



Spring 2024

Program Review of Distance Education Department

Non-Instructional Program Review

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Executive Summary

The Distance Education (DE) Department at Cerro Coso Community College contributes to the college's commitment to providing accessible and high-quality education across the Eastern Sierra and Eastern Kern County regions. Through an evolution from Polycom and Moodle to the current adoption of Canvas and Zoom, the department has consistently adapted to meet the changing needs of online education.

Focused on promoting flexible learning opportunities that align with student success, access, and equity values, the DE Department leads the way in educational innovation through its involvement in initiatives like the CVC Consortium and Zero Textbook Cost (ZTC) online program pathways. Its proactive approach to adapting to the evolving landscape of online education is evident through the department's own initiatives like standardizing course themes, developing educational tools, and facilitating comprehensive faculty training programs.

In its operations and functions, the DE Department is dedicated to maintaining the college learning management system, Canvas, and its technology infrastructure, providing comprehensive support for faculty and students, ensuring compliance and security, and cultivating innovation by developing the college's web applications and maintaining its databases. To ensure continuous improvement, the department uses various assessment methods, such as satisfaction surveys, partner feedback, and data analysis from multiple adopted tools and systems, to continually evaluate and enhance its effectiveness.

Looking forward, the DE Department has mapped a plan for both short-term and long-term goals. Immediate priorities include scaling existing web applications and implementing ZTC grants, while long-term goals include developing Learning Tools Interoperability (LTI) tools for Canvas mobile apps. However, to achieve these goals, the department has identified several critical needs, including enhancing communication channels amongst department staff, optimizing resource allocation, expanding server space, and reinforcing collaboration with administrators, faculty, and staff.

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Part 1: Program Overview

1.1 Program Definition

1.1.1 College Mission

The mission of Cerro Coso Community College is to improve the life of every student it serves. Through traditional and distance delivery, Cerro Coso Community College brings transfer preparation, workforce education, remedial instruction, and learning opportunities that develop ethical and effective citizenry to the rural communities and unincorporated areas of the Eastern Sierra. In doing so, we promise clarity of educational pathways, comprehensive and equitable support services, and a commitment to equity.

1.1.2 Department Mission

The Distance Education (DE) Department at Cerro Coso Community College partners with faculty, staff, and administrators to advance the college's mission. Together, they provide students with a flexible and alternative pathway to academic success through quality distance learning courses enriched by modern technology. Aligned with the college's strategic goals of maximizing student success, increasing access, and closing equity gaps, the collaborative efforts of the department contribute significantly to the college's standing as a leader in online education among California's community colleges. By meeting the expectations of faculty and students alike, the department pioneers innovative technological solutions and efficient services. It empowers faculty to seamlessly integrate distance learning technologies and instructional methods into the college's learning management system, ensuring the delivery of accredited online degree and credential programs. Through ongoing collaboration, continual enhancement, and a student-centered approach, the department strives to make a meaningful impact within the online education community while advancing the broader mission of the college. Continuous assessment of service effectiveness and compliance with regulations highlights the department's unwavering commitment.

1.1.3 Department Description and History

The DE Department at Cerro Coso Community College is a crucial part of the virtual campus, providing extensive support for Canvas, the college's primary online course delivery system, and serving as technical support for integrated educational tools. With modern technology, the DE Department helps students access diverse educational opportunities, supports faculty innovation, and offers continuous support for online course delivery and technical issues. Additionally, the DE Department actively participates in various educational, instructional, student, and administrative service initiatives, contributing to the college's commitment to academic excellence, student success, and accessible education.

With a commitment to providing flexible pathways to academic success, the college serves students in the expansive Eastern Sierra Nevada and Eastern Kern County regions, covering the largest geographical service area of any community college in California. To ensure accessibility to courses for all students within this vast service area and to mitigate the necessity of course cancellations due to low enrollment at individual campuses, the college initiated the offering of interactive television (iTV) courses, the beginning of its current distance education offerings. This initiative allowed for the consolidation of enrollment from several of the college's campuses into a single course section, which helped students

timely complete their academic programs. This was acknowledged in 1997 when the college received the Chancellor's CVC4 Statewide Rural Region Grant, confirming the crucial role of DE in providing accessible and quality distance education courses at the college. In the 2022-23 academic year, about 65% of the college's 15,573 students were enrolled in online courses, showing the college's dedication to remote learning and online education.

In 2011, the department faced challenges with stability, which led to the creation of a Distance Education Task Force and later the establishment of the DE Department and the recruitment of dedicated staff. This key moment also showed the college's commitment to enhancing its services and ensuring quality online courses. At the same time, the Academic Senate supported the documents on Authentication and Integrity Strategies and Regular and Effective Contact suggested by the Pedagogy and Technology Committee (Pedtech), with updated versions in 2018. Since Spring 2012, new online faculty members have received comprehensive training, maintained by the department, showing the college's commitment to providing quality distance education courses and programs. Moreover, the Pedtech in March 2024 approved revised documents on regular and substantive interaction and online faculty training requirements, aligning with the 2023 Title 5 changes.

Over the years, Distance Education at Cerro Coso Community College has continuously adapted to the evolving landscape of remote learning and online education. The college embraced technological advancements early on, using tools such as Polycom systems, Frontpage, and later transitioning to Moodle, its first learning management system. These efforts positioned the college at the forefront of distance education, and currently ensuring that it meets educational requirements and improves engagement in online courses through modern tools like Canvas, Zoom, and Pronto.

By maintaining consistent staff, getting feedback from faculty and administrators, and following strategic plans, Distance Education at Cerro Coso Community College has effectively addressed challenges and steadily improved student success and retention rates in online courses from 66% to 73% and from 86% to 87% between 2011-12 and 2022-23, respectively. Collaboration has been key, with various committees and departments, such as the Student Equity and Achievement Committee (SEAC), Pedtech (formed in 2011), Professional Development Committee, academic departments, Library, Learning Assistance Center (LAC) and individual faculty members, working together to achieve significant outcomes. Some of the noteworthy accomplishments included the launch of the Online Preparedness Session, run by the department, streamlining operational processes, standardizing online course themes, improving Moodle and later Canvas navigation, creating student and faculty tutorials, developing a DE Standard Operating Procedures (SOP) Manual and College Copyright Handbook, and providing extensive faculty training and resources on pedagogy, accessibility, and technology. In addition, the department updated new website content in 2014 to enhance the usability and visibility of CC Online webpages, with ongoing efforts to update the content for the new college website launched in Fall 2023. Technical support was also offered remotely to all college faculty, regardless of their online teaching and technical skills, from the start of the pandemic until the transition back to the office.

Recognizing the importance of providing accessible education and flexible degree options, Cerro Coso Community College and its DE Department took a proactive approach to prepare for the California Community Colleges System's California Virtual Campus (CVC)'s Online Course Exchange Platform, a system-wide initiative of the California Community Colleges System. The department, with support and guidance from the Office of Instruction, actively pursued and obtained approval from the Academic

Senate through the Pedtech to join the CVC Consortium and implement various stages of the Exchange Platform. It ensured that all necessary agreements were in place and provided comprehensive faculty training on essential topics such as accessibility, course design rubrics, and copyright. Additionally, the department is currently reviewing the Platform's inner workings to streamline processes for students and faculty and to provide valuable insights to academic departments on how best to use the Platform's capabilities for their program offerings. Moreover, its collaboration with the Pedtech led to the creation of the local Peer-Online-Course-Review (POCR) Sub-committee, where online course sections are carefully reviewed and the department team assists in reviewing the accessibility of these sections. The process in which these sections gain POCR certification, 32 online sections to-date, increases the visibility of Cerro Coso's online course offerings through the CVC Course Finder search engine on the Exchange Platform. As of Spring 2023, the POCR Sub-committee has achieved CVC Certification, confirming its role as a CVC Certified POCR campus.

Before 2020, the department primarily wrote front-end scripts, such as header and footer messages in Canvas courses, Cerro Coso Email, Service, and Tutorial icon features due to limitations of the Canvas support role for working on back-end programming because of the role's job classification. While these scripts were creative and effective, they are now considered routine maintenance tasks. Nevertheless, they played a significant role in enhancing Canvas's functionality and user experience, the online education platform. Before 2020, the DE staff consisted of an administrator and one educational media design specialist. Shifting from an educational media specialist role to a Canvas web developer position allowed the department to undertake projects requiring back-end programming skills while continuing to offer technical support to faculty and students. Consequently, the DE Department has created innovative Learning Tools Interoperability (LTI) tools for Canvas, including the Annual Unit Plan tool and a customizable Popup Messaging Tool, to enhance the online learning experience. Collaborating with the Vice President of Instruction (VPI), Curriculum and Instruction Council (CIC), and Outcomes Assessment Committee has broadened the department's horizons, resulting in the development of college frontend interfaces, reporting and databases for outcomes (SLO, PLO, AUO), and Course Outline of Records (COR) in 2022, called the Curriculum Assessment Management System (CAMS) project. These efforts encompass the front-end interface design and back-end programming with a focus on data security and database administration. Looking ahead, the department intends to continue expanding its range of LTI tools with the addition of two developers. This expansion will further bolster online education and uphold the department's dedication to providing exceptional learning experiences.

