Essentially, we were interested in determining whether taking the course through the DLC was essentially the student's only option. There were two ways to interpret this: (1) the course was not available in the school at all, or (2) the school offered the course at a time that the student could not access the class without jeopardizing other crucial courses for graduation. For each course taken by students, we completed an oral survey with the DLC coordinator that asked whether the course was otherwise available to each student.

A vast majority (76%) of courses taken through the DLC were not otherwise available to the students. Courses that were not available included advanced courses and electives. Examples of these courses include AP physics or chemistry, Latin, personal finance, and photography. High schools offered the other 24% of the courses in a regular setting or as an independent study course. According to school coordinators, many students taking these classes through DLC previously failed the classes or had transferred into the high school during their sophomore or junior year and did not want to take courses with underclassman. Examples of these courses include Pacific Northwest History, health, or freshman English. In addition, several students took DLC courses because of scheduling conflicts. In summary, although schools offered some of the courses, students chose to take the class through DLC because they did not want to take previously failed classes with underclassmen or because of scheduling conflicts.

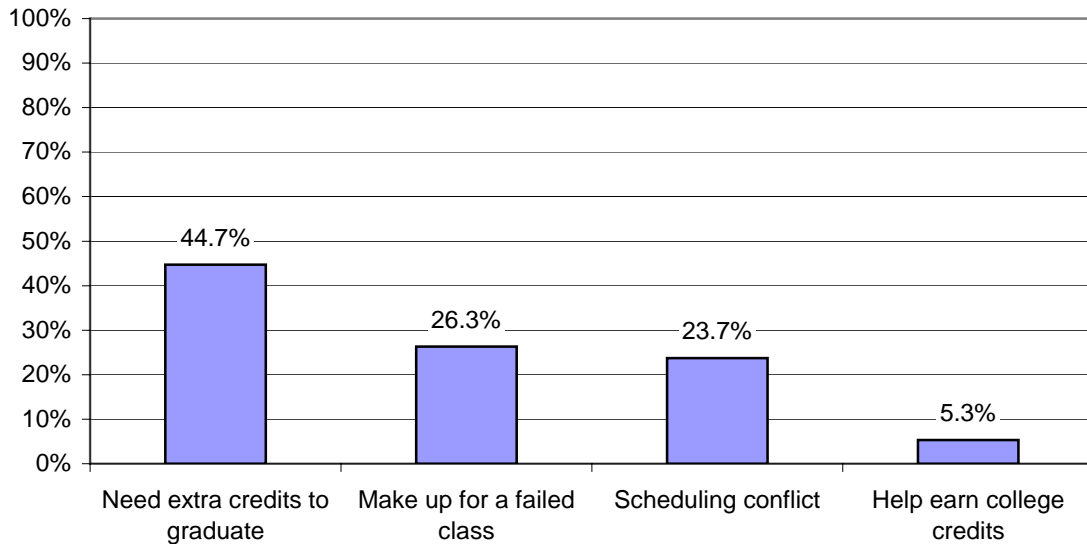
## Research Question # 2: Would the student have graduated without this course?

To determine whether a student would have graduated without this course, we reviewed each school’s graduation requirements, including courses required and number of credits required to graduate, and compared these requirements to each student’s transcript. We placed students into two categories: (1) student *would* graduate without taking DLC course(s), or (2) student *would not* graduate without taking DLC course(s). We further reviewed the transcripts of the students who would not have graduated without taking DLC course(s) to determine how the DLC course helped them.

Sixty seven percent of students would have graduated without taking DLC courses, while 33% would not have graduated without taking their DLC course(s). Further analysis showed that of those students who would not have graduated without taking DLC course(s), 45% needed the extra credits to graduate, 26% made up the class for a previously failed course (i.e., Pacific Northwest History), 24% had a scheduling conflict, and 5% opted to take a core class at a higher level (i.e., AP U.S. History instead of U.S. History; see Figure 2).

Of all the students who needed the DLC course(s) in order to graduate, approximately 55% choose to take DLC course(s) that were not available at their school. When students needed extra credits to graduate, the majority took an elective or fine arts course, rather than a core course.

**Reasons Why Students Who Would Not Have Graduated High School Decided to Take DLC Course(s)**



**Figure 2. Reasons students who would not otherwise graduate took DLC courses**

### **Research Question #3: Would the student be "college eligible" without this course?**

To determine college eligibility, we obtained transcripts from the 115 graduates, along with course catalogues describing the schools' classes. We analyzed the transcripts to determine if the courses taken met the Washington State four-year college and university admission standards. Although there was some variation among colleges, the general "college eligibility" requirements include:

- Four years of English, which must include three years of literature.
- Three years of mathematics, which must include an introduction to trigonometry. Usually advanced algebra or integrated mathematics III satisfies this requirement.
- Three years of social studies.
- Two years of science, which must include at least one laboratory science class.
- Two years of foreign language with a grade of C or better in the second year.
- One year of fine arts (some colleges).

