Perkins Award Grant — Grant Writer (3D Scanner Acquisition)

Dental Hygiene & STEM Department Interdisciplinary Collaboration

January 2026

In January 2026, I successfully authored and secured a Perkins Award Grant on behalf of the Dental Hygiene Department to support the acquisition of a 3D scanner. At the same time, the STEM Department received a separate Perkins Award Grant to acquire a 3D printer. These independently funded projects were intentionally designed to function together, creating an interdisciplinary collaboration that integrates dental healthcare education with advanced digital manufacturing technology.

As the grant writer, I identified the need for Dental Hygiene students to gain hands-on experience with emerging digital workflows increasingly used in modern dental practices. The Perkins-funded 3D scanner allows students to engage in digital impression capture, data acquisition, and technology-enhanced clinical processes. Scan data generated within the Dental Hygiene program is shared with the STEM Department, where their Perkins-funded 3D printer is used to fabricate custom nightguards and bleaching trays for Dental Hygiene students.

This coordinated use of resources reflects real-world professional collaboration between healthcare providers and technical specialists. Dental Hygiene students benefit from exposure to contemporary digital workflows, improved access to clinical appliances, and a deeper understanding of efficiency and technology integration within dental office practice. STEM students apply their skills in 3D modeling, materials science, and additive manufacturing to authentic healthcare applications, strengthening workforce readiness and applied technical competencies.

In writing the grant, I emphasized strategic alignment, sustainability, and shared impact. Rather than duplicating equipment, each department leveraged its Perkins-funded technology to contribute specialized expertise, maximizing the value of federal funds. This collaborative model supports innovation while ensuring responsible stewardship of Perkins resources.

The initiative also promotes equity and access by reducing reliance on external vendors and lowering costs associated with educational dental appliances. Producing nightguards and bleaching trays through this partnership provides timely, cost-effective instructional materials while creating meaningful experiential learning opportunities for students in both programs.

Overall, the Perkins Award Grant for the 3D scanner, combined with the STEM Department's Perkins-funded 3D printer, establishes a sustainable, interdisciplinary model that strengthens workforce-aligned education. This project demonstrates my ability as a grant writer to identify institutional needs, align funding opportunities, and design collaborative initiatives that enhance technical skill development, healthcare education, and cross-departmental innovation.