Effective Practices for Online Tutoring

For Discussion at the March 2019 Area Meetings

The Transfer, Articulation, and Student Services Committee 2018-2019

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Introduction

As institutions of higher education seek to support students through innovative learning and teaching methods, many colleges have begun to investigate the opportunity to provide tutoring through distance education formats. Student success support is not limited to face-to-face interactions within the classroom. As awareness of online tutoring and its role in supporting community college students increases, many colleges have set goals to eliminate barriers in providing student success support by implementing effective practices for online tutoring programs.

Shifting demographics within the state of California and more specifically within the California Community College (CCC) system has created a need for equitable solutions for the success of our students. Students who enter our institutions should be afforded the same level of support whether they enter virtually or in-person. The development of the Online Education Initiative (OEI) has sparked great interest and collaboration within the system to support students' successful completion of courses by using online support services such as online tutoring. The value of framing the need to innovate and reimagine the way we serve students in a continually adapting and evolving world of technology is equally important. We must meet the needs of *all* students who may have barriers to success, such as full workloads along with course commitments and other barriers impacting our diverse student populations. This paper examines multiple resources available for the development and use of online tutoring support.

How To Use This Paper

This document was created by the Academic Senate for California Community Colleges' (ASCCC) Transfer, Articulation, and Student Services Committee (TASSC) intended for academic senates to use as a guide for online tutoring considerations. It may also be used to assist community colleges with the development of effective practices for online tutoring programs. Information described in this paper may help to develop, enhance, and identify areas of both value and concern for online tutoring programs. As such, this paper contains multiple sections that include the following: 1) Accreditation and Online Tutoring, 2) The Value and Benefits of Online Tutoring, 3) Audiences for Online Tutoring, 4) Online Tutoring Skills and Practices, 5) Challenges and Parameters of Services, and 6) Recommendations for Practice.

Justification for the Paper

During the spring 2008 plenary session of ASCCC, the delegates representing the California community colleges passed the following resolution:

Resolution 13.04 Spring 2008 – Effective Practices for Online Tutoring Whereas, Distance education has become a significant portion of California community college offerings, and parallel and equivalent services need to be offered to all students;

Whereas, Online academic tutoring services for distance education students are being implemented across the state as online programs expand; and

Whereas, Tutoring services are an effective means of supporting students, and faculty are concerned with student success and academic quality;

Resolved, That the Academic Senate for California Community Colleges research and prepare a paper that addresses effective and non-effective practices for establishing online tutoring programs.

Following the resolution, the Online Education Initiative (OEI) workgroup began investigating online tutoring platforms and piloting effective practices in conducting online tutoring. In fall of 2012, the Counseling Library Faculty Issues Committee published the *Rostrum* article "Successful Online Tutoring Part I: Getting Started," which briefly discussed interest, need, and initial implementation strategies for colleges seeking to build online tutoring programs (Smith, 2012).

In fall of 2018, the charge of writing a paper fully addressing the changes, challenges, benefits, and effective practices of online tutoring was assigned to the members of TASSC. In response to the changing needs of distance education and the challenges of meeting the needs of our diverse student population, TASSC has also consulted with leaders in the field. The Association of Colleges for Tutoring and Learning Assistance (ACTLA) is developing a set of recommended criteria for online tutoring at the time of this paper's publication.¹ ACTLA's recommendations once published may be used to support this paper in assisting colleges and local senates seeking to build programs, procedures, and effective practices for online tutoring.

Accreditation and Online Tutoring

Institutional effectiveness is driven by a campus-wide effort to meet the needs of students via accreditation standards, and the growing interest in developing online tutoring programs could be an additional and viable campus resource for student success programs seeking to meet accreditation standards. According to the Accrediting Commission for Community and Junior Colleges (ACCJC), accredited institutions are most successful when curriculum, programs, and services foster student learning and achievement via data-informed program design, implementation, and assessment. There are two types of accreditation: institutional (evaluation of overall campus) and programmatic (evaluation of programs, courses of study, etc.). Both are important, as programmatic goals support institutional goals; thus, the development of an effective online tutoring program could certainly support a college's institutional goals. The ACCJC requires four standards as a framework to promote student success (2014):

- Standard I: Mission, Academic Quality and Institutional Effectiveness, and Integrity
- Standard II: Student Learning Programs and Support Services
- Standard III: Resources
- Standard IV: Leadership and Governance

The following paragraph highlights examples that an online tutoring program could satisfy for the aforementioned standards:

¹ For more information and documents, see ACTLA's website at http://actla.info/.

An effective online tutoring program's goals and outcomes should be aligned with the overall mission of the institution to ensure high-quality programming, evidence of student learning, and intentional use of resources (Standard I.A.1, Standard I.B.7). They should be designed using short- and long-term goals, learning outcomes, and a continuous assessment of services to uphold institutional effectiveness. This will lead to a highly successful comprehensive program review focused on student development and achievement. For example, colleges that can collect student demographic data (i.e., gender, age, major, course, enrollment status, units completed, degree goal, grade point average, etc.) and affective outcomes detailing students' feelings and attitudes of services (e.g., availability of tutors, program hours, validation, technology, etc.) have a greater likelihood of creating programs that meet their students' individual needs.

