Shasta College

2018 Innovation Mini-Grant Application

Shasta College is committed to supporting innovation ideas that enhance student learning and success. As a result of the 2015 Governor's Innovation Award, there is now a designated fund (up to $100,000 per year for the next three to five years) to support faculty and staff projects that ultimately result in increased goal attainment for students. In accordance with the criteria for the Innovation Award, practices that enhance transfer and four-year degree completion while reducing time to degree are the highest priorities.

Please complete this application and submit it to the Office of Grant Development by February 28, 2018
For questions, please contact Amy Schutter, Director of Grant Development, at aschutter@shastacollege.edu or 242-7713.

Submitted by:	Katie Leach, Librarian. Jessica Tyson, Anatomy Instructor. Dr Rebecca Osborne, Anatomy & Physiology Instructor.
Division/Dept. Name:	Library
Project Name:	Virtual Reality
Project Overview	Please provide a brief overview of the project.

The Shasta College Library proposes purchasing a virtual reality (VR) station for students and faculty to use in the library and/or for checkout to use in classrooms. Virtual reality is an emerging technology tool that allows student to interact and experience the concepts they are learning in their classes. It also gives students in rural Shasta County a chance to experience museums, environments and monuments they would not otherwise have the opportunity to experience. For example, students would have the opportunity to learn about anatomy and environmental sciences using this immersive technology and "visit" a wide variety of destinations (including the international Space Station, museums and the moon). We will purchase educational experiences that align with curriculum and student learning outcomes based on individual class outcomes as well as institutional learning outcomes. Many educational institutions are adopting virtual reality as a learning tool. California Educator highlighted several elementary schools in Shasta County that are using virtual reality in the classroom. Supporting this initiative will allow Shasta College to join the community in adopting this valuable learning resource.

Student Impact	The main focus of the Innovation Award funds is to positively impact student learning and success. Please describe how your project will: • Improve one or more Student Learning Outcomes (SLOs) • Increase student engagement and/or success • Reduce the amount of time for a student to complete a Certificate, Associates Degree or Bachelor's Degree • Document measurable results (consult with the Research Office)

Virtual Reality provides meaningful and powerful educational experiences for students. As a result of the immersive nature of virtual reality, the student feels as if they are a part of the content they are experiencing. Thus, the experiences enhance the student's engagement with the concepts they are learning in class and

improve Student Learning Outcomes and student success. For example, if a student is learning about how blood cells work within the human body, they can experience this concept in the VR experience, The Body. This experience takes the student into the human body as a blood cell. Students virtually touch and experience how blood cells travel through the body in an interactive documentary program. This immersive way of learning allows students to better grasp concepts in a virtual environment when real-life or hands-on experiences are not an option. To document measurable results the library is partnering with Anatomy instructors, Dr Rebecca Osborne and Jessica Tyson to implement VR experiences and assess student learning through the use of virtual reality in their courses. Besides using VR in a classroom setting, such as anatomy courses, VR can support developing cultural awareness and empathy. In addition, transfer students may be able to take virtual campus visits to colleges of interest. Students often lack the ability to visit colleges they are interested in. Being able to visit the quad, attend a lecture and tour the facilities would increase their engagement in their future plans to transfer.

Collaboration	Mini-grant projects often involve collaboration between multiple divisions/departments and/or outside entities (K-12, CSU/UC, or community partnerships). Please: • List any internal and/or external collaborative partners • Confirm that the partners are aware of the project and what their role in implementation will be

If funding for this project is approved, Anatomy instructors, Jessica Tyson and Dr. Rebecca Osborne will be partnering with the library. The instructors will choose virtual reality experiences that align with their course curriculum. The library will be responsible for purchasing and downloading the experiences. The library will be the primary space for the VR statio n and a librarian will be available to assist the student in operating the technology. The library plans on purchasing a laptop to power the VR machine so that instructors and campus departments can easily borrow the technology and implement it in the classroom and/or campus events. Throughout the semester the instructors will integrate these experiences into their class instruction and assignments. At the end of the semester the library and instructors will analyze the use of the VR experiences and student performance on associated assignments (compared to previous terms where the technology was not available). The VR station could also be used by other departments on campus, such as Equity and Inclusion. Stanford Virtual Reality Lab is currently producing free experiences that are designed to help foster cultural awareness and empathy. In Stanford's VR program, students can experience the world as a different nationality, age, race, gender, ect...Stanford has released studies showing that this has a profound effect on empathy and behavior. Another program that is produced is We Wait, where students will be able to experience what it is like to be refugee. Another department that may be interested in the using the VR station in the future is the counseling department. Students can virtually visit college campuses they are interested in transferring to in the future.

Future Possibilities	The Shasta College mini-grants initiative provides the testing ground for innovative ideas to determine successful outcomes that may be used on a broader scale. Please discuss if the project is: • Replicable (easily shared with other campus programs) • Scalable • Cost-Effective (e.g., through number of students served; through District efficiencies increasing service to students; or if scaling up will prove cost-effective)

As interest grows, the library will expand the experiences offered. The library plan to purchase a wide range of experiences in the beginning to match Shasta College curriculum. The library hopes to partner with faculty members in each department to provide students with the virtual reality experiences they need to succeed in their courses. Many of the educational experiences are low to no cost. The BBC, PBS, National Geographic and other educational entities are providing free experiences for educators to download. The cost to increase our collection of experiences would be minimal. The library plans on purchasing a laptop to power the VR station, making it a mobile station that can be checked out by instructors or departments. The VR station would

be available for students to check out for use in the library. Housing the station within the library would provide easy scalability and an increase in partnership with departments throughout the Shasta College campus.	
Logistics	The mini-grant cycle—to include planning, implementation, and evaluation—is a maximum of 18 months (Fall-Spring-Fall), and all funding sources should be considered. Please confirm that: • The project phases can be completed within an 18-month cycle • No other funding sources are available for the project • A Budget Proposal form has been completed and is attached.
The Virtual Reality project will be easily completed within the 18 month timeframe. Once the technology is purchased and installed, the library will begin implementing it immediately in the Anatomy courses with Dr. Rebecca Osborne and Jessica Tyson. As of yet, no other source of funding for the Virtual Reality machines has been identified.	

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Research Office Signature	**Date**

	2/27/18
Dean or Supervisor's Signature	**Date**