Overall, the DE Department at Cerro Coso Community College remains committed to adaptation and improvement, creating an inclusive and supportive learning environment that contributes to the overall success of the college.

1.2 Department Details

1.2.1 Department Functions and Operations

The DE Department at Cerro Coso Community College carries out various functions and operations to support the college's goals of enhancing student outcomes, increasing access, and reducing equity gaps. Here's a summary of the main areas:

Maintenance of the Learning Management System (LMS):

The DE Department oversees the primary LMS, Canvas—Kern Community College District (KCCD) — Cerro Coso Community College, ensuring it is current, adaptable, and user-friendly. This LMS platform supports various aspects of online course delivery, including material management, assignments, discussions, and student-faculty communication. Additionally, Canvas administration involves enrolling tutors, librarians, and counselors and creating course shells for faculty, committees, and departments such as Faculty 411, Child Development Department, and Counseling Department. It also has included student services for their promotion to students, such as the Promise Student Program, Wellness Central, Learning Resources Center (LAC), and Library.

Beyond the virtual classroom, the department ensures that academic and support services are accessible to students who may not visit the campus in person. The department manages regular updates, bug fixes, and security patches, alongside customization and technical support tailored to the college's needs. It's worth mentioning that the Incarcerated Student Education Program (ISEP) and dual enrollment programs use separate instances of Canvas, managed by different departments. Faculty teaching online courses are encouraged to participate in the Online Faculty Technology and Pedagogy Certificate Training program for comprehensive support, regardless of the Canvas instance used.

Infrastructure Maintenance:

In addition to the LMS, the department manages the technology infrastructure that supports the online education tools and databases, whether in-house or from third-party vendors. This includes tools such as the Universal Design Online Content Inspection Tool (UDOIT) and in-house LTIs like the Annual Unit Plan and the Popup Message. The department ensures the servers, databases, and codes are well-maintained, regularly updating software versions and optimizing tools to handle the daily usage demand of Canvas users.

The department collaborates with KCCD Information Technology (IT) teams to monitor, resolve, and secure the online learning environment effectively. This involves implementing firewalls and data protection measures to prevent security breaches and ensuring the smooth functioning of the online education ecosystem.

Faculty Support and Development:

The DE Department actively nurtures faculty innovation and supports their professional development through diverse initiatives. This includes providing resources, conference and training opportunities, and technical assistance to improve online course accessibility and teaching practices. Faculty training focuses on leveraging new Canvas features like New Quizzes and Canvas Studio, in addition to educational tools such as Pronto, Popup Message, Zoom, Microsoft Flipgrid, UDOIT, and Turnitin. Individualized technology training is available upon request, with department-created on-demand tutorials and guides covering various topics like Canvas New Discussion, Canvas Data Analytics, UDOIT, Canvas Studio, and Canvas Zoom, which are directly accessible within Canvas courses. In-house training sessions, such as Lunch-n-Learn and FLEX workshops, cover topics like accessibility, copyright, regular and effective contacts, online proctoring, and educational tool utilization. External training and conference opportunities on OER, accessibility, equity, Title 5, copyright, and pedagogy are communicated to faculty via email, primarily through college faculty listservs. These faculty listservs are

also used to share information about new initiatives within the California Community Colleges system, such as the Zero Textbook Cost (ZTC) program pathway grants and Open for Antiracism (OFAR). Faculty feedback is gathered through committees like SEAC, Professional Development Committee, Pedtech, and POCR Sub-Committee, ensuring that training aligns closely with faculty needs and interests.

Student Support:

In addition to providing technical support for Canvas and its integrated educational tools, catering to both online and scheduled-Zoom course students, as well as on-ground courses using the Canvas platform, the DE Department is committed to offering comprehensive academic and student support for online students. Recognizing the crucial role Canvas plays as their primary platform throughout the semester, especially for CVC Exchange students enrolled in Cerro Coso online courses, where Canvas serves as their primary means of communication with the college after enrollment.

To optimize Canvas functionality, the department collaborates closely with administrators, faculty chairs, individual faculty, Pedtech, SEAC, and other academic and student service departments. Through collaboration with the Outreach Department, the DE Department effectively leverages its technical expertise to gather device and browser type utilization data from actual Canvas users. This data is then used in partnership with Outreach to reach out to students who primarily use mobile devices, providing valuable insights into their usage preferences. This collaboration has facilitated addressing the technological needs of low-income online students through the college's laptop loan initiative.

Various strategies have been implemented to promote academic and student services, including utilizing Popup Message LTI to disseminate critical information such as financial aid deadlines, educational plans, tutoring, library access, basic needs support, and scholarship opportunities. Additionally, scripts have been developed to embed a Service icon in each Canvas course, facilitating student access to resources like the library, tutoring, counseling, and Disabled Student Programs and Services (DSPS). Initiatives such as the "Navigating an Online Course Successfully" tutorial, "Pronto" tutorial, "Free Microsoft 365" tutorial, "Student Zoom" tutorial, and the "Logging to Canvas" tutorial have significantly improved the online experience for students, allowing them to focus more on course content rather than navigating the platform and technological tools themselves.

Standardizing Canvas course templates with scripts and introducing Canvas header messages during the first week of each course further enhance Canvas functionality and facilitate department and college communication with online students. The Online Preparedness Session Canvas training, available for self-enrollment immediately after registering for the online class and throughout the semester, ensures that students are well-prepared to navigate Canvas before the first day of class, gain an early understanding of how to navigate their Canvas course, and provides an additional channel for accessing academic and student service content. Additionally, the department has centralized student services, tutorials, and Cerro Coso email access within the Canvas Global Navigation bar of each Canvas course, simplifying the process for students to locate essential resources while completing their online courses.

Accessibility Support:

The DE Department is instrumental in ensuring accessibility for both faculty and students in online learning. Faculty members receive comprehensive support to make their course materials accessible to all learners, including guidance, training, resources, and accessible content creation tools. Accessibility

training options include @ONE training and Web AIMS training, while tools such as UDOIT, Poptech, and Canvas Studio captioning facilitate the creation of accessible course content, including captioning videos, adding alt text to images, and providing audio transcripts. The department also offers opportunities for faculty to outsource complex PDF accessibility remediation and provides workshops and one-on-one training in accessibility rules and specific tools upon request.

Active involvement in the Cerro Coso POOCR review process involves providing detailed accessibility feedback to faculty submitting their courses for review, contributing to courses earning POOCR certification. Students are likewise well-supported with accessibility tools and resources that enable them to access educational materials, such as text-to-speech software, screen readers, and live captioning options. Integration of tools like Immersive Reader and EquatIO directly into Canvas ensures a seamless experience, minimizing technology barriers and promoting inclusivity. The department closely collaborates with DSPS to provide accommodations upon request, such as time extensions for quizzes or the addition of an American Sign Language (ASL) interpreter to a course.

In addition to addressing technical support needs through LTI solutions integrated with Canvas and Canvas itself, faculty also need guidance and assistance in implementing accessibility feedback in the POOCR process. This support ensures that online courses that are part of the ZTC online program pathway are fully accessible to all students, promoting inclusivity and equal access to educational resources. The DE Department recognizes the need to help faculty comply with accessibility standards as more students choose online programs and more courses use Open Educational Resources (OER) to develop ZTC online program pathways.

By performing these functions and operations, the DE Department highlights its role in supporting faculty, students, and staff in online education while ensuring accessibility and technological efficiency.

1.2.2 Program Costs and Funding

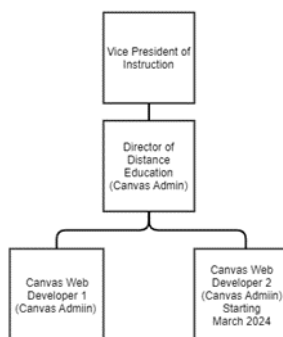
Different sources of funding support the DE Department's services and operations. The department uses general funds for personnel salaries and expenses, and other funds like Strong Workforce, ZTC, and equity funds for faculty and staff professional development and software licensing needs. Software applications, based on recommendations from the Pedtech or faculty requests, take up a large portion of the annual budget request. In addition, the Distance Education Telemedicine grant enabled the purchase of iTV equipment in 2019.

The DE department, along with the VP of Instructions, two academic department chairs, and a faculty program coordinator, secured more funding through ZTC program pathway grants. These grants will enhance the development of four online ZTC program pathways: Child Development Certificate Programs, English Degree Program, Child Development Degree Program and Social and Human Services Certificate Program. They will provide faculty stipends for transforming courses into POOCR-certified and accessible ZTC online courses and create a new Canvas web developer position. This developer will have more skills in WCAG 2.0 accessibility standards, both in rule terms and through coding, to help with ZTC accessibility reviews and technical development, including LTI development projects related to these ZTC program pathways.

1.2.3 Organization Chart

The DE department is part of the Instructional division of the College, under the guidance and leadership of the VPI. The department's structure is shown in Figure 1.