To support instructional programs and student learning, it is recommended that online tutoring services meet the needs of students via equitable access to tutoring and a continuous assessment of student progress, learning, and success, regardless of service location and delivery method (Standard II.A.7, Standard II.B.1). Moreover, in designing effective online tutoring programs, students should be viewed from an asset-based learning lens, which recognizes the skills and strengths of students. Further, this framework seeks to empower students by helping them understand and apply the knowledge and experience they bring to the learning session. This concept can help increase students' confidence and critical thinking, which promotes students viewing themselves as leaders and teachers in a transaction of learning, rather than merely learning content through a transmission of information (Metz and Bezuidenhout, 2017; Peacock and Cowan, 2016).

Human, physical, technology, and financial support are needed to ensure program success. Colleges must invest in training and technology that provides the greatest opportunity for successful development and implementation of services (Standard III.C.4, Standard III.D.16). When a college considers developing learning support services, it is incumbent on the college to ensure those resources are accessible and well-maintained, and are regularly evaluated for their effectiveness (Standard I.B.4). This should include developing resources for the program and students alike. For example, colleges can purchase software or use online platforms that support the short- and long-term goals of the online tutoring program. Additionally, colleges can proactively remove barriers that may prevent students from accessing the services. This equitydriven practice includes ensuring students have reliable wireless internet on campus and accessible computer labs with any necessary equipment for an online tutoring session, or opportunities to rent or purchase discounted tablets or electronic devices.

The hiring, development, and support of qualified personnel is also needed to create an effective online program. Tutors must be well-versed in the use of technology, subject matter, and tutoring strategies, such as building a welcoming and engaging online environment for students (Metz and Bezuidenhout, 2017). Periodic evaluations and training for personnel are important to ensuring the quality and standards of service. These standards and professional development opportunities must be aligned with the overall goals of the program and of the institution. More on training and professional development for tutors will be described later in this paper.

Supportive leadership is key for programming success (Standard IV.A.1). Campus leaders (i.e., boards of trustees, presidents/superintendents, vice presidents, deans, and faculty leaders) should be well informed of the tutoring program's goals, challenges, and achievements, as these individuals have access to financial, technological, physical/facilities, and social/networking resources that can aid in the advancement and continuation of tutoring services for students.

The Value and Benefits of Online Tutoring

Online tutoring provides benefits for all students, as well as for the institution and the faculty. As previously mentioned, effective online tutoring creates supplemental opportunities for students enrolled in all types of courses: face-to-face, hybrid, and online. These programs are an essential resource for community college students who largely commute to campus and have external factors that compete for their time.

Online environments for completion of courses, degrees, counseling, and tutoring are becoming more prevalent in higher education. The number of students taking online courses has increased dramatically in recent years. In fact, a U.S. News article reported that federal data from a study conducted by Babson Survey Research Group of more than 4,700 colleges and universities, found that more than 6.3 million students in the United States took at least one online course in fall 2016, a 5.6 percent increase from the previous year (Friedman, 2018). The article also states that this is the fourteenth consecutive year of reported growth in online enrollment. Similarly, distance education has nearly tripled in the California Community Colleges over the last 12 years. For example, a total of 860,283 unduplicated students enrolled in a distance education course during the 2016-2017 academic year compared to 328,372 during the 2005-2006 year (CCCCO, 2017). To support these students, colleges have increased their online services to include advising, counselling, and tutoring. A recent Community College Success Network (2015) tutor center survey found that 47 colleges offered tutoring through a learning center (83%), followed by online platforms (56%) or computer labs (56%), in comparison to the use of traditional classrooms (40%), multipurpose space (28%), or the library (15%). Because of this growing trend, learning centers have found it essential to incorporate technology and other online resources to adapt and meet the needs of students. Online tutoring allows students who have obstacles or barriers to receiving in-person campus assistance the equitable opportunity for success services beyond the boundaries of the physical campus space.

Online tutoring proactively creates opportunities to engage students in their communities using a myriad of access modalities (e.g., via phone, e-mail, or computer/video conferencing platforms). Similar to face-to-face learning assistance programs, online tutoring can help students enrolled in multiple courses from various disciplines. Online tutoring programs may assist students with various needs for course success, such as the development of ideas, organization of information, formatting of research papers, and preparation for exams, to name just a few activities. To achieve success in these areas, online experiences for tutors and students must be equivalent to face-to-face tutoring services. Tutor and student expectations for a successful learning session will be addressed later in this paper.

Audiences for Online Tutoring

The California Community College (CCC) system serves 2.4 million students at 114 community colleges. Many of these students commute to campus, work off-campus in part-time or full-time situations, and may have family or individual responsibilities that can often create barriers to success. These factors compete for students' time and can impact their enrollment decisions, their use of campus services, and their ability to succeed. To positively support students, many colleges have created various methods of course delivery, including traditional face-to-face classrooms, where students attend lectures in-person; hybrid or blended classrooms, where a specified number of course hours include online learning in addition to face-to-face attendance; and finally, online courses, where students do not meet in a physical classroom so that learning can be accessed anytime within any space. Online tutoring can be a flexible resource designed to support students within all of these course delivery methods.

As noted in our *Rostrum* article "Successful Online Tutoring," "The goal of online tutoring is to create a virtual tutoring environment for students that emulates a face-to-face experience which can help a student achieve success in a given class" (Smith, 2012). As such, online tutoring was designed to meet the needs of all community college students and these services are especially useful for the large numbers of community college commuter students and students with challenges or disabilities who are limited in their ability to physically access on-campus academic tutoring support. Therefore, online tutoring programs are responsive to the needs of all community college students for students to engage in support services outside of the physical space of the college campus.

Online Tutoring Skills and Practices

Effective skills and practices for both the tutor and the tutee² are critical in the success of an online tutoring program. The necessary skills and practices may vary depending on the college's needs and available resources, the type of platform or interface used, and the subject(s) being tutored. In this next section of the paper, descriptions of some basic roles, competencies, practices, and resources suggested for online tutoring will be given.

