Are Students Ready?

In *Job Corps for the Future: The Road to Self-Sufficiency*, MTC presented a plan for better preparing Job Corps students with the academic, career technical, social, and emotional skills needed for career success and economic self-sufficiency. This follow-up paper provides more detail on one aspect of that plan: preparing college- and career-ready Job Corps graduates.

Now more than ever, the US workforce needs highly educated, highly trained, and highly skilled young workers. The economy is projected to add 24 million new jobs by 2020 and baby boomer retirements will add another 31 million job openings. These jobs will require more education and training than jobs of the past, with 65 percent requiring at least some postsecondary education.

While there are many opportunities in the economy for young workers, many youth are not leaving high school fully prepared to succeed in college and career. For example:

- An annual report by ACT found that only 28 percent of the 1.9 million graduates of the class of 2015 who took the ACT were prepared to succeed in college-level courses in all four of the subjects tested—math, science, reading, and English (see Figure 1).
- Sixty percent of all new college students and 75 percent of students at two-year colleges need remedial courses.
- A 2015 survey by Achieve found that only 29 percent of employers said high schools were adequately preparing students to meet the expectations they will face at work.
- The same survey found that six out of ten employers require high school graduate employees to receive additional education in reading, writing, and math.

![ACT College-Ready Benchmarks and Percent of Students Reaching Benchmarks by Subject](image)

*Figure 1. Source: The Condition of College and Career Readiness, 2015, ACT, Inc.*
Defining College and Career Readiness

Students going straight to the workforce out of high school must have the same academic proficiency as those entering college. Regardless of their next steps after graduation—the workforce, the military, or postsecondary education—all Job Corps students must leave the program ready for the rigors of college and career in a high-skills economy. College- and career-ready Job Corps graduates are those who have:

1. Identified their career goals and know the necessary steps to achieve them
2. Attained the academic skills and credentials needed to complete college coursework without the need for remediation
3. Obtained primary industry-recognized certifications in their chosen career path
4. Mastered the social and emotional skills needed to persist and progress in their career path and in postsecondary education

This definition, adapted from American Youth Policy Forum, provides the framework for a four-part plan to graduate more college- and career-ready Job Corps students. Each part of the plan is accompanied by specific recommendations that will require changes to current policies, practices, and resources in Job Corps. Cost estimates associated with implementing the recommendations are provided in Appendix A.

1. Identifying career goals and knowing the steps to achieve them

No wise traveler sets out on a journey through unknown terrain without a map. Every Job Corps student needs to have both short- and long-term career goals and have a plan in place to reach those goals. Even though plans may change along the way, having a plan in place increases the likelihood of success.

A recent report by ACT highlights the correlation between planning and preparedness. ACT asked students of the class of 2015 taking the ACT their intended college major. Thirty-three percent of those who declared a major achieved college-ready scores in all four test areas, compared with 32 percent of those undecided, and only ten percent of those who didn’t answer the question.

Despite the importance of planning and preparing for college, the Center for American Progress found that 72 percent of low-income high school students are not participating in college preparation. While affluent youth likely receive more planning from family and mentors outside of school to make up for the lack of it in school, Job Corps students need to have targeted guidance and counseling to prepare them with a plan for college and career success.

Preparing students with long-term career plans will require both programmatic and cultural changes. The focus must change from Job Corps graduation as the end goal to Job Corps graduation as the first step along a student’s career path. Implementing the following recommendations will ensure all Job Corps students have mapped their education and career paths:

- Require each student to have a written career pathway plan that includes what they need to accomplish at the center, as well as the work experience, additional certifications, and postsecondary education needed after graduation to achieve their long-term goals
Recommendation: Require each student to have a written career pathway plan

During the outreach and admissions process, every student should be provided with materials and advice about the career pathways available through Job Corps. This career pathway information should include possible educational and training steps after Job Corps, including stackable credentials. For example, if a student expresses interest in the certified nursing assistant program at Job Corps, he or she should receive detailed information about the types of credentials, advanced training, and education needed to become a licensed practical nurse, a registered nurse, or other medical professional.

At the center, students should be given a comprehensive assessment to identify abilities and interests and choose a career pathway that is based on their knowledge, skills, and abilities. Students should be given resources to research and write a complete career pathway plan, and they should be able to easily articulate that plan to others.