Figure 1: Distance Education Department Structure Chart



Within the Distance Education Department, there are two main roles:

- **The Distance Education Director (Canvas KCCD Root Account Admin, Zoom Account Admin)** oversees the overall operation, strategic planning, and resource allocation. The director also ensures compliance with online education regulations and safeguards data privacy and security in the College's Canvas account as much as possible.
- **Canvas Web Developers (Canvas Cerro Coso Subaccount Admin)** provide technical support for the College's learning management system, Canvas and its integrated education tools. The position also helps in delivering technical and accessibility training for faculty and creates Canvas tools, such as LTIs, to enhance the online learning experience for students and support college initiatives.

Based on the identified needs in the 2023-24 Distance Education Section Plan, the College approved hiring an additional Canvas web developer to help with the workload that the current web developer faces. Starting in March 2024, this new hire started working on Zero Textbook Cost (ZTC) projects, aligning with the upcoming ZTC program implementation. The two web developers will also split tasks as a way to ensure business continuity.

1.3 Program Connections

1.3.1 Relationship to Departments and Programs

The DE Department collaborates closely with various programs, departments, and committees to ensure a comprehensive approach to online education. These partnerships involve administrators, faculty chairs, academic and student service departments, and committees such as SEAC, Professional Development, POQR, and Pedtech. Here are examples of the department's collaborations:

Collaboration with Other College Departments or Divisions:

The department's mission guides its efforts to partner with the VPI. For instance, it participated in projects like becoming a Teaching College on the CVC Exchange Platform. This goal required substantial support, including working with Pedtech to gain approval from the Cerro Coso Academic Senate on an

Exchange Implementation Resolution, demonstrating leadership at various levels, and seeking assistance from stakeholders like Bakersfield College and Porterville College. Currently, the department is actively streamlining the enrollment process on the CVC Exchange Platform, using data from its CVC Dashboard to enhance understanding of enrollment trends and inform effective program decision-making processes shared with academic deans and faculty chairs.

Collaboration with Bakersfield College (BC), KCCD and Porterville College (PC):

The department partnered with Porterville College and Bakersfield College to create a Technical Support Canvas webpage, which houses technical contact information, tutorials, guides, Canvas chat, and the KCCD Help Desk ticket feature. These resources are conveniently accessible within Canvas under the Help icon of each Canvas course. Furthermore, the department actively collaborates with BC, PC, and KCCD on various security projects to enhance data protection measures.

Accessibility Partnership with DSPS:

The department collaborates with DSPS to provide necessary accommodations, such as extra time and ASL interpreters, to ensure online education is inclusive for everyone. Furthermore, the department advocates for more accessible content from third-party vendors and addresses issues with integrated educational LTI tools in Canvas. Faculty knowledge of DSPS tools, such as screen readers, is also promoted through cooperation with DSPS.

Compliance and Program Integrity:

Recently, the department collaborated with the KCCD Contracts and Procurement Office, BC's and PC's distance education department to create a stronger Family Educational Rights and Privacy Act (FERPA) agreement template for LTI integration. This updated template addressed previous inconsistencies, ensured more district-wide protection, and considered the accessibility of third-party vendor LTI integration. Additionally, partnerships with Pedtech ensure compliance with recent Title 5 regulation changes, especially regarding regular and substantive contacts in online courses and faculty training. Currently, the department is actively involved in simplifying the student's name change process in Canvas and its educational LTI tools in collaboration with KCCD IT and the Admissions and Records department.

Innovation:

The department has worked with SEAC and Pedtech to create a seamlessly integrated messaging tool for Canvas courses. This tool enables student services, such as Counseling, Outreach, Financial Aid, Library, Learning Resource Center, and Child Development departments, to notify students about educational plan services, financial aid deadlines, basic needs support, and library and tutoring services. In the near future, the department will work with faculty chairs to build and use an OER repository LTI, which will let faculty share accessible OER content with their Cerro Coso peers. Also, the department will join forces with POCR committee to make a POCR CVC Rubric Feedback LTI tool. Also, the department intends to work with Allied Health on a Futuro Health LTI tool.

Equity and Inclusion Focus:

Working with Pedtech, the college developed its first Distance Education Accessibility Plan, fostering a culture of accessibility in online courses. Additionally, the department closely collaborated with the VPI,

faculty chairs, and a faculty program coordinator to secure and utilize several ZTC grants, enhancing access to education across the college campus. Moreover, involvement with the POOCR Sub-committee allows the department to offer valuable faculty feedback on the accessibility aspect of the POOCR review process.

1.3.2 Professional Development

The DE department offers various methods for its staff to acquire new skills and knowledge, such as participating in conferences, workshops, and up-to-date technology training sessions. Some of the recent opportunities have been conferences such as InstructureCon, Strengthening Student Success, Online Teaching Conference, Cal OER Conference, and training such as WebAIMs, Allyant PDF Accessibility, LTI Development, 3rd party vendor educational tools and POOCR Accessibility training.

1.3.3 Marketing and Outreach

The DE Department is committed to effectively communicating its services and initiatives to administrators, faculty, and students through various channels to encourage participation from them, particularly among faculty, and to align with college goals.

Proactive Communication:

Faculty members receive timely alerts about the availability of Canvas course shells at the start of registration for the upcoming semester, enabling them to prepare in advance. Additionally, reminders are sent out at the beginning of each semester, prompting faculty to begin work on their course content at least one week before the semester begins. Notifications are also sent when Canvas courses are open for student access, following the Academic Senate's recommended processes to mitigate course readiness issues. These communications, distributed via full-time and adjunct faculty listservs, ensure that faculty, especially new members, are well-informed about the college's online course processes.

After registering for an online course, students receive an email confirmation within 24 hours containing essential information about their enrollment. This information includes details about Navigate, the Online Preparedness Session, textbook purchases, course login procedures, drop policies, financial aid deadlines, educational plans, and basic needs support. All this information is provided to help online students prepare effectively before the first day of class.

In response to the news that Canvas technical support would cease for faculty and students, the department immediately reviewed its Canvas phone usage for technical support and joined the Knowledge Base (KB) group of the CCMS Advisory Committee in Fall 2020 to find a solution. As a result, the department created 76 (38 for faculty, 38 for students) frequently asked questions and shared the link with faculty several times before the start of the semester, ensuring proactive communication and support for technical inquiries.

Faculty Training and Opportunities:

The DE Department uses listservs to inform both full-time and adjunct faculty about the annual New Online Faculty Technology and Pedagogy Training Certificate program, with the training schedule distributed during the Spring semester. Lunch-n-learn workshops on various topics are also announced through the listservs, covering areas such as Zoom, Pronto, Canvas Studio, UDOIT, accessibility, and

Blackboard Ally. Additionally, OER resources and discipline-specific training are provided to faculty via listservs in recent semesters.

Relevant resources, conferences, internal, and external training opportunities are regularly shared with faculty through email, supporting professional development and resource gathering within and outside the college. Faculty participation in external training programs such as the Humanizing Online STEM Academy has led to the creation of course preview webpages called liquid syllabus, hosted on the college website.

Collaboration with Pedtech, POCR Sub-Committee, Faculty Chairs and Others Opportunities:

The DE Department actively participates in various meetings and conferences, such as California Community Colleges Distance Education Organization meetings, the annual Online Teaching Conference (OTC), CVC Consortium meetings, and CCMS Advisory meetings, to stay informed about new regulations and laws affecting distance education. This information is then shared with Pedtech, who informs the Senate to ensure awareness and compliance. Notifications are also sent to campus directors, deans, VPs, and student services areas whenever relevant information regarding distance education arises in their areas of service.

The department's current collaboration with the POCR sub-committee is to improve and document peer review processes, particularly for upcoming ZTC online program pathway courses. Working together with faculty coordinators, this effort seeks to increase the number of POCR-certified courses, contributing to ADA compliance and equity.

Notifications regarding ZTC grants are distributed to faculty chairs, encouraging them to consider and submit applications. As a result, the college received multiple ZTC grants in Fall 2023 for the establishment of ZTC Online programs, including certificates and degrees in Child Development, certificate in Social and Human Services, and degree in English.

By using a proactive and collaborative approach to marketing and outreach, the DE Department can improve the educational experience for faculty, students, and administrators involved, contributing to student success, access, and the narrowing of equity gaps.

Part 2: Trends

2.1 Service Recipients

The DE Department serves various individuals or groups, including:

- **Online Students:** Engage in college courses online, relying on Canvas for accessing course materials, submitting assignments, and interacting with instructors and peers.
- **Scheduled-Zoom Course Students:** Participate in courses with designated Zoom sessions, using Zoom and Canvas for accessing learning materials and communicating between sessions.
- **On-Ground Course Students Using Canvas:** Attend regular face-to-face classes that use Canvas for accessing course materials.