Online Tutoring Interfaces and Resources

Colleges have two major options for online tutoring interfaces and resources: 1) contracting tutoring services through proprietary online tutoring companies (such as NetTutor) and 2) training in-house tutors and making their services available using a technology platform (such as WorldWideWhiteboard or any other online conferencing platform).

When colleges consider or engage in requests for services from proprietary companies for tutoring interfaces, platforms, and resources, they are encouraged to research various elements of the services provided, such as the following: cost, content/subjects tutored, functions or availability of technology (e.g., chat, instant messaging, video, interactive whiteboards, file

 $^{^{2}}$ The term "tutee" is used by experts in the field of tutoring and learning centers, as synonymous with "the student" who uses tutoring services.

sharing, cell phone capability, etc.), customer ratings, tutor qualifications, available hours and days, synchronous or asynchronous³ options, and ease or user-friendliness.

Additionally, colleges in the development stage of an online program may need to investigate the available campus resources and existing learning or tutoring centers to assess the most effective means of providing online tutoring services for the campus. The following paragraphs provide an overview of the key components of proprietary companies, specifically NetTutor, along with an overview of the use of local or in-house tutors for comparison.

NetTutor Service

Currently, through the CCCCO California Virtual Campus - Online Education Initiative (CVC-OEI),⁴ California community colleges in the CVC-OEI consortium have access to a free systemwide license for the use of WorldWideWhiteboard, as well as access to reduced-cost licenses for the use of NetTutor. The CVC-OEI is

a collaborative effort among California community colleges to ensure that significantly more students are able to complete their educational goals by increasing both access and success in high-quality online courses. . . . Composed of high-quality online courses, resources for students, and technology, the CVC-OEI represents a comprehensive and collaborative program that leverages effective practices and technology to significantly increase the opportunity for higher education degree attainment in California. ("About OEI," n.d.)

NetTutor, the tutoring service currently available to CVC-OEI consortium colleges, is an online tutoring service provided by a company called Link Systems International (LSI). LSI selects and trains the tutors and delivers tutoring services through the WorldWideWhiteboard platform. NetTutor can be integrated with Canvas, a widely-used course management system among the CCC system; this integration enables students to have a single sign-on access to NetTutor, which means that they can access NetTutor services through their Canvas courses without having to go through an additional sign-in process.

NetTutor provides synchronous (real-time) and asynchronous online tutoring to students with trained tutors who have at least a bachelor's degree, have prior teaching and/or tutoring experience, work as full-time tutors, and have successfully completed a month-long training period. The NetTutor service is also accessible in the evening hours. The CVC-OEI and NetTutor have developed an Online Tutoring Handbook with recommendations for CCC faculty on how to encourage students' effective use of the service ("OEI Online Tutoring," 2018).

Again, the cost, content, available technology, consumer ratings, tutor qualifications, availability, synchronous or asynchronous options, and the ease of use are important aspects to evaluate when considering the use of any outside service for a local online tutoring program. Community

³ Synchronous is interactive, real-time communication between tutor and tutee. Asynchronous is interaction between the tutor and tutee that is time-displaced.

⁴ At the time of this writing, CVC-OEI is funded through a five-year grant that began in 2018. As vendor agreements are subject to change, it is possible that resources provided to consortium colleges by the CVC-OEI may be altered.

colleges are encouraged to discuss and decide which direction most effectively and efficiently meets the needs of the students and the campus overall in determining the use of a proprietary service versus the use of local tutoring services.

Local Service

As colleges engage in high-quality, low-cost options for serving students from diverse populations with varying needs, established learning centers may seek to build upon existing student services. Some community colleges have developed their own local online tutoring service or site to do this work (Appendix A). Colleges with such programs have identified and/or trained in-house tutors (e.g., staff/tutors already employed with the college or hired locally for campus tutoring services), who have had interest or who possess the technological skills to provide quality online tutoring sessions. These programs often provide a link or site developed for the online tutoring program at the local campus, making in-house tutors available for either for synchronous or asynchronous sessions.

Challenges to establishing in-house online tutoring programs will be addressed later in this paper. However, a resource to consult may be the CVC-OEI, which provides to its consortium colleges tutoring resources to augment other tutoring services that local colleges may have. The OEI-NetTutor site has multiple links to resources ("Tutoring," n.d.). Below are examples of services that are available through CVC-OEI:

- 1. A low-cost license⁵ to provide student access to NetTutor online, on-demand service, where students can connect to a live tutor.
- 2. A systemwide free license to access and use the WorldWideWhiteboard platform, which CVC-OEI consortium California community colleges may use for students, faculty, and staff to collaborate and tutor online.

Online Tutoring Center versus Online Resources

Some colleges make available to students an online tutoring center through an online tutoring service, site, or link accessible to students through the college's website, online course management platform, or registration management platform. Online tutoring differs from online resources in one or both of the following ways: 1) An online tutoring center will provide students fully online, on-demand, synchronous access to a live tutor, which differs from placing resources on a college website, where students access resources to help increase academic success without accessing fully online, on-demand, synchronous tutoring; or 2) Colleges provide asynchronous tutoring services, where students send questions or seek feedback or assistance with course content or concepts, and then wait for a tutor to respond at a later time; this differs from instructors or tutoring centers placing guides or helpful links or videos online to augment learning or course material, which is not considered online tutoring.

