Short Title	Technology-enhanced classrooms
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3. **Department**	Online Learning and Educational Technology (OLET)
4. **Please briefly describe your idea**	I propose that we create 5-10 Technology-Enhanced Classrooms (TECs) that fosters an engaging and interactive student-centered experience for in-person, remote/online. The infrastructure for many classrooms includes baseline technology (desktop podium and LCD screen). If we intend for strategic enrollment management efforts to result in increased enrollment, we must prepare our instructional spaces now to address and/or meet the changing needs of a diverse community of learners. Recent student surveys indicate there is an increasing demand for multiple instructional modalities. Faculty (including those participating in the HyFlex Pilot Program) have expressed frustration from the lack of even the basic technology in the classroom to interact and engage with students who need to participate remotely or online. If there is budget available, this request is to install tracking cameras in all classrooms while focusing on a smaller set for the TEC spaces that will include a larger curated list of equipment that offer seamless integration from one touch panel screen from the podium. There is a classroom on the 2nd floor of the ITC building that can be used as a reference.
5. **Indicate the strategic priority that this project supports. (check all that apply)**	Excellence in Teaching and Learning Diversity, Equity & Inclusion
6. **How does your idea support the College's strategic priorities?**	Achieving the goals of the college's Excellence in Teaching and Learning strategic priority will be more challenging without also taking next steps to improve the educational infrastructure of more classrooms and learning spaces across the campuses. The TEC Project will directly impact the work necessary to "Lead and support ongoing development and improvement of equitable innovative and responsive learning environments for students and employees." The concept of online, hybrid, or HyFlex learning is not new and has been around for over a decade. Technology Enhanced Classrooms will provide instructors with the incentive to be more intentional about how they structure their lessons and activities for both in-person, remote, and online students thus improving the overall quality of the student learning experience.
7. **What contribution would this project make to the Diversity, Equity and Inclusion Strategic Plan? How does it contribute?**	TEC classrooms supports and/or aligns with the following DEI strategic goals and priorities: DEI Strategic Theme: Eliminate student equity gap. This project has the potential to greatly reduce equity gaps by providing additional paths to access to instruction and engagement with instructors and peers via remote and synchronous online participation in courses. Goal 3.3.1 - Create and support instructional materials, resources, spaces, and environments that promote equitable and inclusive teaching and learning. Goal 3.3.2 - Assess existing materials, resources, spaces, and environments using the Standard for equitable and inclusive learning materials. Increasing the number of TECs moves us closer to building a stronger foundation for student learning at the college by implementing an infrastructure that will provide additional paths to access instruction and reduce/eliminate the barriers of effective use of classroom technology. In order to be successful, it will be critical to embed an equitable and inclusive lens throughout the planning and implementation of TECs.