- **CVC Exchange Students:** Sign up for online courses at the college through the CVC Exchange platform, where Canvas is their primary means of connecting with Cerro Coso Community College after enrollment.
- **Faculty:** Instructors who use Canvas and integrated educational tools for course delivery, grading, student communication, and course development.
- **Administrators and Faculty Chairs:** Including the vice presidents of instruction and student services, deans, directors, campus directors, and faculty chairs, who use Canvas and CVC Exchange Platform data and reports for academic planning, assessment, and decision-making. Tools like the Annual Unit Planning LTI and CAMS project tool are specifically for their use.
- **Academic and Student Services Departments:** Collaborate with the DE Department to engage students who primarily use mobile devices, address technological needs through initiatives like the laptop loan program, and promote offerings through Canvas Header or Popup Message LTI. Departments and programs include Outreach, Financial Aid, Basic Needs, laptop loan program, Promise program, Wellness program, Library, Counseling, and Tutoring.
- **Subgroup Student Populations include First-Generation and Economically Disadvantaged, and Ethnicity:** The DE Department analyzes retention and success to understand these populations' unique needs and initiate partnerships and resources to support their educational journey. In Fall 2021, the department shared the data with academic and service departments to understand and initiate possible new approaches to delivering more targeted services within the Canvas platform.

By understanding the unique needs of its service recipients, the DE Department adapts its services and initiatives to enhance the overall experience for all participants.

2.1.1 Usage and Demand

To improve the department operations and resources allocations, it is critical to assess how the DE Department services are used and needed, especially as the educational environment changes in remote learning and traditional instruction. The analysis covers a maximum of five years from AY2018-19 to AY2022-23, looking at the trends and patterns in distance education sections, enrollment, headcounts and comparing them with traditional course offerings, along with other departmental data. It's crucial to note that, for the assessment of DE Department usage and need, distance education data will not include the ISEP and dual enrollment programs, even if they are online courses. Moreover, it's important to understand that the ISEP and dual enrollment programs run on separate instances of Canvas and are handled by separate departments. This ensures accuracy and clarity in reviewing the trends in distance education data at the college. Also, traditional courses are defined as only traditional courses, except for the pandemic lockdown period from Summer 2020 to Fall 2021, when traditional courses were offered remotely due to exceptional situations and covered under the California Community Colleges System Emergency Temporary Distance Education Blanket Addendum.

Table 1: Section Trends

Section	AY2018-19	AY2019-20	AY2020-21	AY2021-22	AY2022-23
Cerro Coso Community College (CC)	1,325	1,246	1,103	1,199	1,265
CC (without ISEP & Dual Enrollment Programs)	1,028	941	763	822	885
Distance Education (DE)	481	500	574	605	564
Traditional	547	441	189	217	321

Source: Cerro Coso Community College Institutional Research Department

As shown in Table 1, the section numbers at Cerro Coso Community College have changed over time, reaching a peak in AY2018-19 and a slight increase in AY2022-23. A clear trend is the steady growth of distance education sections from AY2019-20 to AY2020-21, with a minor drop in AY2022-23. In contrast, traditional class offerings vary more, dropping from AY2018-19 to AY2019-20, sharply declining in AY2020-21, and slowly recovering after that, but staying below initial levels. These trends suggest a shift towards more distance education offerings, probably influenced by the pandemic's impact on course delivery methods. The rise in distance education sections suggests increased usage and demand of DE Department services from students and faculty.

Table 2: First Day Enrollment Trends

First Day Enrollment (Includes fraud hold)	AY2018-19	AY2019-20	AY2020-21	AY2021-22	AY2022-23
CC	31,426	29,850	28,717	26,069	25,533
CC (without ISEP & Dual Enrollment Programs)	25,185	23,909	20,556	18,396	19,420
DE	17,169	17,146	16,822	16,223	15,936
Traditional	8,016	6,763	3,734	2,173	3,484

Source: Cerro Coso Community College Institutional Research Department

Table 3: Census Enrollment Trends

Census Enrollment (Does not includes fraud hold)	AY2018-19	AY2019-20	AY2020-21	AY2021-22	AY2022-23
CC	29,647	28,543	27,383	23,393	23,111
CC (without ISEP & Dual Enrollment Programs)	22,871	21,930	19,384	16,302	17,535
DE	14,403	14,932	14,668	13,474	13,449
Traditional	8,468	6,998	4,716	2,828	4,086

Source: Cerro Coso Community College Institutional Research Department

Looking at first-day enrollment data in Table 2, it shows a steady decrease in total enrollment, with changes in distance education enrollment peaking in AY2021-22 before a small decrease in AY2022-23. In comparison, traditional enrollment goes down considerably over the years, possibly showing shift of student preferences possibly affected by changes in how education is delivered, such as more use of distance education options during the pandemic. Census enrollment data in Table 3 follow the same patterns as the first-day enrollment data. For the DE department, first-day enrollment data is especially important, as the number of technical support requests usually reaches its highest level between two weeks before classes start and two weeks into the semester.

Table 4: Headcount Trends

Headcount (DE - Students who took at least one distance ed course)	AY2018-19	AY2019-20	AY2020-21	AY2021-22	AY2022-23
CC	9,991	9,630	8,264	7,583	7,709
CC (without ISEP & Dual Enrollment Programs)	8,216	7,896	6,438	5,794	5,936
DE	6,365	6,236	5,267	4,826	4,953

Source: Cerro Coso Community College Institutional Research Department

Table 4 shows a decrease in the number of students taking at least one distance education class over the past five years. This suggests that individual students are taking more distance education courses. This shift could be attributed to the greater availability of online course sections compared to traditional ones, assisting students in timely program completion amid the gradual return of courses to traditional delivery methods post-pandemic. Compared to the increased enrollment, the decrease in headcount may signify fewer unique students for departmental support, but the increasing number of supported

sections continues to strain departmental resources. The declining headcount indicates areas for further research into factors influencing student enrollment.

Table 5: Retention and Success Rates

Method of Delivery	Outcome Type	AY2018-19	AY2019-20	AY2020-21	AY2021-22	AY2022-23
CC	Retention Rate	90%	90%	91%	89%	90%
CC	Success Rate	78%	80%	81%	78%	78%
CC (without ISEP & Dual Enrollment Programs)	Retention Rate	88%	89%	89%	88%	89%
CC (without ISEP & Dual Enrollment Programs)	Success Rate	74%	76%	78%	77%	75%
DE (without ISEP & Dual Enrollment Programs)	Retention Rate	85%	87%	88%	87%	87%
DE (without ISEP & Dual Enrollment Programs)	Success Rate	69%	73%	75%	74%	72%
Traditional (without ISEP & Dual Enrollment Programs)	Retention Rate	94%	93%	94%	95%	94%
Traditional (without ISEP & Dual Enrollment Programs)	Success Rate	83%	84%	88%	90%	85%

Source: Cerro Coso Community College Institutional Research Department

Table 5 reveals useful information about how different delivery methods of the college affect student retention and success, focusing on distance education and traditional courses, excluding dual enrollment and ISEP. Over the five years analyzed, DE courses had similar retention and success rates to other delivery methods. The retention rate for DE courses was between 85% and 88%, showing a consistent pattern of keeping students enrolled in distance education courses. Similarly, the success rate for DE courses ranged from 69% to 75%, indicating that a large number of students achieved positive academic outcomes in these courses.

Traditional courses, excluding dual enrollment and ISEP, also showed positive outcomes. The retention rate for traditional courses stayed high, between 93% and 95%, over the same period. Moreover, the success rate for traditional courses increased, with values between 83% and 90%. While traditional courses had slightly higher retention and success rates than DE courses, the data indicates that DE is still an acceptable and reliable way of delivering courses.

It's important to note that when looking at the overall performance of Cerro Coso Community College, including dual enrollment and ISEP, both DE and traditional courses helped maintain stable retention and success rates across the college. One interesting observation is the high success rates for both traditional and distance education courses during the pandemic period, compared to the pre-pandemic

and post-pandemic periods. This trend needs more research in the future to understand what factors contribute to the higher success rates and to its long-term effects on educational practices and student outcomes.

However, when excluding dual enrollment and ISEP, DE courses had similar or slightly higher retention and success rates than traditional courses, which demonstrates the role distance education plays in improving student retention and academic success for the college. Overall, the data demonstrates the importance of considering specific delivery methods, such as distance education, and how they influence student outcomes at a college.

Table 6: Canvas and LTI Usage

Year	Unique LTI	Total LTI Installs
AY2016-2017	27	285
AY2017-2018	36	469
AY2018-2019	48	533
AY2019-2020	46	663
AY2020-2021	48	757
AY2021-22	54	712
AY2022-23	61	675
2023-2024 (to 4/23/24)	69	1,051
Grand Total	137	5,145

Source: KCCD Canvas Instance LTI Report

Table 6 shows a steady increase in both unique LTI installations and total LTI installs in the Canvas platform from 2016 to 2024. The number of unique LTIs grows from 27 in AY2016-17 to 69 in AY2023-24, indicating a growing diversity in the tools integrated with Canvas. Similarly, the total LTI installs show consistent growth, rising from 285 to 1051 over the same period. This trend indicates a wider adoption of LTIs in online courses since 2016, suggesting broader adoption of LTIs in online courses since 2016. However, with this growth comes an increased demand for technical support, highlighting the need for Canvas administrators to receive ongoing training and professional development about new tools to help faculty and students effectively.