Video Conferencing and Campus Services

⁵ In the 2018 CVC-OEI agreement, consortium colleges have 500 free hours, after which they are eligible for a low-cost rate.

Video conferencing services may be leveraged to deliver tutoring, as well as other campus services; however, the logistics of using such services would need to be set up locally. Student access will also need to be considered, ensuring that all students have available free resources, such as computers, cameras, and any needed peripherals, such as audio devices/speakers or any other universal access equipment.

To support building an online tutoring program using whiteboards and video conferencing, CVC-OEI Consortium colleges have access to LSI WorldWideWhiteboard (as described above), and all California community colleges have access to CCCConfer/Zoom,⁶ a free systemwide account accessible by faculty and staff, which is effective for faculty-to-student online tutoring, for staff-to-student tutoring, or for student-to-student online group or one-on-one tutoring.

Additionally, when researching the availability of video conferencing for online tutoring, colleges may need to collaborate with the information technology department (IT) to evaluate and assess the internet capabilities and bandwidth needed to support video streaming on campus.

The Role of the Coordinator

When investigating and developing a plan or procedures for an online tutoring program, consideration of the required personnel, equipment, and space is necessary. One personnel role suggested as a key component of a robust learning center in addition to the tutor and tutee, either in an on-ground or online tutoring center, is a faculty coordinator; thus, thoughtful discussion and intentionality toward filling or leveraging an existing coordinator role is important.

One of the first responsibilities of an online tutoring coordinator may be to determine the operational framework and effective practices desired to meet the outcomes for the online tutoring program. The coordinator could be a faculty member or other professional already in place in another student service center or instructional department who desires or is deemed appropriate to lead an online tutoring program or could be a person solely intended to lead the campus online tutoring service.

If the college determines the need for a coordinator role, a starting point for the coordinator may be to assess the availability of resources and platforms, in collaboration with administration, academic senate, faculty, and any learning center staff available. Furthermore, the location and any physical space needed for the tutoring center (especially, if the center uses in-house tutors) or for students who need to access campus technology in order to use the online tutoring services should be considered. Challenges regarding implementation for the institution will be addressed later in this paper.

In making recommendations for designing the online tutoring environment, coordinators often work with staff, faculty and local senates, and administrators to consider the utilization of either or both of the following two types of online tutoring: synchronous or asynchronous. Both of these methods offer opportunities and challenges for students and staff. The asynchronous form of online tutoring entails interaction between the tutor and tutee that is time-displaced. Students submit their work and/or question(s), then wait for a response, usually given within 24-48 hours.

⁶ See https://www.cccconfer.org/ for more information.

Alternatively, synchronous tutoring occurs online during an interactive, real-time chat, often using a program that has on-screen video, file-sharing, whiteboards, or any other appropriate interface for communication with students of a variety of needs (Sabatino, 2014). Coordinating online synchronous tutoring time can become an added challenge for both the tutor and the tutee. For this reason, tutoring should be available at various hours to meet the demands of students' differing schedules, as well as the availability of the tutors. Moreover, the coordinator's role may include scheduling the tutors' working hours, if the center elects to use in-house tutors, and if using an outside company for services, the coordinator may monitor and assist tutees' use of the service and any in-house equipment, as needed.

The coordinator may also keep records and data to regularly assess and monitor the needs of the program, the students, and the staff/tutors. Effective programs develop and regularly measure outcomes in collaboration with faculty and staff or tutors, as well as ensure alignment with student equity metrics and institutional outcomes, which could be another responsibility of the coordinator.

The above descriptions are not intended to be an exhaustive list of responsibilities for an online tutoring center coordinator, nor an endorsement of any one role or service in particular, but rather an overview of some of the possibilities to begin campus discussions on effective practices for online tutoring.

Preparing the Tutee

Some necessary skills are required by the students, or tutees, in order to take full advantage of an online tutoring session. Aside from basic computer literacy, the student may need to be familiar with the program or platform being used, which may require either an introductory session with the tutor or a pre-session handout or video sent to the student through email or easily accessible via the online tutoring center's website (Metz and Bezuidenhout, 2017). However, proactive approaches are encouraged by providing welcoming and student-friendly on-campus orientations and/or online readiness tutorials or modules. Incorporating the completion of one of these preparatory sessions as a requirement before an online tutoring session often ensures a higher result of success for both the tutee and the tutor. Creating a list of frequently-asked questions or pre-session tips for students, whether in a handout or on a tutoring center website, is another effective practice for colleges to consider (Appendix B).

Many existing online tutoring platforms supported by proprietary companies have incorporated these practices as part of their site's offerings. However, whether it is an existing external interface or a homegrown site/platform, the tutee should understand the expectations of the required technology, internet access, and basic computer skills necessary to maximize the effectiveness of the online session. If students do not have the technological resources available at home or off-campus from where they may be seeking access to their online tutoring session, they may need to access the college computer labs; again, this should be communicated clearly to the student prior to scheduling an online tutoring session or making any online tutoring available.

