Prison to Professionals STEM-OPS Mentoring Toolkit

Mentorship Program of Support by Fostering Enriching Mentor Experiences Through Innovative Initiatives

CONTENTS

FROM PRISON
— CELLS TO PHD —
INVESTING IN POTENTIAL
PRISON-TO-PROFESSIONALS

NSF

ABOUT US

STEM-OPS is an NSF Eddie Bernice Johnson INCLUDES Alliance working to improve science, technology, engineering, and mathematics (STEM) learning opportunities in prisons and supporting access to STEM (broadly defined) for those who are directly impacted by the carceral system.

ACKNOWLEDGMENTS

Author Team: Stanley Andrisse, Kelsie Becklin, Machli Joseph, Lana Mendis, and Mancy Thompson

This toolkit would not be possible without the vast knowledge of those who have started and those who have participated in these programs. Special thanks to the following:

Kyle Dudzinski, Tyrone Hall, Erik Escareno, Terrell Blount, Barry Pinkney, Mike Winans, Richard Elder, Kevin Taylor, Luke Grosvenor

Thank you to NSF for supporting this project.

For more information, please contact: Info@PrisonToPro.org

FOR MORE INFO

Contact From Prison Cells to PhD.

P2P STEM-OPS Mentoring Toolkit

Table of Contents

Introduction

Mentoring is a versatile practice, taking various forms and adapting to the unique needs of each pairing. STEM-OPS mentorship programming stands as a beacon of support, fostering enriching mentoring experiences through innovative initiatives. Developed in collaboration with esteemed partners Princeton University's Prison Teaching Initiative (PTI), Vanderbilt University's Initiative for Race Research and Justice (RRJ), and Operation Restoration (OR), and led by the industry-recognized thought leaders at From Prison Cells to PhD (P2P), this program aims to empower individuals pursuing careers in STEM fields, especially those impacted by incarceration.

The Power of Mentorship in STEM

Mentorship has proven to be a catalyst for success in STEM fields, offering guidance, support, and encouragement to individuals navigating these challenging career paths. Moreover, STEM education and training programs within correctional facilities hold immense potential in reshaping lives and reducing recidivism rates. By providing education, fostering critical-thinking skills, and offering second-chance employment opportunities, STEM initiatives in prison settings pave the way for a brighter future for incarcerated individuals.

Effective mentoring hinges on several critical aspects: (1) tailored instructional methods, (2) a focus on education among formerly incarcerated individuals, and (3) the adoption of trauma-informed practices. Recognizing the unique experiences of formerly incarcerated persons (FIPs) is paramount, necessitating tailored approaches that address the effects of institutionalization and cultural disparities. Successful mentoring relationships thrive on reciprocity, mutual respect, clear expectations, and personal connection, whereas failed mentorships often suffer from poor communication, lack of authentic lived experience, and conflicting personalities.

Peer Support and Social Capital

Peer-to-peer mentorship fosters strong alliances between mentors and mentees, leading to higher relationship satisfaction and increased buy-in to the process of change. By harnessing the power of peer support, historically marginalized students in STEM-OPS programs (and similar programs) can benefit from enhanced well-being and increased chances of success.

Education as a Path to Success

Education plays a pivotal role in the rehabilitation and reintegration of formerly incarcerated individuals. While prisons often provide educational programs leading to GEDs and high school diplomas, access to higher education remains limited. Higher education not only improves individual outcomes but also reduces recidivism rates and societal costs. By providing

opportunities for academic advancement, STEM initiatives empower individuals to transcend their past and pursue fulfilling careers, benefiting both themselves and society at large.

Trauma-Informed Care

Adopting trauma-informed approaches is crucial in mentoring individuals with a history of incarceration. By recognizing the impact of trauma, mentors can create safe and welcoming environments conducive to growth and learning. Trauma-informed practices help build trust, enhance personal safety, and promote a sense of respect and belonging among mentees.

Optimizing Your Experience

Why Mentorship Matters in STEM

Mentoring offers numerous benefits for STEM professionals, including:

1. **Skills development and knowledge:** Mentors provide hands-on training and access to specialized knowledge.
2. **Real-world application:** Mentors help bridge the gap between theory and practice in STEM fields.
3. **Career guidance:** Mentors offer insights into different career paths and help mentees identify their strengths.
4. **Networking opportunities:** Mentors facilitate introductions to industry leaders and potential collaborators.
5. **Research and innovation:** Mentors guide mentees through the research process, from securing funding to publishing papers.
6. **Problem-solving skills:** Mentors help mentees develop critical-thinking abilities and analytical reasoning.
7. **Inspiration and motivation:** Interacting with passionate mentors can inspire mentees to persevere in their STEM pursuits.
8. **Staying updated:** Mentors keep mentees informed about the latest developments in STEM fields.

