Goal 3: Workforce Development & Education
Develop a sustainable STEM workforce by creating a pipeline of STEM-trained students, educators, and workers while increasing public understanding of solar energy, water, and the environment.

Objective 1: Increase K-12 students’ awareness of STEM Opportunities and careers
1. Engage 1st generation college students in Nexus science
   Activity: Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) (Usinger, Cowherd)

2. Increase high school students choosing STEM careers
   Activity: STEM Investigation Program (SCIP) (Ewing-Taylor, Shih, Olson)

3. Prepare K-12 students for postsecondary STEM fields
   Activity: GEAR UP (Usinger)

Objective 2: Prepare students for internship opportunities with industry partners
1. Solar energy technical training for STEM students
   Activity: TMCC Solar Trailer (Brazfield)

2. Connect students with Nexus industry partners
   Activity: Industry Internships (Brazfield)

Objective 3: Increase graduate students completing Ph.D. and pursue careers in STEM
1. Enhance institutional commitments for undergraduate research opportunities
   Activity: Undergraduate Research Opportunities Program (UROP) (Mensing, Regner)

2. Online professional development for K-12 teachers on Nexus science
   Activity: K-12 Teacher Professional Development (Schrader, Vallet)

Objective 4: Promote careers in science with authentic undergraduate research experiences
1. Increase teachers that engage students in STEM
   Activity: Nevadans Really doing Solar (NERDS) (Ewing-Taylor)

2. Online professional development for K-12 teachers on Nexus science
   Activity: CyberNexus Website (Schrader, Ewing-Taylor)

Objective 5: Increase K-12 STEM teachers’ curricular knowledge and use of effective pedagogical strategies
1. Guide teachers and scientists in developing curriculum
   Activity: K-12 Curriculum Development (Schrader)

2. Disseminate on-line professional development and curriculum to geographically remote regions of Nevada
   Activity: K-12 Dissemination Methods (Schrader, Vallet)

Objective 6: Increase public understanding of on-line learning opportunities for students, teachers, and the general public
1. Deliver online learning opportunities for students, teachers, and the general public
   Activity: Davidson Academy Bilingual Online Peer Segments (STEM BOPS) (LaTournette, Schmidt)

2. Online professional development for K-12 teachers on Nexus science
   Activity: K-12 Teacher Professional Development (Schrader, Vallet)