The vast majority of college eligible students met four-year college admission requirements without DLC courses. Approximately 49% of the students in the sample were not eligible for college, 46% were college eligible without taking their DLC course(s), and 5% became eligible by successfully completing their DLC course(s). The courses making students college eligible were in the areas of English, mathematics, world language, and social studies. These students opted to take these classes through the DLC to accommodate scheduling conflicts, to make up for a previously failed class, to earn extra credits, and/or to take advanced courses not available in their school instead of regular core courses.

### **Research Question #4: Would the student be "college prepared" without this course?**

For this research question, we defined students as being "college prepared" if they were taking classes where they could receive college credit (i.e., AP or college level courses) or core academic courses taken beyond college entrance requirements (i.e., a fifth English credit). We further grouped students into two categories, students who *were* college eligible and students who *were not* college eligible, to determine the extent to which "college eligible" students become more "college prepared."

Overall, of the courses taken, 32% were at the advanced level, and 26% could help students earn college credits.<sup>1</sup> When we divided students into groups based on college eligibility, we found that 61% of the students who were college eligible took at least one advanced level DLC course that helped them become more college prepared.

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<sup>1</sup> Courses that help students earn college credit are also identified as an advanced level course.

Approximately 48% took at least one DLC course that could help them earn college credit. In contrast, of the students who were not college eligible, only 9% took an advanced level class, and 5% took a class that could help them earn college credit. More than half of the students *who were college eligible* took DLC classes to become more college prepared.

### **Research Question #5: Do these results differ by student ethnicity?**

In the original research design, we wanted to determine if there were differences based on student ethnicity. We were not able to answer this question, however, because of the small sample size in the study. Of the 115 students in the study, 76% were Caucasian, 10% were American Indian/Alaskan Native, 5% were Hispanic, 4% were Asian, 2% were African American, and 3% were mixed ethnicity. All ethnic categories had fewer than 10 students except students classified as Caucasian ( $n = 87$ ) and American Indian/Alaskan Native ( $n = 12$ ).

### **Observations about Implementation**

Site visits yielded similar findings to those made by second year evaluation team (Cohen & Royer, 2005). Although the scope of this research project was not to evaluate individual school programs, below are a few observations about the strategies schools used to promote successful completion of courses as well as some of the barriers to student course completion.

#### ***Successful Implementation Highlights***

***Screening and monitoring of students.*** Some DLC coordinators interviewed potential students before registration. One coordinator said, “[Students] need to be realistic. If they don’t need it they’re less likely to complete.” Another coordinator said the key is “targeting the right kids.” After students started their classes, several coordinators met with students and contacted the online instructor to make sure that the students were “connected” and keeping up with assignments. These coordinators claimed that the first two to three weeks are the most important. If students get behind during that time, it is very difficult, even for the best students, to catch up. Another summarized this point saying, “You have to have a person in charge of monitoring student progress, deadlines, [and] timeframes. [You] need structure at the beginning.”

***Structured classroom environment.*** The majority of schools provided either a classroom environment or a designated place for students to take their online courses. In most instances, coordinators reported that a structured classroom was the most desirable location. Without this environment, coordinators reported, “many students quickly fall behind.” One coordinator said the majority of their students were in classrooms, however, “If the student was not in a class [took DLC course independently] they had to have a teacher sponsor them.” In another school, DLC students worked on computers within a regular classroom. A coordinator summarized, “We had online math

students in the math teacher's classroom. The teacher was a resource. It was fairly successful."

***Part of an existing program.*** In a few of the schools, building administrators added the DLC program to an existing alternative education program with staff members available to assist students in their online courses. One educator saw DLC courses expanding course offerings for all students in their program and for the entire school: "We're not looking to just give more to those who already have it [advanced classes] or the kid who has failed every other option. Online learning can be for everyone." In other schools, an entire class of online learners met with a local teacher as well as their online instructor. School personnel at another school used DLC courses to offer courses they could not always offer. The coordinator summarized, "It was popular last year when we couldn't offer some classes. It fulfills the demand. This year we were able to offer more AP courses." At another school, staff members used some of the resource tools available from DLC for their own high school courses stating, "The resource tools and reference materials are great."

## **Barriers to Student Course Completion**

***Lack of identified staff support and resources.*** Several school coordinators placed the limited success of their students on themselves. At times, they reported that their role was to supervise students in their room while they taught another course or preformed their "normal duties." In one case, a teacher "took on" the DLC project as part of their duties while gaining their administrator's credentials. The coordinator reported, "The coordinator position was not funded [added on to regular duties]." In some cases where the teachers assumed DLC duties in addition to the regular classroom duties, the support and monitoring of student progress declined after the registration process.