The tutee should also be prepared to actively participate and contribute to the tutoring session. By giving the student an example of what is expected during a tutoring session, both the tutor and tutee will be able to make the most of the time they have together. According to researchers and experts in online tutoring (Stenborn, et al., 2016; Sabatino, 2014), the following could be used as general steps and structures to help guide expectations or an orientation for either the tutee and tutor before any online tutoring session:

- 1. To begin the inquiry process, the tutee/student should provide information about the assignment. (However, the tutor may also guide the conversation initially, especially in the synchronous format, to help identify the student's need.)
- 2. The tutee should explain any concerns with the assignment or skill that is necessary to complete the problem, assignment, or skill review. (However, the tutor and tutee are encouraged to determine the focus of the tutoring session together, if virtual time and space allows by engaging in an exchange or dialogue, accessing the student's prior knowledge, background, and skills.)
- 3. The tutee may ask questions or respond to feedback given by the tutor about the problem or assignment. (The tutor should also encourage open communication, while actively facilitating the critical discourse needed to conceptualize and engage the student in inquiry.)
- 4. The tutor and tutee may develop a plan for future revisions, course assignments, or skill practice.
- 5. The tutor may also guide the tutee in acknowledging the affective presence of feelings regarding confidence in the overall learning process by guiding the tutee through self-reflection to build the student's self-efficacy.

Training and Ongoing Professional Development for In-House Tutors

In addition to the preparation needed by the tutee, it is also important that the tutor, whether inhouse (employed locally by the college) or contracted/hired through a proprietary company, encompass the necessary skills to provide positive and effective online tutoring experiences for students.⁷ Effective interaction and collaboration for any type of tutorial cannot happen without the skillful support and moderation of trained tutors.

Colleges are encouraged to engage in conversations with constituency groups to set goals and priorities for staffing their online tutoring centers, as well as considering the financial and budgetary parameters of the college. Tutors hired by the college can be either paraprofessionals, faculty, staff, student/peer tutors, or those from an outside company.

Title 5 §58168 requires that student tutors have "received training in tutoring methods."⁸ To ensure success, the most effective tutors use multiple engagement strategies and rarely follow one single communication formula. Research suggests that effective online tutors often adopt both proactive and reactive strategies during tutoring sessions (Wong, et al., 2010). Highlyeffective tutors learn to be good judges of when to guide, when to facilitate, when to question,

⁷ Academic Senate for California Community Colleges *Rostrum* article "Supplemental Instruction Revisited" further describes all types of tutoring. See https://asccc.org/content/supplemental-instruction-revisited.

⁸ For more information, see the Chancellor's Office tutoring regulations document at

 $http://extranet.cccco.edu/Portals/1/AA/Credit/supplemental_learning_and_supervised_tutoring_regs_guidelines.pdf.$

and when to provide direct instruction. Proactive strategies include the tutor's ability to create a safe and comfortable learning environment for the tutee by making learning fun, being readily available, encouraging critical thinking, and teaching effective study techniques (Peacock and Cowan, 2016). They also approach the tutoring session attempting to ameliorate concerns by using a friendly and open social presence to reduce the distance between tutor and tutee "through effective use of communication conventions" (Metz and Bezuidenhout, 2017). In other words, skilled and well-trained tutors engage tutees in student-centered conversations using equity-minded language and positive verbal approaches to create a safe space for students to openly share their views, perspectives, and concerns.

Just like in any other tutoring situation (i.e., face-to-face sessions), effective online tutors, in both asynchronous and synchronous situations, actively work with tutees to identify what the students desire to learn and then allocate sufficient time to tutor. Any effective tutoring session is not merely teaching facts or solely giving information; instead, it is a productive session that should stimulate conversation, debate, opinions, and analysis of ideas. One common myth about online tutoring is that online tutoring sessions are significantly different from face-to-face situations, and although there are differences in the modality used for the session (i.e., communication through technology for online tutorials), effective online tutors use the same engagement strategies that face-to-face tutors use, especially social, cognitive, and pedagogical techniques to create positive educational learning experiences for students (Peacock and Cowan, 2016).

An effective online tutor, just as does a tutor in face-to-face sessions, aims to create a learning exchange based on an inquiry framework that provides a safe space for the tutee to work through intellectual challenges "to go beyond themselves in terms of their depth and breadth of understanding so into their zones of proximal development" (Peacock and Cowan, 2016). A successful tutor will help students move into learning experiences that foster intellectual growth and critical thinking, beyond just knowledge acquisition, which encourages the students to be thoughtful, insightful, and solution-oriented; this supports the students beyond the tutoring session when they conduct their own research and problem solve on their own.

Effective tutoring strategies should also include the tutor's ability to adapt to the student's pace, learning style, and interests. Effective tutors get to know their tutees and cater interactions to the students' individual needs as much as possible. For example, some students enjoy engaging in social interactions and are already highly-motivated to do so, while others feel more comfortable taking a more passive approach to a tutoring session. Either way, it is vital for tutors to communicate and keep track of their tutee's progress throughout the session. Moreover, some students are reflective learners who enjoy reading material, processing, and analyzing, and *then* discussing, while other students prefer learning while doing. Some tutors find it useful to give the tutee an initial learning-style assessment to decide on a particular tutoring approach that best fits the student's needs. However, it is important to note that the role of an effective online tutor requires these competencies that go beyond technological skills and that encompass a complex skill set, as briefly described in this section.

Scaffolding, Digital Badges, and Videos

There are a variety of tools and resources that colleges may adopt when structuring a local or homegrown online tutoring program, and professional development, just as it is for proprietary companies' tutor training, is certainly a key component for ongoing training of any local inhouse tutors. The following concepts are just a few of the many professional development opportunities and structured frameworks that may help shape effective training for local online tutoring:

Scaffolding

When creating an online tutoring program, designing a structure of how guidance is to occur between the tutor and student is suggested; one method is known as "learning scaffolds" (Feng, et al., 2017). Successful scaffolding for an online tutoring session can be divided into target categories: social, teaching, and cognitive. Although all three targets can and should be utilized throughout the online tutoring session, the beginning of the session could focus primarily on developing a social presence. This may involve training a tutor to present a welcome or introduction, showing a tutor how to engage in online discussion etiquette using equity-minded language, and providing examples of positive motivational comments a tutor can use for a student's progress and efforts (Stenbom, et al., 2016).