Having a written plan to guide them through Job Corps is not enough—the plan must extend far beyond students’ training on center. Students must understand that graduation from Job Corps is not the end of their career preparation, but rather the beginning in a life-long pursuit of career success.

Recommendation: Provide students with greater access and exposure to postsecondary education

Job Corps must do more to ensure that more students include college in their long-term career plans and to ensure that those interested in college feel that it is accessible. Job Corps can raise students’ expectations about their own learning and expose them to the college experience through frequent campus visits, interactions with students and instructors, and the opportunity to sit in on college classes.  

Job Corps must also work to form more articulation agreements with community colleges that allow students to earn college credit at the center for completed academic and technical skills training and then transfer that credit to college upon graduation from Job Corps. Starting Job Corps graduates on their postsecondary education path with college credits under their belts will increase the likelihood that they will persist.

2. Attaining the academic skills and credentials needed to complete college coursework without the need for remediation

College- and career-ready Job Corps graduates leave the program having attained the academic skills and credentials needed to complete college coursework without the need for remediation. Simply sending Job Corps students on to college to take remedial courses places them at a tremendous disadvantage:

- Nearly four out of ten students in community colleges never complete their remedial courses
- Fewer than one in ten remedial students graduate from community college within three years
• Just a third of remedial students complete a bachelor’s degree within six years\textsuperscript{12}

These statistics don’t mean that Job Corps should discourage students from going on to postsecondary education. On the contrary, they highlight the importance of helping all students achieve the academic success they need to persist and progress throughout their careers. To help Job Corps students attain the academic skills and credentials needed to complete college coursework without the need for remediation, Job Corps must:

• Create the expectation of continual academic improvement for all students
• Hire, train, and develop academic teachers skilled at connecting with at-risk students
• Fully integrate career technical and academic curricula to engage students in their learning and improve math and reading proficiency
• Personalize learning for each student by using engaging digital tools

**Recommendation: Create the expectation of continual academic improvement for all students**

Students enter Job Corps at many different levels academically and many have to make enormous strides to achieve current required academic gains. Regardless of their level upon entering the program, all students could benefit academically from continued enrollment in math, reading, and writing. The current policy is for students to discontinue academic classes once they reach a TABE score of 567 for reading and 566 for math. However, these cutoff scores for ending academic training fall far below what is needed for college and career readiness.

As shown in Figure 2, a TABE score of 596 in reading and 595 in math are needed to demonstrate readiness for college and career. Figure 2 also shows college-ready benchmarks for various college placement and admissions tests. College- and career-ready graduates must be prepared to reach those benchmarks on the Accuplacer, SAT, ACT, or Compass.

### Ready for College without Remediation

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>TABE</th>
<th>Accuplacer</th>
<th>SAT</th>
<th>ACT</th>
<th>Compass</th>
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<td>85</td>
<td>360</td>
<td>22</td>
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<td>116</td>
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<td>82</td>
</tr>
</tbody>
</table>

*Figure 2. Sources: Southern West Virginia Community and Technical College; Montana Office of Public Instruction*

To better prepare students for a lifetime of learning and self-improvement, Job Corps should require that students continue to receive rigorous academic instruction in math and English throughout their enrollment. More advanced classes could be offered on center, through education partners, or through online courses.
Recommendation: Hire, train, and develop academic teachers skilled at connecting with at-risk students

Job Corps must do more to improve the academic outcomes of all students, not just those planning to attend college. Achieving the academic gains needed to prepare college- and career-ready Job Corps graduates will require investment in changing the culture, curricula, policies, and resources of the program. However, the greatest investment Job Corps can make to improve academic outcomes is to hire, train, and retain effective teachers. Research suggests that teacher quality is the most important predictor of learning gains among students.¹³

Investing more in teachers and their training will go a long way toward getting students prepared for college and career. Job Corps can increase its investment in teacher quality by hiring teachers that are trained in and certified to teach the subjects they will be assigned, by providing academic teachers with time away from the classroom for professional development, and by compensating teachers so that pay is competitive with public schools.

At most centers across the country, Job Corps teachers are paid less than their counterparts in the public school system. Bringing the salaries of Job Corps teachers to parity with those of the public school system would cost the program an estimated $53,000,000 for the first year (see Appendix A). Providing teachers with ten days of professional development would cost an additional $8,000,000 annually. Investing in quality teachers shows a commitment to outcomes for students and will help them achieve the academic skills they need for college and career success.

