



KNOWLEDGE
ECONOMY

EMPOWERING YOUNGER GENERATIONS AND POSTSECONDARY TALENT OPPORTUNITY:

In order to prepare the state of Alabama for the innovation economy, state government, working with K-12 and postsecondary schools, nonprofits and the private sector, must build a skilled workforce to meet the job demands of the future. This development begins in pre-school and continues beyond post-secondary education into career upskilling and reskilling. If Alabama, along with partners in the education and private sectors, can increase the talent of its citizens, it will be better positioned to recruit the businesses and jobs of tomorrow. The following recommendations align with portions of the recommendations provided in the Hoover Institution Report under “The Role of Alabama Universities in Fostering Innovation and Growth” and “Establishing the Foundation for Economic Growth.”

1. INNOVATION INDUSTRY-DRIVEN HIGH SCHOOL AND UNIVERSITY/COLLEGE GUIDANCE COUNSELING PROGRAM – ACTION

RECOMMENDATION:

Establish marketing programs at city or county levels that collect information from local innovation industry employers in partnership with local workforce development partners to inform high school and university/college guidance counselors regarding job and career trends within the innovation industry and the types of credentials needed to succeed in such innovation-related careers. Begin collecting nonpersonally identifiable information about career goals and pathways of high school and college/university students before and after engaging with a guidance counselor participating in the program.

BACKGROUND AND RATIONALE:

Guidance counselors provide education- and career-related guidance to students at the high school and college level. These early interactions often influence the education and career decisions of such students. If these guidance counselors are not informed regarding local and regional industries and employment opportunities, they will be less equipped to inform their students of opportunities nearby. A program that directly markets to, informs and connects guidance counselors with industry partners would have the effect of bridging this gap and ensuring that staying local is an option to be seriously considered.

MEASURES OF SUCCESS:

Number of industry innovation employers, high school and university/college guidance counselors and local workforce development partners engaged.

Number of students recruited into Alabama jobs out of high school and university/college as a result of program.

MILESTONES:

2021-22

Execute memoranda of understanding with five employers, one local workforce development partner, one high school and one local or regional university/college in five cities throughout Alabama with meaningful innovation assets.

Compile information from employers and local workforce development partners on workforce needs and pathways.

50 guidance counselors reached by the program.

100 students recruited into Alabama jobs out of high school and university/college as a result of program.

2022-23

Execute memoranda of understanding with five employers, one local workforce development partner, one high school and one local or regional university/college in five additional cities throughout Alabama with meaningful innovation assets.

Compile information from employers and local workforce development partners on workforce needs and pathways.

50 additional guidance counselors reached by the program.

100 additional students recruited into Alabama jobs out of high school and university/college as a result of program.

2023-24

Reevaluate efficacy of program.

Improve as needed.

LEGISLATION REQUIRED:
ADDITIONAL FUNDS REQUIRED:

NO
YES

2. K-12 TEACHER AND STUDENT STEM PROGRAMS – ACTION

RECOMMENDATION:

Create and/or support pilot programs designed to increase science, technology, engineering and math (STEM) offerings in Alabama’s K-12 schools and evaluate outcomes to build into a broader program. This pilot should include funding for nonprofit partners to deliver training to teachers and to expand program offerings for students. The need for more STEM teacher training and student offerings could also be addressed through policymaking that would require, incentivize and fund STEM skills programs. Ensure that the skill sets required for innovation industry careers are embedded into Alabama’s core educational offerings.

BACKGROUND AND RATIONALE:

Preparing for the economy of the future requires long-term planning. It is necessary to begin this work at the K-12 level by ensuring that teachers are equipped to deliver high-quality STEM education and that students are provided with ample STEM offerings that help them develop an interest in, and prepare them practically for, post-secondary education and/or careers in STEM-related fields. Dovetailed with the guidance counselor program contained in this report, such students would be equipped to take relevant jobs in Alabama.

MEASURES OF SUCCESS:

Number of teachers trained through program.

Increased teacher understanding and interest in STEM offerings.

Number of students taught by teachers trained through program.

Increased student understanding and interest in STEM offerings.

MILESTONES:

2021-22

Secure appropriation of \$2 million.

Identify three pilot school systems (strong STEM offerings, limited STEM offerings and no STEM offerings) and prepare mechanisms to evaluate inputs and outcomes.

Engage nonprofits to deliver teacher training and to fund student offerings.

200 teachers trained, leveraging nonprofit partners.

500 students trained, leveraging nonprofit partners.

2022-23

Secure appropriation of \$2 million.

Identify one school system to direct all program resources to as the full pilot and evaluate inputs and outcomes.

Engage nonprofits to deliver teacher training and to fund student offerings.

200 teachers trained, leveraging nonprofit partners.

500 students trained, leveraging nonprofit partners.

2022-23

Reevaluate efficacy of program.

Improve as needed.

**LEGISLATION REQUIRED:
ADDITIONAL FUNDS REQUIRED:**

**NO
YES**

3. INNOVATION INDUSTRY-DRIVEN UPSKILLING/RESKILLING PROGRAMMING – ACTION

RECOMMENDATION:

Create a grant program to fund nonprofits providing upskilling/reskilling programming to adults that is tailored for local/regional innovation industry needs.

BACKGROUND AND RATIONALE:

There must be synergies between the current and anticipated needs of innovation employers and the educational/trainings offerings for the next generation of workers. Additionally, there are many Alabamians who would seek out upskilling or reskilling opportunities if given the opportunity. The effectiveness of such training programs, as a tool to develop and retain talent, is dependent on the availability of in-market jobs immediately upon completion of the program. Failing to connect graduates of such programs to jobs immediately upon graduation would reduce enrollment. Failing to connect graduates of such programs to jobs in market would lead those graduates to seek employment outside of the market where they were trained.

MEASURES OF SUCCESS

- Number of nonprofits engaged.
- Number of innovation industry employers engaged.
- Number of adult learners graduating from programs.
- Number of adult learners taking relevant jobs in Alabama.

MILESTONES

2021-22

- Appropriate \$3 million in funds for the program.
- Execute memoranda of understanding with innovation industry employers.
- Develop application materials for nonprofits.
- Raise \$3 million in taxpayer donations.
- Support the creation and/or expansion of three upskilling/reskilling nonprofits in Alabama cities with meaningful innovation assets.
- Graduate 300 adult learners.
- 90% of adult learner graduates take relevant jobs in Alabama.

2022-23

- Raise \$3 million in taxpayer donations.
- Support the creation and/or expansion of three upskilling/reskilling nonprofits in Alabama cities with meaningful innovation assets.
- Graduate 300 additional adult learners.
- 90% of adult learner graduates take relevant jobs in Alabama.

2023-24

Reevaluate efficacy of program.

Improve as needed.

LEGISLATION REQUIRED:
ADDITIONAL FUNDS REQUIRED:

YES
YES
