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| **Plan Title** | EmpowerED Pathways -- Bridging the Digital Divide with OER and Personalized AI Assistance at Fresno City College |
| **Plan Description** | **Introduction:** The EmpowerED Pathways initiative is designed to dismantle educational and economic barriers faced by Fresno City College students by implementing a dual-approach strategy. This strategy integrates Open Educational Resources (OER) to alleviate the financial burden of textbooks and a Personalized AI Assistant to provide support akin to services available to students at more affluent institutions.  **Objectives:**   1. To facilitate the widespread adoption of OER materials by faculty across diverse disciplines, reducing or eliminating the cost of textbooks for students. 2. To develop and implement a Personalized AI Assistant that can provide academic and administrative support to students, tailored to their individual schedules and needs. 3. To bridge the digital divide by equipping students with digital literacy skills and access to cutting-edge technology, fostering equity in educational opportunities.   **Methodology:**   * **OER Integration:** Workshops and incentives for faculty to adopt and integrate OER materials into their curriculum. * **AI Assistant Development:** A collaborative process involving lead faculty, programming students, and potential contractors to build and train a chatbot using the OpenAI API, ensuring it can understand and respond to student inquiries effectively. * **Pilot Programs:** Implementing the chatbot within the "Connecting Minority Communities" pathway and the Web Developer degree, with further integration into the "Computer Programming Essentials" certificate program.   **Training and Fine-Tuning:**   * Utilizing tokens from OpenAI to train the AI Assistant with a vast array of educational interactions, ensuring it learns the nuances of student needs and questions. * Ongoing fine-tuning with the help of students and faculty to optimize the chatbot’s performance for academic and personal support.   **Outcomes:**   * Improved access to educational resources with a reduction in textbook costs. * Enhanced student support and academic performance through the use of the AI Assistant. * Elevated digital literacy among traditionally underserved student populations.   **Timeline:** A detailed two-year timeline will be established, outlining the development phases, training periods, pilot testing, and full-scale implementation across participating programs.  **Budget Overview:** A transparent financial plan covering OpenAI API usage, cloud hosting services, faculty reassign time, and additional resources necessary for the project's execution.  **Evaluation and Sustainability:** A robust evaluation framework to measure the project’s impact on student success and strategies for maintaining the AI Assistant and OER adoption post-funding period.  **Conclusion:** EmpowerED Pathways represents a transformative step towards educational equity at Fresno City College. By leveraging open resources and personalized technology, we aim to level the playing field for our students, enabling them to achieve their academic goals with fewer obstacles. |
| **Lead Institution** | Fresno City College |
| **Community College District** | State Center CCD |
| **Start Year for this plan** | 2023-24 |
| **Start quarter for this plan** | Q1 |
| **The funding year for this plan** | 2024-27 |
| **The number of fiscal years this plan with span** | 3 years |
| **Contacts** | Dennis Mohle, CIT Department, Business Division |
| **Acceleration Grants Program Plan**   1. **Proposed Program Pathway**   **1.1 Please provide the program pathway name below** | Business Pathway - Digital Equity and Access |
| **1.2  Please provide the program pathway TOP code below.** | 0708 |
| **1.3 Please select the program pathway award type from the list below:** | Degree and Certificate |
| **1.4 Is this a new or existing program pathway converting to ZTC?** | Existing |
| **1.5 If this is a new program pathway, does the program meet one of the following criteria?** | Yes |
| **2. For this program pathway, please provide the number of courses already available to students as zero textbook cost. To the extent possible, please identify the specific courses.** | none |
| **3. How many courses in this program will need to be converted to zero textbook cost to offer students a complete ZTC program pathway? To the extent possible, please identify the specific courses.** | Web Developer Degree:  Creating Websites  Intro to Web Development  Beginning Go language Programming  JavaScript  Client/Server Databases  Web Development Frameworks  Node.js  Web Development with the Go Programming language  Computer Programming Essentials:  Kotlin Programming (New, Spring ‘25)  LLM Programming (New, Spring ’25)  Java Programming  C++ Programming  Python Programming  Visual Basic Programming |
| **4. In which academic term are you planning to have the first course of the ZTC program pathway available for students to enroll?** | Spring ‘25 |
| **5. General Education (GE)**  **5.1 Please list the transferable GE courses that will be in the ZTC pathway program and provide links to any OER currently being used for these courses.**  **5.2 If there is a gap in general education courses, how will the college fill that gap?** |  |
| **5.2.1 (Other) If other, please explain in the space below.** |  |