Additional training on the mid-phase of an online tutoring session could focus on the tutor's teaching presence. This includes training tutors how to focus on the assignment and study material, how to provide learning support for the tutee, and how to explain the connections between the learning activities and the learning objectives. Lastly, effective training for the final phase of a tutoring session may focus on the cognitive presence provided by the tutor during a session, which can be reached by providing examples and models to tutors of how to guide students through self-reflection, exploration of the student's own thinking and practice, and showing tutors how to check for understanding during and at the end of the tutoring session.

Digital Badges

Another effective method of ongoing professional development and training for online tutors is the use of digital badges. The term "digital badges" dates back to 2010 (Gibson, et al., 2015) and describes the virtual acknowledgement of skills and competencies that a tutor may attain. From the perspective of online tutoring practices, badges have the potential to motivate tutors, encourage reflection, and recognize skills that online tutors have acquired through practice (Hrastinski, Cleveland-Innes and Stenbom, 2018). An effective professional development process can be to create digital badges used as specific target goals for tutors to meet the needs of a particular campus, a particular student population, or a particular subject matter or discipline.

For example, digital badges can be earned when the tutor provides an example of a particular skill by submitting a copy of a chat discussion or transcript taken from an online tutoring session. The following are three of the many examples of digital badges that a tutor may earn (Gibson, et al., 2015):

1. A badge focusing on the tutor's skill to encourage discussion. The tutor may be encouraged to have conversations that emphasize discussion rather than direct instruction or lecturing. The tutor may ask questions and give students time to explain their ideas.

- 2. A badge encouraging reflection, where the tutor's conversations may include examples of a tutor's ability to initiate deeper cognitive reflection on what the student has learned.
- 3. A badge that focuses on the tutor's skill of providing social or emotional support, addressing the affective or the self-efficacy of the tutee, as well as awareness and validation of the variety of needs of students from diverse backgrounds. The tutor's conversations could illustrate encouragement that can help a student turn possible frustration into a productive dialogue.

This last badge described above may or may not be relevant, as some may argue that providing emotional support is not the role of a tutor, but recent research points to the importance and validity of the affective and emotional presence of the tutor in providing positive virtual environments for students (Stenbom, et al., 2016). Nonetheless, allowing tutors to acknowledge and build tutoring skills, while earning digital badges, can be a valuable training method, especially when involving the training of peer tutors (e.g., students hired by the college as tutors). This can be an effective and ongoing professional development opportunity for successful programs to encourage self-reflection for tutors, boost workplace motivation, and provide for the evaluation of quality assurance.

Videos

In effective educational settings, instructor or tutor-made videos can be used to supplement and reinforce previous instruction and aid students in mastering complex material. Supplemental video lectures can complement classroom lectures, illustrate how to think through and solve problems, provide clarification, or give students an opportunity to review at their own pace, and as often as needed for mastery of the material, content, or skill (Brecht, 2012). However, the use of videos that solely augment lessons or course content is not the same as providing an online tutoring environment.

Research, however, does show that watching a video of a tutor helping another student solve complex problems has been an effective tutoring practice. For example, when second-year physics students viewed a video of a simulated conversation between a student and tutor about quantum mechanical tunneling, they performed better on a post-test than others who had viewed alternative videos on the same topic in a traditional lecture format. Asking students to solve physics problems collaboratively while watching the video showed to be even more successful (Chi, 2013).

With continual evolving and advancing technology, such as mobile devices, faster computer processors, increased bandwidth, and easy access to free video streaming platforms, students have more opportunities to access virtual learning environments, and video creation is one of those opportunities that may make it possible for many more students with access to small digital video recorders, phones, or tablets to efficiently and effectively learn how to use online services. Video recordings can be relatively low-cost, easily shared additions to an online tutoring session to support students who may benefit from observing others learn. However, it is important for colleges to provide equitable opportunities to train staff and faculty on how to use video streaming platforms and video capturing technology, in addition to providing resources for tutors to model and assist students with accessing these types of devices and learning opportunities.

Overall, it is important to remember that in all types of online tutoring, whether synchronous or asynchronous, there should exist a set of established guidelines for structure, expectations, roles, responsibilities, and available training and ongoing professional development for use of the continually adapting technology for all, including tutors, faculty, staff, and students.

Challenges and Parameters of Use of Services

As California community colleges seek to meet the needs of diverse student populations, especially in efforts toward meeting the goals of the Chancellor's Vision for Success and the Guided Pathways framework that aim to support students toward degree and certificate completion, campus communities have begun to reimagine the way they provide services to community college students, and online tutoring is one of those emerging areas of expertise. Like with other relatively new program designs, innovation within the online learning environment comes with its own set of challenges. Colleges developing online tutoring centers might consider the parameters and possible barriers to creating, sustaining, and growing online tutoring programs.

Challenges to Effective Online Tutoring

In seeking input from established online tutoring programs across the CCC system, the following list was compiled to highlight some of the challenges that community colleges face and that others may want to contemplate and address if building an online tutoring program.