Another theme was the lack of allotted resources to run the program. One coordinator reported that DLC would have worked better if the "classes had been on-site to keep students on track." Another coordinator wanted more administrative and advising support: "This [DLC] is not supported by the counseling office. We need a dedicated person." One coordinator said that online courses sound easy to many students, but even students taking advanced courses find it is easy to put off work and get behind. A school coordinator cited a lack of structure, parent support, and student accountability as some of the issues and summarized, "Our students were not successful." In general, many of the schools that added DLC duties to staff members as an extra assignment or where coordinators signed students up and let them work on courses independently found less success than schools where more structure and resources existed.

***Student characteristics and lack of skills.*** Coordinators mentioned several barriers to student success in online courses. In one school where few students successfully completed courses, the coordinator reported that online courses were very difficult for students with limited reading ability or keyboarding skills. A teacher added that poor writers also found it difficult and needed extra attention from on-site support.

One school administrator found students with low academic skills were generally unsuccessful and said, “We gave up on offering remedial courses because of the lack of success.” Several teachers commented, “Procrastination is a real issue.” What made procrastination even more challenging for online learners was that often the school coordinators were unaware of missing assignments and deadlines until it was too late.

**Technical and course issues.** Although school coordinators indicated that the support provided by DLC staff was excellent, students working independently would often report computer issues several weeks into the course. In schools where a dedicated staff member checked in with students, this was less of an issue. Some schools had a technology resource person available to assist students accessing online courses from school and home. Several coordinators said that some DLC online teachers were more helpful than others. A counselor reported that some courses required online chats that were difficult for some students to attend adding, “Some courses were taught by people in other time zones.”

### Individual School Vignettes

Two school vignettes illustrate some of the differences in implementation strategies and degree of commitment and enthusiasm around Digital Learning Commons. We have changed the names of the schools as well as some of the details. Many of the implementation traits were common in several schools visited. In one school, it was reported that teachers embraced DLC as a part of their overall school program. At the other school, although school personnel allowed all students to register for DLC courses, they provided very little follow-up and few students completed the DLC courses. The overall student online course taking experience in these schools, as well as student course completion rates, differed greatly.

#### ***Cedar Hills High School***

At Cedar Hills High School, there is a teacher assigned to oversee the DLC program as well as other alternative course options. This person is familiar with online instruction, maintains contact with course instructors, and monitors student progress. The coordinator comments that although students may work on their courses at home, they must also work during a structured classroom period. The teacher stresses that students need to stay on track, especially during the first three weeks of the course. There is a staff member to help students in case of computer problems.

Students at Cedar Hills often learn about DLC courses in their advisory class. The coordinator meets regularly with classroom teachers to explain the DLC program and the type of students who are successful. After a teacher/advisor recommends a student for an online course, he/she meets with the DLC coordinator for further screening. The school counselor is part of the overall registration process and works with the DLC coordinator to ensure that the student receives credits on his/her transcript.

Although continued funding for DLC is always a concern, the district has expressed its support of providing additional opportunities to students, especially for classes that the regular high school does not offer. The DLC coordinator meets with building and district administration frequently to report on student success and program development.

### ***Lakeside High School***

At Lakeside High School, the program is much different than at Cedar Hills. Teachers report feeling threatened by the DLC program, stating that online courses may jeopardize their classes and may lead to a reduction in classroom teachers. An inconsistent method of recruiting students includes counselors suggesting online classes to students with “holes” in their schedule, selecting students who have failed courses, and offering advanced courses to students who have taken all of the hardest courses at the high school. Once students register, the school allows them to use library computers or access online classes at home. Some will take an independent study period. Students taking DLC courses are “on their own” for the most part and building staff members do not contact online course instructors to monitor student progress. District and building leadership are aware of the DLC but are uncommitted to providing future funding. As long as there is outside funding for this program, the program will remain. The building principal is hesitant to plan for DLC in the future until the district expresses long-term financial support.

### **Sustainability**

Sustainability was an issue for nearly every school participating in the study. One administrator observed, “We’re concerned about long-term funding. It’s hard to sell a program with uncertain funding.” The coordinators seemed most optimistic about DLC growing over time when school personnel reported positive experiences and when district and building administrators allocated resources to support the program. However, this was not the case in all schools. In three of the schools, the coordinators indicated that they had discontinued or would not offer DLC courses next year. Other coordinators were waiting on funding decisions. In one school that required students’ families to pay for part of the online courses, a reduction in requests resulted. The coordinator reported that this might be the result of students having Running Start as a less expensive option.