Recommendation: Fully integrate career technical and academic curricula to engage students in their learning and improve math and reading proficiency

Job Corps must also do more to engage students in their learning. One of the best strategies for engaging students is to provide relevance and context to the subject matter.¹⁴ For example, a carpentry student will be more willing to master the concept of fractions if fractions are presented as critical to reading a tape measure. Students should also be receiving the personalized academic instruction specific to the needs of their chosen career paths.

Recommendation: Personalize learning for each student by using engaging digital tools

Not only must learning be personalized according to students’ career paths, students should also have learning personalized to their specific needs and learning styles. This can be accomplished, in part, through effective digital learning programs that provide immediate feedback and allow students to explore and create.¹⁵ Digital learning programs have the potential to greatly enhance academic instruction and provide teachers with additional tools to engage students in their learning. However, for these tools to be utilized effectively, Job Corps must update its digital infrastructure and internet security policies. Job Corps students and teachers must have the same access to the internet, educational programs, computers, and other electronic devices as other educational institutions. Making these updates at each center would cost approximately $18,500,000 (see Appendix A).
3. Obtaining primary industry-recognized certifications in a chosen career path

Educational attainment alone will not be enough for Job Corps graduates competing for the 55 million jobs opening up in the coming decade. They will need to demonstrate that they have the right technical skills and competencies to perform the job. Graduates who only have the minimal skills that come with a first-aid certificate or food handlers’ permit will find it increasingly difficult to obtain employment. To be prepared for today’s workforce, students will need to demonstrate they have learned the skills needed to obtain primary industry-recognized certifications in their respective fields. To prepare all students with the technical skills they need and employers demand, Job Corps must:

- Provide greater support to students in obtaining primary-industry recognized certifications in their chosen career paths
- Hire, train, and develop instructors skilled at connecting with students
- Strengthen and broaden employer partnerships that lead to primary certifications
- Increase Advanced Career Training (ACT) and Off-Center Training (OCT) slots

Recommendation: Provide greater support to students in obtaining primary industry-recognized certifications in their chosen career paths

While opportunities to obtain nationally recognized credentials are currently offered at Job Corps, more must be done to ensure that training is offered that leads to primary certifications in fields that yield the highest wages. Research has found that credential holders working in their field of study earn almost $11,000 dollars per year more than workers with only a high school diploma. However, credential holders not working in their field of study are no better off than high school graduates with no postsecondary credentials.\(^\text{16}\)

While the promise of higher wages down the road can help motivate students to complete more primary industry-recognized credentials, Job Corps should also incentivize students along the way. These incentives don’t have to require a lot of additional resources, but they could help keep students engaged and motivated and to take pride in their accomplishments along the way.

Job Corps also needs to have the flexibility to change technical training offerings quickly. It has been estimated that worldwide half of the jobs available today did not exist 25 years ago,\(^\text{17}\) and the pace of change is only going to speed up. Without the ability to identify and eliminate obsolete technical training courses and replace them with new ones, Job Corps is in danger of producing graduates equipped with outdated skills and credentials.

Recommendation: Hire, train, and develop instructors skilled at connecting with students

Students need instructors certified in their fields who can train them to meet current industry standards, anticipate where the industry is moving, and expose students to these new methods. Instructors must keep current with industry standards and credentials and keep their own credentials current. In order to stay current, instructors need adequate professional development time.
Career technical instructors at Job Corps centers typically make less than their counterparts at high schools. Bringing Job Corps instructor pay to parity with that of instructors in high schools would require $29,000,000 in additional funding annually (see Appendix A).

**Recommendation: Strengthen and broaden employer partnerships that lead to primary certifications**

There are currently several examples of successful Job Corps and industry partnerships that provide a pipeline of talent to employers, such as the one developed with Ingalls Shipbuilding in Mississippi. As a result of this partnership, Ingalls has enhanced the advanced welding curricula taught at centers to specifically meet their requirements. Graduates of advanced welding programs are career ready and have been employed by Ingalls at a starting wage of up to $24 an hour. This partnership is a great example of employer-driven curriculum development, training, and placement. Job Corps must develop more of these partnerships both nationally and regionally.

Targeting recruitment and tailoring training to meet employer and industry partner requirements can also provide students with more opportunities for internships and apprenticeships. The importance of internships in preparing for career success cannot be understated. A recent survey by Gallup found that 71 percent of college students did not do an internship prior to graduation. These graduates were two times less likely to be engaged at work; engagement is a strong predictor of productivity. Job Corps students need greater exposure to the working world prior to graduation. Since so few teenagers are working in today’s labor market, an internship may be a student’s first opportunity to experience real-life working conditions.

