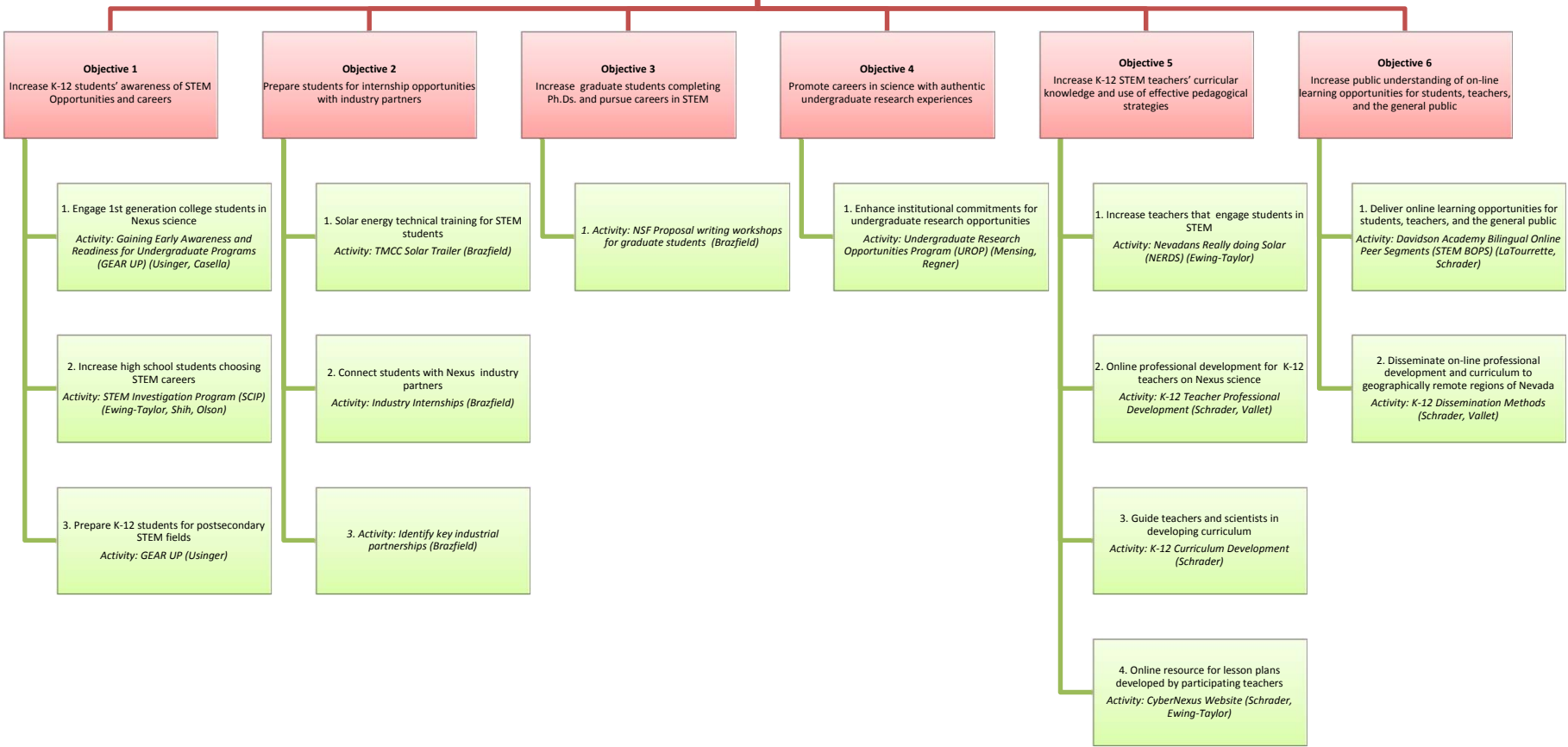


**Goal 3**  
**Workforce Development & Education**  
 Develop a sustainable STEM workforce by creating a pipeline of STEM-trained students, educators, and workers while increasing public understanding of solar energy, water, and the environment



**Objective 1**  
 Increase K-12 students' awareness of STEM Opportunities and careers

**Objective 2**  
 Prepare students for internship opportunities with industry partners

**Objective 3**  
 Increase graduate students completing Ph.Ds. and pursue careers in STEM

**Objective 4**  
 Promote careers in science with authentic undergraduate research experiences

**Objective 5**  
 Increase K-12 STEM teachers' curricular knowledge and use of effective pedagogical strategies

**Objective 6**  
 Increase public understanding of on-line learning opportunities for students, teachers, and the general public

1. Engage 1st generation college students in Nexus science  
 Activity: *Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP)* (Usinger, Casella)

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)

1. Solar energy technical training for STEM students  
 Activity: *TMCC Solar Trailer* (Brazfield)

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

3. Activity: *Identify key industrial partnerships* (Brazfield)

1. Activity: *NSF Proposal writing workshops for graduate students* (Brazfield)

1. Enhance institutional commitments for undergraduate research opportunities  
 Activity: *Undergraduate Research Opportunities Program (UROP)* (Mensing, Regner)

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: *K-12 Teacher Professional Development* (Schrader, Vallet)

3. Guide teachers and scientists in developing curriculum  
 Activity: *K-12 Curriculum Development* (Schrader)

4. Online resource for lesson plans developed by participating teachers  
 Activity: *CyberNexus Website* (Schrader, Ewing-Taylor)

1. Deliver online learning opportunities for students, teachers, and the general public  
 Activity: *Davidson Academy Bilingual Online Peer Segments (STEM BOPS)* (LaTourrette, Schrader)

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