| 6. Non-Duplication Efforts **6.1 What steps did the college take to determine that your proposed ZTC program pathway will not duplicate other existing ZTC program pathways, and if appropriate, please describe what is unique about your program pathway.** | To ensure the proposed Zero Textbook Cost (ZTC) program pathway – the Digital Equity and Access Program (DEAP) – does not replicate existing ZTC pathways, Fresno City College has undertaken the following steps:  **Comprehensive Review of Current ZTC Offerings:**   * Conducted an audit of all current ZTC program pathways available within the college and at neighboring institutions within the region. * Engaged in cross-departmental meetings to discuss current and upcoming ZTC initiatives to prevent overlap.   **Community and Regional Needs Assessment:**   * Performed a needs to identify gaps in ZTC offerings and specific needs of our student population, especially underserved communities. * Analyzed regional educational offerings to ascertain the uniqueness of our program in relation to other community colleges in California.   **Collaboration with Industry and Academic Partners:**   * Consulted with local industry partners to understand workforce needs and ensure that our ZTC program pathway aligns with current and future employment opportunities. * Partnered with four-year institutions to determine the distinctiveness of our ZTC offerings in the broader academic landscape.   **Distinctive Features of Our ZTC Program Pathway:**   * The DEAP is uniquely structured to serve the specific demographic of Fresno City College, which includes a high percentage of students facing socio-economic challenges, such as poverty, caregiving responsibilities, and former incarceration. * Tailored to incorporate personal-assistant chatbot technology, the program leverages cutting-edge AI to provide personalized support for academic and administrative tasks, emulating the resources available to students at elite institutions. * Integrates a strong focus on digital literacy and cybersecurity, areas identified as high-need fields within our community, thus preparing students for in-demand careers. |
| **6.2 How will the college prioritize using existing OER content in your ZTC program pathway to avoid creating additional, duplicate OER content?** | * Regularly assessing the effectiveness and coverage of OER materials used in our courses to identify any content gaps that may necessitate the creation of new resources. * Conducting periodic reviews of the OER landscape to update our strategy and incorporate new high-quality resources as they become available.   **OER Customization Instead of Creation:**   * Focusing on the customization and adaptation of existing OER content to fit specific course needs, leveraging tools that allow for the modification of open licenses materials, instead of creating new content from scratch.   By prioritizing the use of existing OER content, Fresno City College's ZTC program pathway will contribute to the collective effort of reducing educational costs and promoting accessibility, while ensuring that our resources are utilized in the most effective and efficient manner possible. |
| 7. Sustainability **7.1 Describe the college’s plan for sustainability of this ZTC program pathway after the grant funding is exhausted. Include how ZTC content will continue to be updated and available to students.** | **ChatGPT**  In addressing the sustainability of the ZTC program pathway post-grant funding, it's crucial to lay out a comprehensive plan that demonstrates the college's commitment to long-term maintenance and enhancement of the program. Below is an illustrative response that could be tailored to Fresno City College's specific context and resources:  **Sustainability Plan for ZTC Program Pathway Post-Grant Funding**  **Institutional Commitment and Integration:**   * Fresno City College will ensure the sustainability of the ZTC program pathway by embedding it within the institutional strategic plan, securing a commitment from the college administration to maintain funding for key program components after the grant period. * Integration of ZTC resources and practices into the curriculum development and review process to institutionalize the use of OER.   **Faculty Engagement and Development:**   * Continuing professional development for faculty focused on OER usage and course design to ensure that the expertise in creating and updating ZTC content is maintained within the faculty body. * Establishing a faculty-led OER committee responsible for the ongoing evaluation and curation of ZTC materials.   **Student Involvement:**   * Involving students in the evaluation process of OER materials to ensure the content remains relevant and engaging, thus fostering a culture of continuous improvement. * Creating student ambassador roles to promote ZTC courses and materials to peers, ensuring demand and support for ZTC courses remain high.   **Financial Planning:**   * Allocating a portion of the college budget each fiscal year to the maintenance and updating of ZTC content, ensuring there are dedicated funds available. * Seeking alternative funding sources such as partnerships with local businesses, community organizations, and ongoing grant opportunities to support the updating and expansion of OER materials. |
| 8. Collaboration **8.1 Does the college have a multi-member team working on zero textbook cost program pathway development?** | Yes |
| **8.2 Is the college collaborating with other colleges within the local college district?** | Yes |
| **8.3 Is the college collaborating with other colleges outside the local district?** | Yes |
| **8.4 Will the college collaborate with a CSU or UC to support transferability of the ZTC program pathway? (e.g., engage faculty reviewers from a CSU or UC to better support articulation.)** | Yes |
| 9. Budget **9.1 In the budget section, include the proposed budget for Program Pathway #1, up to $200K, by budget code.** | * 1000 (Instructional Salaries): $120,000 * 3000 (Employee Benefits): $40,000 * 4000 (Supplies and Materials): $1,500 * 5000 (Services and Other Operating Expenditures): $27,908 * 6000 (Capital Outlay): $2,900 * Indirect Costs: $7,692 |
| **Supporting Documents** | Ask Dennis Mohle for backup and supporting documents |