**Recommendation: Increase Advanced Career Training (ACT) and Off-Center Training (OCT) slots**

Job Corps currently has a model for providing training that leads to industry-recognized primary credentials at postsecondary institutions through its ACT and OCT programs. These programs allow Job Corps students to receive training in their chosen career fields at accredited institutions that give them valuable education and credentials beyond what they would receive on center. Students enrolled in ACT programs are also earning college credits. Unfortunately, funding for ACT slots has been cut in recent years. Restoring funding to previous levels would require an additional $12,500,000 (see Appendix A).

As Job Corps helps students obtain the most in-demand certifications in their respective fields, focuses training on in-demand careers leading to high wages, and seeks out new postsecondary and industry partners, Job Corps students will be placed in well-paying jobs, equipped with the tools they need to continue progressing throughout their careers.

4. **Mastering the social, emotional, and other 21st Century skills needed to persist and progress in a career path and in postsecondary education**

For Job Corps graduates to be fully prepared to compete in an increasingly competitive global economy, they will need to supplement their educational and technical training with the development of essential social and emotional skills needed for success in the 21st Century economy—often referred to as 21st
Century skills. Employers and policymakers are calling on schools to better prepare youth with skills such as problem solving, critical thinking, communication, collaboration, and information literacy.

While such skills have long been an asset in seeking employment, they are now recognized as necessary, and methods are being developed to better teach and measure this skill set. One example is the Assessment and Teaching of 21st Century Skills (ATC21S), which is sponsored by technology giants Cisco Systems, INTEL, and Microsoft. ATC21S identifies four broad categories of 21st Century skills: ways of thinking; ways of working; tools for working; and ways of living in the world (see Figure 3). In addition to these important 21st Century skills, Job Corps students must continue to develop more traditional skills, such as hard work, persistence, dependability, and determination.

**21st Century Skills**

<table>
<thead>
<tr>
<th>Ways of Thinking</th>
<th>Ways of Working</th>
<th>Tools for Working</th>
<th>Ways of Living in the World</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Creativity and innovation</td>
<td>• Communication</td>
<td>• Information literacy</td>
<td>• Citizenship</td>
</tr>
<tr>
<td>• Critical thinking, problem solving, decision making</td>
<td>• Collaboration</td>
<td>• Information and community technology literacy</td>
<td>• Life and career</td>
</tr>
<tr>
<td>• Learning to learn</td>
<td></td>
<td></td>
<td>• Personal and social responsibility</td>
</tr>
</tbody>
</table>

Figure 3. Source: Assessment and Teaching of 21st Century Skills (ATC21S),

To ensure Job Corps graduates possess the social, emotional, and other 21st Century skills needed for success in their professional and personal lives, Job Corps should develop policies and requirements for centers to:

- Provide opportunities for students to learn, practice, and receive feedback on 21st Century skills
- Ensure every student has a mentor for encouragement and support
- Engage every student in cultivating a positive learning environment
- Provide additional mental health resources and services to students who need them

**Recommendation:** Provide opportunities for students to learn, practice, and receive feedback on 21st Century skills

Activities that allow students to practice 21st Century skills should be incorporated into academic and technical training curricula, evening study, and recreation programs. These activities should promote the development of skills such as team work, problem solving, communication, self-management, and social responsibility and students should be assessed on mastery of these skills.
As students develop 21st Century skills through practical application, they will leave Job Corps better prepared for college and career. Participating in service learning experiences is one way for students to practice these skills and such experience is very attractive to employers. In a 2014 survey of over 400 employers, 69 percent said they would be more likely to hire someone who had completed a service-learning project.21

**Recommendation: Ensure every student has a mentor for encouragement and support**

Every Job Corps student needs a mentor to provide encouragement, support, positive feedback, and a sense of security. The National Dropout Center at Clemson University found that youth without mentors are 48 percent more likely to drop out of school, engage in risky behaviors, and end up in the criminal justice system.22 Mentors provide a positive support system that will help students make better choices and develop the 21st Century skills they need for college and career success.

**Recommendation: Engage every student in cultivating a positive learning environment**

The work of preparing each Job Corps student with the 21st Century skills needed for college and career success requires a center environment that fosters physical and emotional safety, models and reinforces positive behavior, and engages each student in the process of improving the learning environment on center. The more engaged students are in their learning, their school culture, and each other, the more likely students are to succeed in their education and training.