8.	**What problem, need or gap in service will be addressed? What evidence is readily available to illustrate the need or support the goal(s) of the project? Please include links to data sources if known.**	The creation of TECs will be in support of the feedback/responses from the Spring 2020 Student Impact Survey that reported: 50.4% had prior online experience *45% preferred classes with both in-person and online components 44% preferred in-person 11% preferred online The creation of TECs must also be paired with continued efforts to solve the barriers of lack of stable internet connectivity in rural and underserved areas. Thanks to the great work of Tara Sprehe and the student services teams, hotspots are available in more areas. The program can be expanded in parallel to the new TEC spaces by allowing students to rent them each term. TECs will allow for a greater number of sections to offer remote/hybrid/HyFlex options and which will eliminate more students from having to commute longer distances in order to access the internet to attend class and/or complete assignments. Instructors are able to keep track of where students are struggling and to make the teaching-learning process more interactive. A hybrid/HyFlex approach gives Increased flexibility and more control to the students over the time, place and pace of learning. This flexibility often translates to increased attendance and participation in the classes. Sophisticated assessments and reporting is possible with comprehensive student evaluations, peer benchmarking facilities and granular reporting through the effective use of technology. Instructors can provide students with instant feedback with customized assessments, participation in live lectures, live chats with teachers are ways of providing immediate feedback to students that are very valuable for learning. TECs paired with effective use of the learning management systems, teacher – student interactions can be much more personalized and effective. Link to helpful article: https://edtechmagazine.com/higher/article/2021/05/making-hybrid-learning-happen-higher-ed
9.	**What is the benefit of this project (e.g. revenue potential, impact on student enrollment, retention, completion, etc.)?**	The impact TECs will have on the climate and culture of teaching and learning at CCC is not an event, it is a journey. Developing a toolkit, training, and support systems for faculty empowers and equips them to provide the best education for students, strengthening the school's brand and student experience. The following are a few examples of how the effective use of the right types of technology; guided by best practices and principles will impact enrollment and improve retention: Potential to expand student-student peer interactions and collaboration with students outside their immediate classroom (regionally and globally). Opportunity to incorporate professionals in industry, etc. to present and join the courses virtually. Increased flexibility: A hybrid approach gives control to the students over the time, place, and pace of learning. This flexibility often translates to increased attendance and participation in the classes. Sophisticated assessments and reporting: Comprehensive student evaluations, peer benchmarking facilities and granular reporting are all made possible through the use of technology and the LMS. Instant feedback to students (RSI) is possible with customized assessments, participation in live lectures, and live chats with teachers are ways of providing immediate feedback to students that are very valuable for learning. Opportunities for teacher – student interactions to be much more personalized and effective.
10.	**What activities will be proposed in the project?**	Create a rubric to help guide the final selection of equipment purchases and installations. Order and Purchase equipment. Coordinate installation and set-up with ITS. Release time for faculty for hybrid/HyFlex/online course development. Professional development and training for ITS and faculty members on the technology/software. Dedicated ITS staff to respond to tech support needs and/or maintenance. Develop an assessment and evaluation process to inform future rollout to additional classrooms.
11.	**Identify stakeholders who will likely be involved in**	Feedback and input is recommended from the following stakeholders/partners: Guided Pathways, student focus groups, Strategic Plan: Excellence in Teaching and

the project planning or delivery.	Learning Workgroup, The Center for Teaching and Learning Information Technology Services, and Online Learning and Educational Technology
12. How do you think success could be measured for this project?	Measurable indicators of success: Student enrollment increases/declines for sections taught in the TECs. Faculty surveys. End of term student assessments/evaluation. Track weekly reservation requests and utilization of TECs. Registration increases/growth in courses offered in TECs.
13. Describe the investment (time, funds, etc.) that would probably be needed to get this project off the ground.	Larry Rosenburg provided me with an approximate cost range for each classroom (based on the latest ITC room upgrade) of approx.: $50,000-60,000 for equipment and installation. **TEC Request 1-3 Classrooms $10k – 15k per classroom.** The TEC's will have more of a "basic" set-up (using ITC as a reference. The tech in that space is already being supported by ITS). The recommended equipment includes the following: - Crestron touch panel control system (integrates with/controls technology). 1 mounted camera with tracking (one facing the front of the classroom - IP Ceiling microphones and speakers (IP mics are required to integrate with videoconferencing via Zoom). - Wacom touchscreen monitor with pen (creating a podium dual monitor at set up) - Wireless bodypack microphone (lavalier or headset) - Wireless clicker w/ laser pointer Development of Job Aids/instructional materials. Timeline: I anticipate this project would be implemented in phases beginning with installation of Crestron control panels and cameras. The estimated timeframe relies heavily on the availability of the technology, delivery dates and the bandwidth of ITS to complete a full classroom installation. This could take up to 12-18 months.
14. Have you identified a grant or other funding source to help cover related expenses?	No
15. If yes to 14, please provide more information about the grant or other funding source.	
16. Beyond the start-up costs, is additional or ongoing funding required to maintain this project in the future? If so, please describe the costs (amounts, frequency, etc.) as well as if you have identified sources for ongoing funding.	Maintenance contracts would be required for some or all equipment. This may or may not be included in the initial purchase prices. Additional funding will be needed to support instructional design and online course development. Creating TECs will only be successful if they are informed by shared teaching and learning principles and best-practices reflected in the course design.
17. What level of urgency best fits your idea?	Short-term, needs to be explored within next 4-12 months
18. If you answered "other" in question 17, please describe.	

19. Please include additional information you would like to share:	
20. Please share any questions you have for the Innovation Team:	

Survey for this Innovation Fund request: https://forms.gle/zc2SD3P2uTsJy5Ua6