Table 7: Canvas Pronto LTI

Pronto LTI	Fall 2020	Fall 2023
# of Group Created	537	6,469
# of Direct Message Created	419	4,512
Total # of Messages	17,400	243,187

Source: Cerro Coso Community College Pronto Dashboard Report

The data in Table 7 shows the total usage of Pronto LTI from Fall 2020 to Fall 2023, revealing a steady increase in Pronto LTI usage, mainly by academic and student services departments. The data is cumulative, which means it shows a consistent pattern of growth over time, not random changes. The steady increase in the number of groups created, direct messages exchanged, and total messages sent indicates a sustained expansion of engagement within the Pronto LTI platform. This trend indicates a increasing dependence on digital communication tools by services to enable collaboration, support, and information sharing across the college.

Table 8: Canvas Popup LTI

Popup Message LTI Usage by Semester	Summer 2023	Fall 2023	Spring 2024
# of Unique Teachers	5	11	7
# of Unique Courses Scheduling Popups	5	29	10
# of College Popups Scheduled	9	64	18
# of Course Popups Scheduled	5	14	9
# of Unique Students Reached	141	743	577
Range of Students per Popup	19-68	11-301	7-516

Source: Cerro Coso Community College Popup Message Dashboard Report

Table 8 shows growth in the usage and activity of the Popup Message LTI by semester, from Summer 2023 to Spring 2024. The number of different teachers using it increased, reaching 11 in Fall 2023 from only 5 in Summer 2023, though there was a slight decrease to 7 in Spring 2024. Similarly, the number of different courses setting up popup messages went up from 5 in Summer 2023 to 29 in Fall 2023 before

going down to 10 in Spring 2024. This shows a broader adoption of the Popup Message LTI across various courses and by more teachers.

The department did not reach out to individual faculty regarding the LTI addition in Spring 2024, contrasting with promotional efforts in Fall 2023. This indicates the need for continual efforts to inform faculty about the tool's availability each semester to bolster adoption rates. Despite minimal promotion, usage increased compared to its initial launch, suggesting sustained usage among early adopters. Additionally, the total number of college and course popups has risen, indicating the tool's value to academic and student services.

While the number of unique students reached varied, the overall trend reveals an expansion in the reach of the Popup Message LTI, with the student-per-popup range widening over time. This data demonstrates the effectiveness of the LTI in facilitating communication in Canvas courses, therefore highlighting the potential for further adoption with additional promotion of the tool.

Getting students and faculty to adopt new Canvas LTIs, such as Pronto, is a lengthy process. It took approximately two years for student services, academic departments, and individual faculty members to fully recognize Pronto's value as a valuable classroom and online student tool, facilitating informal chats, especially in settings lacking personal interaction. The department anticipates a similar timeline for the complete adoption of the Popup Message LTI..

Table 9: Canvas Platforms for Course Access

2023	Spring		Summer		Fall	
Usage per unique student	1st day to Census	after Census	1st day to Census	after Census	1st day to Census	after Census
Canvas Student App	1.09	1.05	0.92	1.46	0.97	1.58
Mobile Web Browser	1.11	0.92	0.93	1.12	0.93	1.15
Desktop Web Browser	1.64	1.34	1.37	1.37	1.55	1.37
Chromebook	0.32	0.31	0.18	0.20	0.25	0.25
2022	Spring		Summer		Fall	
Usage per unique student	1st day to Census	after Census	1st day to Census	after Census	1st day to Census	after Census
Canvas Student App	1.55	1.05	0.97	1.10	1.39	1.05
Mobile Web Browser	1.25	1.03	0.97	0.89	1.12	0.99
Desktop Web Browser	1.79	1.84	1.70	1.60	1.61	1.60

Chromebook	0.25	0.25	0.21	0.18	0.29	0.29
2021	Spring		Summer		Fall	
	1st day to Census	after Census	1st day to Census	after Census	1st day to Census	after Census
Canvas Student App	1.23	1.26	1.11	0.95	1.40	1.11
Mobile Web Browser	1.06	1.05	0.90	0.74	0.88	0.75
Desktop Web Browser	1.75	1.92	2.02	1.91	1.60	1.94
Chromebook	0.24	0.20	0.18	0.16	0.23	0.21

Source: KCCD Canvas Instance Student Pageview Data

Table 9 shows how different Canvas platforms and semesters affect the patterns of course access by unique students. The usage per unique student does not follow a clear pattern for any specific platform across different semesters. The Canvas Student App has some changes, but they are not always increasing or decreasing. The Mobile Web Browser has a slight drop in usage per unique student from 2021 to 2022, then changes again. The Desktop Web Browser usage is relatively steady with small changes, while Chromebook usage differs across different semesters but does not have a consistent direction.

Also, a notable observation indicate a multi-device approach to access online resources by each student. Some unique students will use both the iPad and iPhone app in the same semester, while others will change between different desktop devices during the same semester. However, Chromebook users seem to differ from this pattern, as their usage stays consistently low across all semesters without evidence of using other devices as well. This behavior suggests that unique students may prefer to use different devices for different tasks or may switch between devices depending on convenience or availability.

The usage per unique student of different platforms varies across semesters. For example, in the Spring semester of 2021 and 2022, the Desktop Web Browser has the most usage per unique student, followed by the Canvas Student App, Mobile Web Browser, and Chromebook. But in 2023, the Mobile Web Browser has more usage than the Desktop Web Browser in the Spring semester, while the Canvas Student App is the most used platform in the Summer semester. This shows that unique students' choices for platform usage change significantly from semester to semester.

These student preferences are important for platform development and support decisions. Knowing which Canvas platforms students prefer can help allocate resources for platform enhancement, while tracking how platform usage changes over time helps in predicting future unique student behavior and adjusting to it.

Table 10: Accessibility Support

Semester	Year	# of Sections Using DE Accessibility Assistance
Spring	2021	3
Summer	2021	26
Fall	2021	43
Spring	2022	25
Summer	2022	5
Fall	2022	7

Source: Distance Education Support Spreadsheet

As shown in Table 10, the number of sections that used DE accessibility assistance increased over the semesters, especially from Spring 2021 to Fall 2021. This trend suggests a rising need for accessibility support in online courses, possibly because of the 2019 DE Accessibility Plan's aim of meeting ADA compliance standards for online courses by 2022. However, the number of sections that used DE accessibility assistance dropped from Fall 2021 to Fall 2022, highlighting the significance of an accessibility plan. The ZTC online program pathway's objective of providing POCR-certified courses will help more courses become ADA-compliant with the help of the DE department.

Figure 2: Canvas and LTI Support



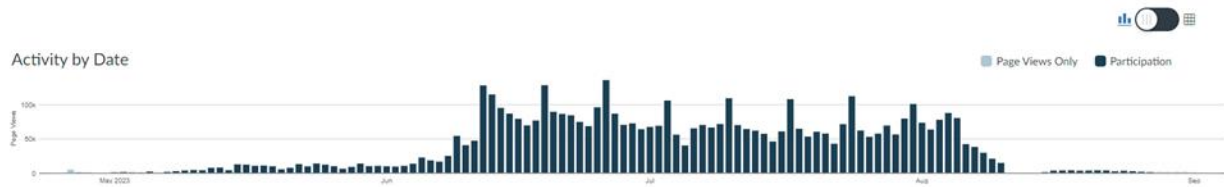
Source: KCCD Canvas Instance – Admin Console – Case Overview Last 30 Days Dashboard

The 30-day Canvas Support Dashboard in Figure 2 does not show the actual demand for technical support, but the DE department knows why there is a difference. Faculty members usually ask the department staff for assistance direct, while students often tell their faculty members about their technical problems, who then pass them on to the department. Attempts over the years to get people to use the ticketing system have not worked.

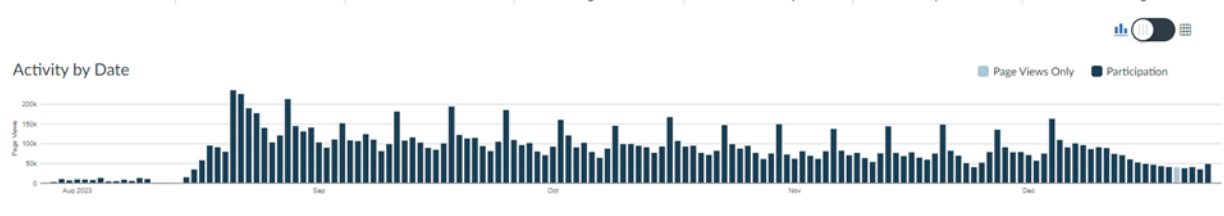
The department's way of helping faculty and students is to solve issues quickly as soon as they hear about them however faculty and students reach them, and it expects to keep this proactive approach in the future.