In conclusion, mentorship with STEM professionals enriches the learning experience, fosters career growth, and enhances success in STEM fields.

Training

Trauma-Informed Care Training

- Mentees and mentors should complete modules on community violence and trauma to understand the impact of trauma on individuals.
- Training should cover key aspects such as reentry challenges and STEM employment barriers.
- Cultural competence training promotes diversity and inclusion in mentoring relationships.
- P2P offers tailored trauma-informed and diversity, equity, and inclusion (DEI) training.

General Coaching and Mentoring

- Mentors should receive specialized training focusing on storytelling, messaging, leadership, and peer-coaching techniques.
- The Asset-Based Community Development (ABCD) model emphasizes strengths and trauma-informed care.
- Orientation sessions for mentors and mentees emphasize the importance of person-centered language and inclusive practices.

Mentor–Mentee Collaboration

- A successful mentor–mentee alliance is characterized by empathy, congruence, and mutual respect.
- Positive collaboration between mentor and mentee significantly influences outcomes.
- Clear agreement on goals and tasks, along with a personal bond, are essential elements of effective mentoring relationships.

STEM Identity Mentor Curriculum: Fostering Belonging and Empowerment

The *STEM Identity Mentor Curriculum* is designed to empower formerly incarcerated scholars and foster a sense of belonging and empowerment within the fields of science, technology, engineering, and mathematics (STEM). Through a combination of interactive sessions, experiential learning activities, and mentorship opportunities, this curriculum aims to equip participants with the knowledge, skills, and confidence to thrive in STEM disciplines and beyond.

Session 1: Building a Strong Foundation

- **Introduce STEM identity:** Explore what it means to be a part of the STEM community and the importance of developing a strong sense of identity.
- **Reflect and self-assess:** Identify personal strengths, interests, and goals within STEM fields.
- **Guest speaker:** Formerly incarcerated STEM professionals are able to share their journeys and insights.

Session 2: Overcoming Barriers and Challenges

- **Recognize and address barriers:** Discuss common challenges faced by formerly incarcerated individuals pursuing STEM careers and strategies for overcoming them.
- **Cultivate resilience:** Build resilience and perseverance in the face of setbacks and obstacles.
- **Role-play scenarios:** Practice effective communication, problem-solving, and decision-making skills.

Session 3: Finding Your Voice and Advocating for Change

- **Develop leadership skills:** Learn how to advocate for oneself and others within academic and professional settings.
- **Effective networking:** Build strong professional relationships and networking within the STEM community.
- **Community engagement project:** Collaborate on a project that addresses a STEM-related issue impacting formerly incarcerated individuals or underserved communities.

Session 4: Mentoring and Peer Support

- **Mentorship panel:** Engage with STEM mentors and role models who provide guidance, support, and inspiration.
- **Peer support group:** Form small groups for mutual support, accountability, and collaboration.
- **Set SMART goals:** Establish specific, measurable, achievable, relevant, and time-bound goals for personal and professional growth.

Session 5: Embracing Diversity and Inclusion

- **Diversity in STEM:** Explore the value of diversity and inclusion in driving innovation and excellence in STEM fields.
- **Cultural competence:** Build awareness and understanding of different cultural perspectives and experiences within STEM.
- **Intersectionality and identity:** Examine how intersecting identities (e.g., race, gender, socioeconomic status) shape experiences and opportunities in STEM.

Session 6: Celebrating Success and Looking Ahead

- **Reflect and celebrate:** Reflect on personal growth, achievements, and milestones throughout the program.
- **Graduation ceremony:** Celebrate participants' completion of the *STEM Identity Mentor Curriculum* and recognize their dedication and perseverance.
- **Next steps:** Identify opportunities for further education, training, and career advancement in STEM fields.

Conclusion

The *STEM Identity Mentor Curriculum* provides a holistic and empowering framework for formerly incarcerated scholars to develop a strong sense of belonging and empowerment within STEM disciplines. By fostering resilience, leadership skills, and a supportive community of mentors and peers, this curriculum equips participants with the tools and confidence to pursue their academic and professional aspirations with passion and purpose.

Time Commitment

- During the first three months, mentors and mentees should aim for weekly interactions lasting up to one hour.
- From months four to twelve, interactions should occur monthly.
- Beyond the first year, interactions can be as needed, with at least one per month suggested.

In conclusion, effective mentoring requires a commitment to building trusting relationships, providing tailored support, and fostering a culture of learning and growth. By embracing best practices in mentorship and trauma-informed care, STEM-OPS programs can empower individuals to realize their full potential in STEM fields.