Institutional Challenges

- Limited funding may negatively affect the ability to start an online tutoring program or to scale-up an existing tutoring center.
- Ongoing resources are needed to support a robust online tutoring center.
- Institutions may need to invest in training for in-house tutors, staff, and faculty.
- Campus online tutoring programs could be seen as encroaching on an already existing student service, so colleges should be intentional about seeking input from other student service areas.
- Institutions will need to research and find user-friendly tools that are not cumbersome for either the tutor or the tutee.
- Online tutoring programs may need additional support from a full-time coordinator, either one from an existing campus student service area or one intended for the online program only.
- Lack of collaboration or communication with faculty who are teaching/lecturing in the courses from which the tutees are seeking help may be an issue.
- Slow or unreliable internet connections for either the tutor or the tutee could be a challenge in quality video conferencing, if used.
- Some dissenters may question the authentic learning happening in the virtual environment.

Tutor Challenges

- Tutors require advanced technological skills. Some colleges have tried using video streaming platforms and have had challenges with training in-house tutors on the use of the technology or the streaming platforms. Other colleges have opted to contract with outside companies, who have tutors trained in these technological skills.
- Tutors in synchronous environments will need to provide responses in a friendly, positive tone to establish a trusting relationship with the tutee. Training for social and emotional presence may be needed for tutors and should be ensured for any outside tutors from proprietary companies, so that feedback is constructive in every session for every student.
- Tutors sometimes find it difficult to engage the tutee in the online platform. The tutee may not actively participate initially, and therefore, targeted training for any in-house tutors on how to use engagement strategies will be needed and should be ensured for any outside tutors.
- Some colleges have limited hiring availability (for example, some colleges have been directed by their institutions to hire only peer tutors).
- Scheduling training for in-house tutors often proves to be an obstacle for centers, as many tutors have varying schedules that do not necessarily allow for extensive time or commitment to training, especially when tutoring programs employ peer tutors who are full-time students. Training for tutors hired from an outside proprietary company should not be needed by local institutions, but institutions may need to research the training completed by outside tutors to ensure quality.

Tutee Challenges

- Students may encounter limited hours for services, especially if the college is using inhouse tutors, who are only able to offer tutoring when the center is open; no late night or weekend hours may be available.
- Response time in asynchronous tutoring sessions may be lengthy for some students.
- Students may need to enter cumbersome data into the online platforms (e.g., math or science problems).
- Synchronous tutoring could be limited to vocal discussions, especially if the college is not intentional about providing accessible services and platforms for all students, including those with hearing impairments or other specialized needs.
- Students may not have a choice between asynchronous or synchronous tutoring. With some proprietary companies who provide online tutors for community colleges, not all of their courses adhere to a synchronous format; some subjects are tutored in asynchronous sessions, while other subjects are tutored using a live whiteboard that directly connects tutors and tutees.
- Some colleges have set maximum hours for the use of online tutoring services for students to avoid bottlenecked days, especially at peak times of the semester (i.e., finals, midterms, end of the semester).
- Students may visit the center's website, but never follow through on asking for an appointment or using the service.

Parameters of Use of Services

Confidentiality

When considering the parameters of an effective online tutoring center, close attention to confidentiality is needed. Colleges may need to develop language appropriate to training tutors on the level of confidentiality needed when working with tutees, such as keeping secure students' names, identification numbers, course grades, or any other personal information to which the tutors have access or that the tutees may share with the tutor. Sensitivity to emotional or personal issues should be discussed in tutor training sessions and clear procedures and parameters may also need to be developed for both the tutee and the tutor. The tutor may need to know the reference location and phone numbers with which to provide students, such as the campus health and wellness center or when to contact an administrator on a serious concern regarding a student's safety and well-being.

Plagiarism

Another vital practice for effective online tutoring is to ensure that tutors understand the necessity in guiding tutees in the learning exchange and not doing the work for the student. Moreover, coordinators and staff of online tutoring programs should provide both tutors and tutees with the college's plagiarism policies to ensure academic integrity.

Log-In Systems and Use of Services

Development of a clear policy and procedure on how students log-in and use the service is another essential practice for successful online tutoring programs. Some colleges use sign-in sheets if students are using on-campus labs or borrowing college technology/computers, while others have online scheduling management systems that can be used from any location. To support all enrolled students and capture data, most colleges use student identification numbers to log students into their online services. Centers may also need to consider parameters and policies for which type of work or assignments students may seek help. That is, is there consideration for allowing students to use the campus service for courses or activities beyond which they are currently enrolled? For example, some colleges have considered other types of support for student needs, such as writing scholarship essays or personal statements for transfer.

Drop-Ins, No Shows, and Cancellations

As an effective practice, tutoring centers provide options for tutoring sessions, such as appointments or drop-in availability. Drop-in hours may be posted on college websites, noted in the college's learning management platform, or emailed to the general student population, along with the center's available hours for appointments. Some colleges develop policies for cancelling appointments; that is, colleges may limit how many appointments a student can cancel and in what time frame (e.g., how many hours before the appointment start time), so as to monitor conscientious scheduling practices by the students. Effective practices also include ensuring that students are aware of any established late arrival or no show policies for online tutoring sessions. These parameters should be clearly communicated to the students, either on the center's website or in a pre-session communication or both.

Americans with Disabilities Act (ADA) Compliance

Community colleges must have an understanding of the challenges students might encounter when utilizing their online services. Colleges must establish their online tutoring services with the goal of designing support for all students, including those with disabilities. According to Section 504 and 508 of the Rehabilitation Act of 1973, colleges are required to provide accommodations (based on a person's preference) and infrastructure (access of technology) that supports all students (US Department of Labor, 2019). Similarly, these laws were also adopted into California law. For this reason, colleges should design programs that include accessible software, telephones, websites, videos, and documents that support tutors and students who have vision, hearing, learning, attention, and mobility limitations. Moreover, effective programs should continuously monitor and assess their technology and services, and formalize procedures to maintain compliance. This approach will ensure programs are proactively prepared to support all persons, and are not reactive in redesigning or changing existing infrastructure, which can be costly and time-consuming. To ensure agreement with federal and state laws, colleges should consult with their Disabled Student Services and Programs offices when designing online tutoring programs.