Students in many Job Corps centers have taken a proactive approach to improving their learning environment through initiatives such as the Y2Y: Partners for Peace. This national initiative encourages students to speak and listen to one another regarding safety on campus and to propose solutions.23

While the Y2Y initiative is very positive for Job Corps, a comprehensive student engagement process must include more than just safety—it must focus on the entire school climate and foster greater connectedness. School connectedness can protect students against violence, substance abuse, and other risky behaviors.24 As students are more engaged in their learning and their school climate, they are more likely to display the college- and career-ready traits they need to succeed, such as persistence, hard work, attention to tasks, and a preference for challenge.25

**Recommendation: Provide additional mental health resources and services to students who need them**

Student engagement is critical to creating a positive learning environment that fosters the development of 21st Century skills. However, more must be done to help students with mental health issues overcome barriers to fully developing these crucial skills. Students with mental health issues need holistic services that address prevention, early intervention, and treatment. Strategies to improve mental health services for students have been shown to improve learning outcomes, reduce behavioral problems, and foster a positive learning environment.26
To allow all students to better cultivate the skills needed for college and career success, Job Corps must increase the resources and services available to students with social and behavioral needs, cognitive disabilities, and mental health needs. If Job Corps were to increase mental health resources available to students during the application process and during enrollment, it would cost an estimated $5,000,000 (see Appendix A).

As centers increase opportunities for students to learn and practice 21st Century skills, improve student engagement and connectedness, and enhance mental health resources, they can expect to achieve greater academic and placement outcomes. Furthermore, they will foster the development of college- and career-ready graduates.

... ...

In this high-skills economy, long-term career success depends on the ability to adapt and enhance one’s own skills through lifelong learning rather than just on the ability to demonstrate proficiency in the job one is hired to do. College- and career-ready Job Corps graduates will have the academic, technical, social, and emotional skills needed to persist in their learning and progress in their careers. They will understand that graduation from Job Corps is not the end of their education, rather it is the first step to acquiring the skills, credentials, and certifications they will need to adapt to an ever-changing labor market.

The success of the students Job Corps serves and the long-term success of the US economy are inextricably connected. Job Corps students need to be college and career ready to succeed in this high-skills economy; and the economy needs college- and career-ready Job Corps graduates to continue to move forward in the years ahead.
Appendix A: Resources Needed for Job Corps to Achieve College- and Career-Ready Goals

**Goal: Increase Job Corps teacher pay so teachers are at parity with public school counterparts**

Resources Needed: $53,000,000

Purpose: To allow Job Corps to recruit competitively with public schools for qualified applicants and retain effective teachers

**Goal: Provide Job Corps teachers an additional ten professional development days per year**

Resources Needed: $8,000,000

Purpose: To provide teachers with time away from the classroom to learn new teaching strategies, especially in the area of incorporating digital learning tools into current curricula

**Goal: Increase Job Corps career technical training instructor pay so instructors are at parity with secondary school counterparts**

Resources Needed: $29,000,000

Purpose: To allow Job Corps to compete with public secondary and post-secondary institutions in recruiting qualified instructors as well as bringing current instructors’ salaries in line with public school counterparts

**Goal: Increase ACT slots to the level prior to the enrollment freeze**

Resources Needed: $12,500,000

Purpose: To provide opportunities for Job Corps students to attend classes at post-secondary schools and make a successful transition to higher education

**Goal: Provide infrastructure, tools, and training needed to support greater digital learning in classrooms**

Resources Needed: $18,500,000

Purpose: To provide for upgrades to infrastructure at Job Corps centers and provide equipment and training to teachers on deploying digital learning in their classrooms effectively
Goal: Increase mental health resources available to students by 20% and provide Outreach and Admissions offices access to a mental health professional to review applications

Resources Needed: $5,000,000 ($3,000,000 for increasing mental health contract hours on centers by 20% and $2,000,000 to provide resources during the application process)

Purpose: To increase mental health resources at Job Corps centers as well as provide resources during the application process.

Total Resources Needed: $126,000,000

Job Corps FY2015 Budget Request: $1,688,155,000

Needed Resources as a Percent of FY2015 Total Budget: 7.5%

2 Ibid.


20 Ibid.


25 Ibid.