## SUMMARY AND RECOMMENDATIONS

### Summary

The purpose of the research project was to determine what role online courses play in (1) enabling students to graduate from high school; (2) making high school graduates college eligible; and (3) enhancing high school graduates preparedness for college. For the project, we identified a sample of 115 graduated seniors who completed 151 DLC courses from 17 participating schools during the 2004 – 2005 school year. We gathered a variety of qualitative and quantitative data, including information from school coordinators, student achievement data, student transcripts, and DLC documents/materials to answer five questions. We have listed the findings below.

1. Was this course otherwise available to this student? If so, how?
  - Approximately 76% of the courses were not otherwise available. These courses primarily consisted of electives or advanced classes, such as personal finance and AP physics.
  - Approximately 24% of the courses were available in the schools as a regular class or as an independent study. According to school coordinators, students often choose to take these classes through DLC because of scheduling conflicts or because they did not want to take a previously failed course with underclassmen.
2. Would the student have graduated without this course?
  - Approximately 67% of students would have graduated without taking DLC course(s), and 33% of the students would not have graduated without taking DLC courses(s).
  - Of those students who would not have graduated without taking DLC course(s), 45% needed extra credits to graduate, 26% made up classes for previously failed courses (i.e. Pacific Northwest History), 24% had scheduling conflicts, and 5% opted to take core classes at a higher level (i.e. AP US History instead of US History).
3. Would the student be “college eligible” without this course?
  - The vast majority of college eligible students met four-year college admission requirements without the DLC courses. Approximately 49% of the students in the sample were not eligible for college, 46% were college eligible without

DLC courses, and 5% became eligible by successfully completing DLC courses.

4. Would the student be “college prepared” without this course?
  - Out of all the courses taken, 32% were at the advanced level and 26% could help students earn college credits.
  - More than half of the students *who were college eligible* took DLC classes to become more college prepared. The disaggregated data show that 61% of the students who were college eligible took at least one advanced level DLC course and that 48% took at least one DLC course that could help them earn college credit (i.e. AP courses).
5. Do these results differ by student ethnicity?
  - We were not able to explore this question because of the small sample size. Of the 115 students, 76% were Caucasian, 10% were American Indian/Alaskan Native, 5% were Hispanic, 4% were Asian, 2% were African American, and 3% were mixed ethnicity. All ethnic categories had fewer than 10 students, except students classified as Caucasian ( $n = 87$ ) and American Indian/Alaskan Native ( $n = 12$ ).

Although the scope of this research was not to evaluate individual school programs, we made a few observations about the strategies used in schools to promote successful completion of courses. These strategies include screening and monitoring students, providing a structured classroom environment, and making DLC courses part of an existing program. The barriers to course completion include lack of identified staff support and resources, lack of student skills, and technical and course issues. In summary, students did better in their DLC courses when teachers embraced DLC as a part of their overall program, when administrators allocated resources to the program, and when coordinators connected with students for screening and monitoring.

## Recommendations

This study addressed the benefit of DLC courses in assisting students to graduate, to earn college admission, and to enhance college preparedness. Several recommendations surfaced out of interviews and the evaluation of student transcripts. Although the DLC Year Two evaluation covered many of these areas, the following are resounding topics.

***Develop a best practice model for implementing DLC.*** The vignettes demonstrate the range of implementation approaches across sample schools. A further examination of those school programs that have a higher rate of documented completed online courses might prove beneficial. When a school district is considering

implementing DLC into an overall delivery model, knowing ahead of time the key elements such as gaining district and building leadership support, assigning release time for a building level teacher/coordinator, providing technical assistance, and ensuring completed courses are adequately posted on transcripts are but a few of those elements. We concur with the recommendation stated in the Year Two Evaluation that the DLC consider development of “Success Tip Sheets” for current and future schools.

***Gather student level data for each DLC course taker.*** Consider asking school coordinators to routinely gather transcripts, courses attempted/completed, college eligibility status, and test scores (e.g., WASL, SAT/ACT, AP Exam) to help inform school leadership about the type of students who are taking DLC courses and the reasons why they are taking them. At the building level, this information would help clarify student and program needs and to see how DLC courses assist programs locally. This information may also prove beneficial in justifying program expenses to budget committees questioning DLC program benefits for students. Additionally, if DLC schools would be willing to share this information with the DLC staff it would promote continual overall improvement for the statewide effort.

## REFERENCES

Cohen, C., & Royer, M. (2005). *Digital learning commons: Evaluation Report*. Retrieved March 27, 2005 from [http://www.learningcommons.org/about/dlc\\_archives.php](http://www.learningcommons.org/about/dlc_archives.php).





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