Figure 3: Promotional Efforts

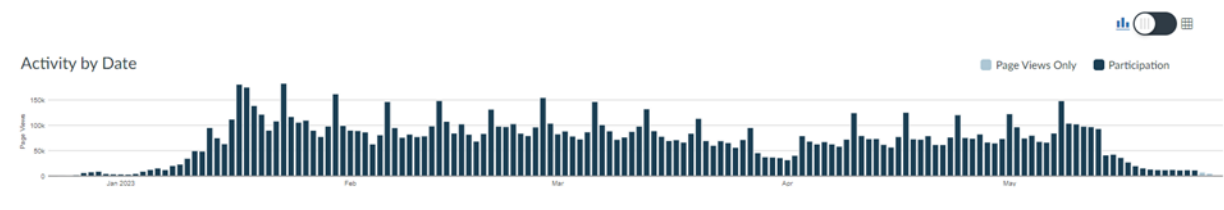
Summer 2023



Fall 2023



Spring 2024

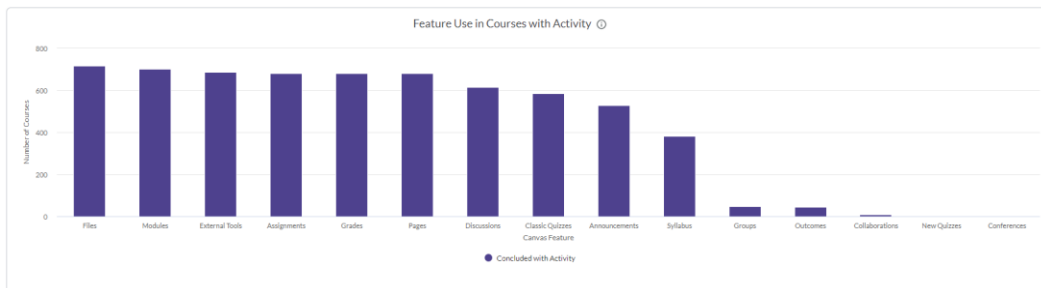


Source: KCCD Canvas Instance – Cerro Coso Communit College Sub-account Analytics

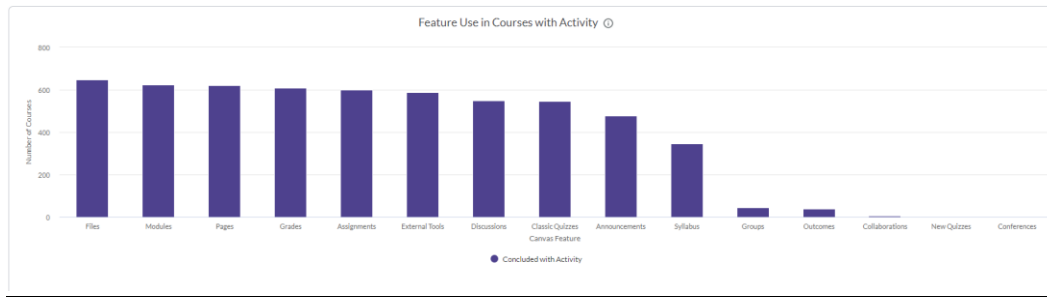
Data from Figure 3 shows a consistent trend across the summer, fall, and spring semesters of 2023: Canvas users are most active on Mondays, no matter the semester, week, or month. The DE department uses this insight to improve the visibility of Canvas header message and popup messages, enhancing the usefulness of a tool.

Figure 4: Trends in Demand

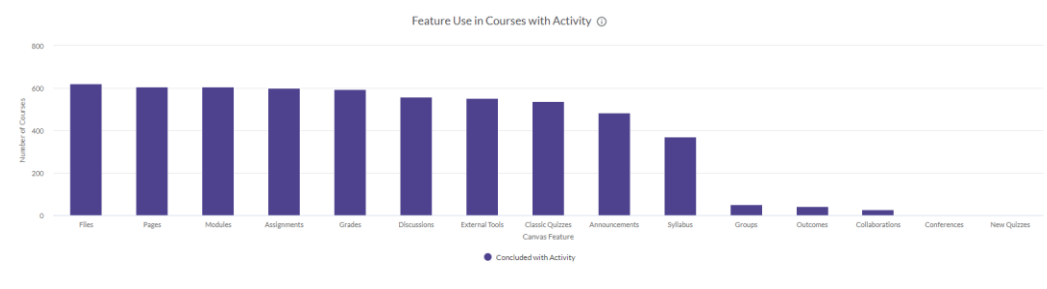
AY2022-23



AY2021-22



AY2020-21



Source: KCCD Canvas Instance – Cerro Coso Community College Sub-account Analytics Dashboard

As shown in Figure 4, file storage is the most popular feature that Canvas courses have used in the last three academic years. The department has noticed that faculty often keep old documents when copying content from one semester to another. While storage space is not a problem right now due to Canvas's generous storage capacity, too many files could cause future issues, potentially leading to additional cost to the college. Therefore, the department recommends that faculty members regularly delete their course storage files as a good practice. Additionally, a trend in the last three academic years is the increased use of external tools by courses. There is further need to research and understand why faculty are deciding to use LTIs.

Future Projections:

The DE Department anticipates increased department service demand, driven by changes to course designs and efforts to improve support services. The increasing availability of ZTC grants and the requirement to be accessibility compliant also stress the need to plan early to address the shifting needs of users. The usage and demand data for DE Department services shows the importance of data analysis and partnerships with departments and committees in meeting the changing needs of distance education students. The department ensures the success of the college's distance education students through its development and implementation of initiatives before issues arise, improving support services, and supporting faculty development.

2.1.2 Customer Service and Satisfaction

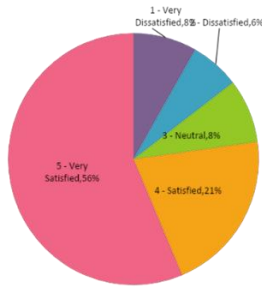
The DE Department is committed to evaluating customer satisfaction of its services. Unfortunately, there is no comprehensive survey for administrators, faculty, and students at the moment, but insights

from previous surveys provide useful information on how satisfied students and faculty are with the DE department services.

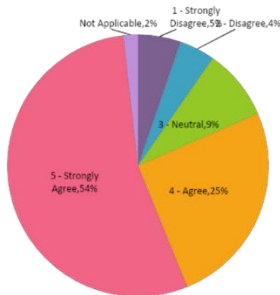
Insights from the Statewide Fall 2016 DE Student Satisfaction Survey, which 191 Cerro Coso students completed, show positive trends. More than 77% of students expressed satisfaction or high satisfaction with their distance education courses. Also, 79% indicated satisfaction with how well their courses met their learning needs, and 67% agreed that their distance education courses were as effective as traditional on-ground courses in terms of learning outcomes.

The survey included questions such as:

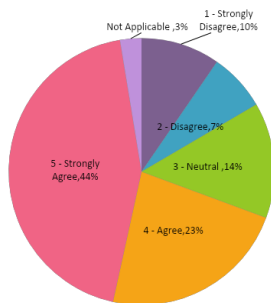
Survey Question 1: My overall level of satisfaction with this distance education course.



Survey Question 2: This distance education course met my learning needs



Survey Question 3: I learned as much in this distance education course as compared to a face-to-face course



The Statewide Spring 2017 Faculty DE Survey, conducted with 20 Cerro Coso faculty members during the transition from Moodle to Canvas, revealed positive satisfaction. Notably, 78% and 82% of faculty

expressed at least a neutral stance on technical support and technical training for faculty, respectively. Additionally, faculty responses indicated at least a neutral stance on technical support for students. Given the college's extensive use of Canvas for over seven years, it was anticipated that all respondents would be content with the technical support provided by the DE department.

The survey covered satisfaction with:

How satisfied are you with each of the following factors in supporting effective distance education at your college?	Percentage (%) with Response of Neutral, Satisfied or Very Satisfied
Technical support for faculty	78%
Technical training for faculty	82%
Technical support for students	95%

Moving forward, the DE department plans to collaborate with the Institutional Research (IR) department to develop and conduct a comprehensive survey on customer service and satisfaction from the college's perspective. Currently, qualitative feedback from faculty and administrators is gathered through committee meetings such as SEAC, Pedtech, and POOCR, providing avenues to share opinions on departmental services.

The DE department is committed to continuous improvement and will continue to leverage feedback to enhance its services and operations, ensuring alignment with the college's mission of prioritizing student success and equitable access to resources for online students.

2.1.3 Effectiveness

The DE department's effectiveness is complex, involving quantitative and qualitative feedback, and various indicators that align with the distance education community and the college mission.

Quantitative Analysis:

The DE department relies on quantitative data as the primary measure of its performance. By analyzing student success rates, retention rates, enrollment figures, and demographic data, the department gains valuable insights into the reach and impact of its distance education services. These metrics indicate a positive trend, suggesting that the department is contributing to meet the goals of the college and the department. Also, data from the Online Preparedness feedback survey and the Exchange platform have assisted in guiding decision-making processes and ensure that the department keeps its high standards in distance education.