Conclusion

The California Community Colleges serve a diverse group of students with a diverse range of needs. To help students achieve their goals, programs and services must be aligned with systemwide initiatives, informed by data-driven pedagogy, and assessed regularly to ensure student learning and achievement. This paper sought to inform community college stakeholders on effective practices for online tutoring. As research continues to grow in this field, so too, should programs and their development of services aimed at supporting students both inside and outside of the classroom.

RECOMMENDATIONS FOR PRACTICE

Below are recommendations for the Board of Governors to consider for the support of online tutoring programs:

- 1. Investigate a systemwide purchase of NetTutor or some other platform through the CVC-OEI.
- 2. Ensure an adequate number of hours for all colleges beyond the consortium colleges' allotted 500 free hours for online tutoring services.
- 3. Expand Disabled Students Program and Services (DSPS) accessibility for online tutoring services through the state budget process.

Below are recommendations for community colleges to consider when developing effective online tutoring programs:

- 1. Design programs with input from the campus community.
 - Solicit feedback from students, staff, administrators, and faculty as an important step to ensure online tutoring programs are designed to support the campus community.
 - Collect recommendations from various stakeholders through online surveys, listening sessions, or a combination of the two.
 - Research and discuss the available resources, budget, facilities, and technology with the appropriate campus leaders.
 - Explore scaling-up an existing learning resource or tutoring center to include an online tutoring component, along with also investigating the use of proprietary companies for tutors.
 - Compare and discuss the viability of in-house tutors, being mindful of training and ongoing professional development needs.
 - Keep students' needs and accessibility as a focus and foundation in decision making.
- 2. Collect data and assess services to improve effectiveness.
 - Online tutoring can create opportunities to electronically document students' prior knowledge, areas of difficulty, and progression of learning. For example, programs can measure effectiveness with pre- and post-assessments that ask about the scaffolding and delivery of information.
 - Data can be collected from multiple students and may help guide conversations and collaboration with course instructors to develop classroom interventions for content delivery and successful learning outcomes.
 - Utilizing data-driven tutoring models also supports community colleges' initiatives, which seek to improve student retention, completion, and success.
 - Community colleges can also use student data to market tutoring programs, improve technology services, increase access and engagement, track student learning, and create professional development opportunities for faculty and staff.

The following are examples to consider when collecting and assessing data:

- Who are the students seeking help? (Collect demographic data, name, student identification number, course, instructor, section number, time in/out, activity/assignment type, etc.)
- How, when, how often do students seek help?
- How did the student hear of the center? Who is referring students to the service?
- What are the student's experiences regarding the service? (Use of this data should be carefully considered, so as to avoid evaluation unless agreed upon or contractually approved)

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APPENDIX A

California Community Colleges with Online Tutoring Programs

- De Anza College's Writing and Reading Center has an institutional contract with Smart Thinking (enrolled students may access up to 5 hours of tutoring per quarter): https://www.deanza.edu/studentsuccess/onlinetutoring/
- Santa Rosa Junior College uses vendor NetTutor, aligned with Canvas access and available through the student's portal: https://de.santarosa.edu/free-online-tutoring-srjc-students-0
- Long Beach City College uses CCC ConferZoom, accessible through the Canvas course management platform: https://www.lbcc.edu/tutoring
- Chabot College is using CCC ConferZoom for online tutoring: https://www.chabotcollege.edu/learningconnection/ctl/FIGs/tutoring/onlinetutoring.asp
- College of the Canyons provides a faculty resource on a distance learning webpage for CCC ConferZoom: https://www.canyons.edu/Offices/DistanceLearning/Pages/ConferZoom.aspx
- Some colleges use popular online resources for asynchronous tutoring/teaching videos, such as Khan Academy and YouTube.

APPENDIX B

Below is a list of helpful tips and recommendations compiled by the Transfer, Articulation, and Student Services Committee to possibly use for a tutoring center webpage or a pre-session handout for students/tutees to have a successful session:

Do's and Don'ts for a Successful Session with Your Online Tutor

- Participate in a tutoring session early in the semester. Seek assistance immediately after you first begin to experience difficulty in the class. Seeking tutoring the day before an exam or when you feel that you are in danger of failing may be overwhelming, so start early.
- Test your technology. Be ready with a webcam, speakers or a headset, or any universal technology you may need (if applicable).
- Choose a comfortable and safe location. Prior to starting your session, plan ahead and choose a quiet location that allows you to concentrate and hear and communicate with the tutor. You may also use campus computer labs, so check for availability.
- Read all pertinent material and try to work all parts of the assignment prior to the tutoring session. This allows you to ask specific questions and pinpoint exactly where you may have difficulties.
- Gather all your course materials. Have at hand the course textbooks, notes, assignment guidelines, syllabus, and other relevant information.
- Set reasonable goals about what can be accomplished. It may not be possible to get answers to questions based on an entire semester's worth of material in one tutoring session.
- Be patient (particularly during busy times, such as midterms and final exams).
- Assume responsibility. Asking for help and guidance is what a strong college student does, but it is the tutor's role to help and guide you, not to do the work for you.