Streamlined Processes:

The DE department values efficiency and strives to improve the online learning experience by making processes smoother. For instance, by sending automated confirmation emails to students when they enroll, it enables the department to provide the students with important information and reduce the manual communication and the onboarding steps. Additionally, by creating a standard Canvas course template, the department ensure uniformity across courses for the development of tutorials while giving faculty space for personalization of their course. These efforts help to create a consistent learning

environment and promote student success. In the near future, the DE department plans to implement initiatives such as creating more LTIs to make workflow easier on POCR feedback and reduce duplication in accessibility fixes.

Collaborative Efforts:

Collaborating with partners such as the Pedtech, POCR and SEAC committees is important for enhancing online learning. These partnerships allow for exchanging best practices, trying new initiatives, and finding areas for improvement. Feedback from these collaborations informs decision-making processes, leading to continuous enhancements in the quality of online education. The department is actively engaged with the POCR sub-committee to streamline and standardize the POCR review process. The goal is to establish consistency and effectiveness throughout the process. This documentation will outline the process from the initial expression of faculty interest through submission initiation, various review stages, alignment with the CVC Course Design Rubric, reviewer feedback, and POCR certification. Standardizing this process will clarify time commitments for submitters and expectations for faculty POCR reviewers.

Continuous Improvement:

The DE department is dedicated to continual improvement, actively seeking feedback from students, faculty, administrators, and staff. Collaborative efforts with various committees serve as valuable platforms for exchanging ideas and identifying areas for enhancement. For example, the department sought feedback from the SEAC and on the Canvas Popup Message LTI it developed, currently working on a version that will allow for promoting academic and student services within the LTI to specific student sub-populations. The creation of the Distance Education Standard Operating Procedure (SOP) manual ensures consistency in decision-making and serves as a reference for current processes and future enhancements. Currently, the SOP is being used to train a new web developer employee, and the department plans to incorporate a protocol section based on the new employee's insights, improving its usability—a perspective only a newcomer to the SOP could provide.

Compliance and Security:

Ensuring compliance with college, state, and federal regulations is crucial for the integrity of distance education programs. The DE department continually refines operations to meet the highest standards, including regulations such as copyright, 508, 504, FERPA, and Title 5. Recently, the department collaborated with Bakersfield College, Porterville College, and the KCCD procurement department to establish a template for Student Privacy Data agreements, ensuring thorough vetting of third-party vendors for Canvas LTI integration. This collaboration strengthens data security and ADA compliance across KCCD colleges, previously inconsistent. Additionally, by working with KCCD IT and the two colleges, the department enhanced security for the entire KCCD Canvas instance by whitelisting URLs through the Canvas Content Security Policy feature. These efforts ensure a consistent approach to compliance and security, safeguarding student data more effectively. The department also worked with the librarians in 2015 to produce the college's Copyright Handbook. Furthermore, in response to the addition of accessibility and regular and substantive requirements in the Distance Education section of Title 5, the department collaborated with Pedtech to update its regular and effective contact document accordingly. The department is also collaborating with ZTC faculty coordinators to ensure their ZTC

online program pathway meets quality review criteria based on POQR, further ensuring accessibility by putting all ZTC program pathway courses to the POQR review process.

Faculty Development:

Faculty development programs can improve online teaching quality. The annual Online Faculty Pedagogy and Technology Certificate Program has shown its value, with approximately 20 faculty participating each year since 2012. This program prepares faculty with the abilities and information they need for successful online teaching, leading to better student results. To maintain the quality of the training program, the training curriculum has included topics such as CVC Course Design Rubric, equity, accessibility and lately AI. The department also keeps offering training, workshop, conference opportunities to faculty in the hope it will help them with their online teaching quality.

The DE department demonstrates its efficiency in different ways, such as pursuing continuous improvement, collaborating with partners, complying with the regulations, and facilitating faculty development, all with the aim of providing a high-quality online education for students.

Part 3: Outcomes

3.1 Overview of Outcomes

The DE department created administrative unit outcomes (AUOs) that matched its mission. The assessments had to be specific and measurable, so that the feedback from students, faculty and administrators could be seen. The outcome results could then help improve the services of the department. Four AUOs were made: focusing on diversity, equity, inclusion and accessibility; aiming for innovations and improvements; providing excellent customer services; and following college practices, district policies and regulations. The first AUO is important for checking the college's goal of helping students succeed, increasing access, and reducing equity gaps. The second AUO shows the department's value of creativity, which leads to innovation and improvement. The third AUP connects to the idea of meeting the needs of those served. Finally, because of the changing rules and policies in distance education, following them is essential to serve our students well. The evidence for these outcomes is in the Supporting Documentation part of this program review.

3.2 Administrative Unit Outcomes (AUOs) - Initiatives

3.2.1 Assessment History

AUO 1 Assessment Results

AUO Language:	Prioritize Diversity, Equity, Inclusion and Accessibility
Target:	N/A
Assessment Method:	Assess College Sub-population of Online Student Population Create Distance Education Accessibility Plan Implement the ZTC program pathway grant
Assessment Date:	Every two years
Recent Results:	Created a Performance Outcome Spreadsheet with sub-population of online students (e.g. age, gender, ethnicity, 1st generation, DSPS, etc.) Created and Implemented the Distance Education Accessibility Plan

AUO 2 Assessment Results

AUO Language:	Prioritize for Innovation and Improvements
Target:	N/A
Assessment Method:	# of LTIs developed Creation and adoption of SOP Manual Creation of FERPA template Create a Canvas Template Write API and Frontend Scripts Develop On-Demand Tutorials for Faculty and Students
Assessment Date:	Every two years
Recent Results:	5 Homegrown LTIs Developed 8 API Scripts to call on Canvas data 18 of Tutorial Videos 1 Cerro Coso Canvas Course Shell Template that includes Course Header, Footer, modules, cc email icon, services icon, tutorials icon

AUO 3 Assessment Results

AUO Language:	Strive to Provide Excellent Customer Services
Target:	N/A
Assessment Method:	Survey
Assessment Date:	Every two years
Recent Results:	Statewide Spring 2017 Faculty DE Survey Statewide Fall 2016 Student DE Survey

AUO 4 Assessment Results

AUO Language:	Ensure Alignment with College Practices, District Policies and Regulations
Target:	N/A
Assessment Method:	# signed FERPA agreements Creation and adoption of Copyright Handbook (collaborated with Library Department) Align documents with change in Title 5
Assessment Date:	Every two years

Recent Results:	16 FERPA agreement signed Version 1.0 Copyright Handbook (collaborated with Library) Update Regular and Substantive Interaction Contact Document (collaborate with Pedtech) Version 2.0 of Standard Operating Procedure Manual Adopted Version 1.0 of Student Data Privacy and Accessibility Compliance Agreement Template for LTIs Adopted by All Three Colleges Update Online Faculty Pedagogy and Technology Training Certificate Program Curriculum to include CVC Course Design Rubric, AI, Equity and Accessibility (collaborate with faculty training and Pedtech)
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3.2.2 Evaluation of Administrative Unit Outcomes - plans to evaluation going forward

The DE Department has chosen four AUOs as its primary indicators for this first program review. These AUOs will help evaluate the department's operations and services and identify what is working well and what needs to improve. The department will use these AUOs to monitor progress and guide strategic planning efforts, helping the department to assess its performance in key areas and make informed decisions to improve its services.

Data analysis is an important part of the assessment process. It involves metrics such as student enrollment, success rates, retention rates, number of tool or platform adoption, and feedback from faculty and students. These insights will give useful information on the quality of online education experiences and the effectiveness of support services provided by the DE department.

Reviewing department outcomes is essential to know how to improve. The AUOs created during this review will be useful benchmarks to find strengths and weaknesses in the Distance Education Department. They will provide a structure for measuring progress and informing strategic decisions.

3.3 Planning

3.3.1 Planned Assessment Cycle for AUOs

The table below outlines the assessment readiness schedule of the Distance Education department AUOs ahead of its next program review.

AUO Assessment Cycle

	FA 2024	SP 2025	FA 2025	SP 2026	FA 2026	SP 2026	FA 2027	SP 2027
AUO 1				x				x
AUO 2	x				x			
AUO 3			x				x	
AUO 4		x				x		

Part 4: Program Evaluation and Looking Ahead

4.1 Program Evaluation

The DE Department at Cerro Coso Community College is committed to enhancing the quality of online learning. Through regular reviews and collaborations with various committees and departments, the

department continuously seeks ways to improve the online learning experience, particularly for Canvas courses. Offering an abundance of support and resources, including technical assistance, professional development opportunities, and accessibility tools, the department strives to meet the diverse needs of faculty and students.

Despite facing challenges such as limited resources, budget constraints, and technical issues in managing and maintaining technology infrastructure, the department demonstrates remarkable adaptability and innovation. The department's dedication is evident in its ability to navigate these challenges while staying informed of changing trends and technological advancements in online education. Additionally, the department prioritizes encouraging collaboration and forming partnerships to address the evolving needs of its service recipients, with inclusivity being fundamental to its efforts.

Areas for improvement include addressing differences in access and success rates among different student groups, improving support services for underrepresented groups, and increasing outreach efforts to encourage participation and engagement in distance education courses. Additionally, ongoing professional development opportunities for staff members will be important to ensure they stay updated with best practices in coding when developing in-house LTIs and tools. Despite these challenges, the DE Department has shown flexibility and resilience in serving the varied needs of its user group. By focusing on building on strengths and addressing areas for improvement, the department is ready to continue making significant impacts on the college community, ensuring an inclusive and supportive learning environment for all.

4.2 Goals and Strategies

The DE department goals and actions for the short-term (two-year) and long-term (five-year) periods are consistent with the department's mission and vision for the future.

4.2.1 Two-Year Goals/Strategies

Over the next two years, the primary focus will be to establish solid foundations, nurture growth, and take specific actions to address current challenges. Firstly, the plan emphasizes scaling of existing LTIs and creating new ones to enrich the educational resources available to both faculty and students. The development of new LTIs will be guided by observed demand and faculty requests, ensuring efficient allocation of resources to meet the changing needs of educators and learners. This effort aims to enhance the educational experience within the college and partner high schools. It involves setting up databases and dashboards on the college's server infrastructure to ensure data control, security, and confidentiality, thereby reducing risks associated with external platforms.

Secondly, the implementation of ZTC program pathways is highlighted as crucial for promoting access and equity in education. This initiative stems from the successful application for the ZTC grant, aimed at making college education more affordable for students, supported by California and the California Community Colleges system. By offering cost-effective educational options, the aim is to lower financial barriers for students from diverse socio-economic backgrounds, aligning with the mission of fostering student success and inclusivity.

Lastly, the plan emphasizes the development of Tableau Dashboards tailored to the college's server databases to provide actionable insights for informed decision-making. These dashboards offer visibility into key performance indicators, academic trends, and resource allocations, supporting strategic

planning efforts across the institution. By integrating databases into Tableau, access to a wealth of data is gained, addressing a longstanding challenge and empowering decision-makers to make well-informed choices based on comprehensive analyses.

Below are the three 2-year strategies outlined in the plan along with their respective action plans:

Action Plan for 2-Year Strategy 1

Concise Description of Strategy	Scale Existing and Develop New Web Applications
Measurement of Completion	Launch five LTIs on LTI development roadmap, including OER Repository LTI (version 3.0), Drag-and-Drop Course Content Builder LTI (1.0), Popup Message LTI (version 4.0), Futura LTI (version 2.0) and POCR CVC Rubric Feedback LTI (version 1.0).
Timeline	Within two years
Responsible Person	Director of Distance Education

Action Plan for 2-Year Strategy 2

Concise Description of Strategy	Implement the ZTC Implementation and Acceleration Grants
Measurement of Completion	Start offering the following POCR-certified ZTC online program pathway. <ul style="list-style-type: none"> • English Degree Program • Child Development Degree Program • Four Child Development Certificate Programs • Social and Human Services Certificate Program Launch the OER Repository LTI, Drag-and-Drop Course Content Builder LTI, and POCR CVC Rubric Feedback LTI.
Timeline	Within two years
Responsible Person	Director of Distance Education and ZTC Faculty Coordinator(s)

Action Plan for 2-Year Strategy 3

Concise Description of Strategy	Develop Tableau Dashboard(s) for Cerro Coso Server Databases.
Measurement of Completion	Ability to visualize and connect data from the CAMS database, student Banner data and Canvas data.
Timeline	Within two years
Responsible Person	Director of Distance Education

4.2.2 Five-Year Goals/Strategies

In the next five years, the DE department's strategic goals extend beyond immediate needs, emphasizing long-term viability, creativity, and adaptability. By reviewing usage and demand data, the department identified a potential increase in LTI usage due to capabilities that basic Canvas functions cannot provide. This data also highlighted a growing trend toward using multiple methods and devices to access student online courses, including the Student Canvas mobile app. Notably, not all current LTIs are available through the app, posing additional equity issues for students who can only afford to use mobile devices to access their online courses. In coming up with these five-year goals, the department

aligned its strategies with the college's mission of maximizing student success, increasing access, and closing equity gaps.

As a progression in innovation and technological advancement, the first five-year strategy involves transitioning the college's in-house developed LTIs from PHP to Python. This shift to Python brings numerous advantages, ensuring a promising future for the department applications. Firstly, Python's versatility spans beyond web development, accommodating emerging technologies like AI. Secondly, its clean syntax and extensive library support streamline development efforts and enhance code readability, fostering the creation of more maintainable applications. Additionally, Python's robust community offers many resources, tutorials, and frameworks, simplifying development processes. Transitioning to Python also supports the creation of dashboards with databases hosted on the college web servers, offering improved performance and security.

Tying into this progression, the second five-year strategy is crucial to our commitment to technological innovation and student accessibility. It focuses on developing Canvas LTI tools that seamlessly integrate with the Canvas student and teacher mobile apps. This initiative emphasizes the importance of Python's cross-platform capabilities, enabling programming across various platforms and ensuring the college tools are accessible to all students, regardless of their device.

Building upon the foundation laid by the first two strategies, the third five-year strategy involves exploring the development of an in-house Canvas simulation LTI, which requires a versatile programming language. This project presents an opportunity for significant transformations, necessitating strategic thinking, collaboration, and decisive actions to realize the department's future vision. Python's flexibility and extensive library support make it an ideal choice for this project, facilitating the development of a robust and scalable simulation tool that can enhance the learning experience.

Below are the three 5-year strategies outlined in the plan along with their respective action plans:

Action Plan for 5-Year Strategy 1

Concise Description of Strategy	Evaluate the programming competencies of the web developers, find any skill deficiencies, and provide training to standardize their programming language. Switch the college's web-based applications from PHP to Python.
Measurement of Completion	All current and future in-house LTIs and web-based applications will be written in Python.
Timeline	Within four years
Responsible Person	Director of Distance Education

Action Plan for 5-Year Strategy 2

Concise Description of Strategy	Develop Canvas LTI tools that integrates with the Canvas student and teacher mobile apps.
Measurement of Completion	Launch the Popup Message LTI and other in-house LTIs in Canvas student and teacher mobile apps.
Timeline	Within five years
Responsible Person	Director of Distance Education

Action Plan for 5-Year Strategy 3

Concise Description of Strategy	Explore the development of an In-house Canvas simulation LTI.
Measurement of Completion	Pilot an in-house simulation LTI.
Timeline	Within five years
Responsible Person	Director of Distance Education

4.3 Program Needs

The DE Department has identified requirements for sustaining and enhancing the department's effectiveness, quality and innovation, in step with the future goals and actions that this review proposes.

4.3.1 Program Dialogue

Having bi-monthly meetings and updates on specific projects will enable staff members to communicate honestly and work together on various parts of the department. Staying involved in college committees, external committees like PedTech and Cerro Coso POCR, and the wider online education community such as the KCCD Canvas Admin Meeting, California Community College Distance Education Community Organization (CCC DECO), CVC Consortium, and CCC Common Course Management System (CCMS) Advisory Committee, also promote cooperation and innovation.

4.3.2 Staffing

The department will concentrate on making the best use of the available resources to fulfill department needs efficiently, since there is no intention to hire more staff soon after the latest hire in March 2024.

4.3.3 Professional Development

In the next five years, the professional development goals of the DE Department will focus on enhancing the programming competencies of web developers, identifying any skill gaps, and providing targeted training to standardize their programming languages. Given the increasing relevance of Python in artificial intelligence and its advantages over PHP, it is recommended to consider transitioning the College's web-based applications from PHP to Python. Python aligns with the future of technology, offering enhanced security, better performance, and greater versatility, which will future-proof the College's technological infrastructure, particularly as the department consider the development of tools for mobile platforms.

To keep pace with the rapidly changing field of educational technology, the department should maintain its involvement in conferences such as the Online Teaching Conference (OTC) and InstructureCon. Furthermore, joining the IMS Global Learning Consortium (IMS Global) will provide a supportive network for staying informed about LTI standards and emerging web-based application technologies. Membership in IMS Global will also offer web developers access to advanced LTI training, opportunities to share ideas with LTI developer experts, and updates on the latest LTI standards and technologies.

Moving forward, the DE department is committed to providing ongoing professional development opportunities that emphasize innovation and collaboration. Additionally, the department wants to explore potential opportunities for staff members to present the tools they have developed at conferences, thereby advancing online education and technological progress at the college.

4.3.4 Technology

One way to improve security for LTI development is to increase server space, which will enable data and tools to be separated into different compartments. Additionally, keeping a subscription to Tableau developer tools will help with connecting to databases for visualization purposes. Developers also asked for a TinyMCE application subscription to assist in making formatted content with an easy-to-use interface.

4.3.5 Safety and Security

Canvas, LTIs and the department web servers need KCCD IT's ongoing support to stay secure and protected as internal tool development expands. Being an institutional member of IMS Global will provide useful opportunities to learn from other community members about their approaches to keeping LTI development secure and protected, especially as the department creates more internal LTI tools.

By meeting these operational and service needs effectively, the DE Department can improve its online education quality and promote innovation, cooperation, and diversity.

Part 5: Supporting Documentation