May 24, 2017

INSTITUTE FOR AMERICAN APPRENTICESHIPS

Vermont Higher Education Council 1 Winooski Park SMC Box 289 Colchester, VT 05439

Dear VHEC Certification Committee Members,

Thank you for your time and effort in reviewing our Application for a Postsecondary Certificate of Approval. The purpose of the application was to allow the students of the *Institute of American Apprenticeships at Vermont HITEC* to gain credit and be provided degrees for a set of nationally acclaimed and certified apprenticeship programs. These programs have been offered successfully to unemployed and underemployed Vermont and New Hampshire residents for over 18 years.

IAA programs are offered only in partnership with participating employers, and include many well-known enterprises such as the UVM Medical Center, Husky Molding Systems, Dealer.com, Dartmouth Hitchcock, and Hypertherm. The academic portion of the program is designed to meet and at times exceed what is generally required of a student in a program of similar area of focus in a traditional college setting. What sets IAA programs apart is that student learning outcomes are confirmed by the faculty, academic assessments, professional certifications, and participating employers who hire only those who have demonstrated professional competency.

In their report the site visit team concluded their analysis of IAA programs by identifying four areas of concern:

- 1. The organizational structure of board and management;
- 2. Documentation of policies and procedures for consistency;
- 3. Limited evidence of planning; and
- 4. Evidence of how organization would change.

While we can agree with the need for change with respect to number one and two as addressed in the narrative below, we disagree that there is limited evidence of planning or willingness to change. As you stated, in 2015 we created a strategic plan that addresses all of the issues relating to how IAA would change if it were to become a credit and degree granting institution, and that we are willing to do so. The team was provided with a copy of this report and with the individuals who participated in this venture.

Also, we believe we have demonstrated that we are capable of resolving any of the issues you identify as concerns and hope you provide us with the opportunity to do so. None of these issues have affected what we believe are the two most important items to consider: 1) the quality of the education including a high level of faculty integration, and 2) the financial integrity of the organization.

We recognize the role and authority of VHEC in ensuring adequate standards in higher education and are willing to change and work through whatever challenges are identified as obstacles to gaining our

students the credits they deserve. Indeed, our programs would not exist today without all the support and guidance we have received from a number of accredited higher education institutions in Vermont and New Hampshire including Vermont Technical College, Burlington College, VSC Office of External Programs, Lyndon State College, CCV, Champlain College, St. Michaels College, Norwich University, the University of Vermont and the River Valley Community College.

While the site team visit was comprehensive and the team members diligent in their efforts to assess IAA, it appears we were unable to adequately convey the full scope of IAA's policies, processes and procedures. We offer this written response to provide the final decision makers with a more accurate viewpoint of IAA with respect to the issues that were outlined in the report. We do hope the committee members will take the time to review our response before making a final decision regarding our request. We understand that there may be areas where we need to make improvements and again we are willing to do so in whatever time frame is expected of us.

The team's comments are provided in italics corresponding with each section of the review report, and the IAA response is provided below the comments.

I. Purpose, Philosophy, and Objectives

IAA has been understandably frustrated in its dependence on higher education entities whose changes in priorities and leadership have resulted in erratic recognition of programs as college credit-worthy. While IAA did not discuss a plan to change its outreach or program delivery approach, the organization believes that the ability to award a post-secondary credential would expand its options.

It was not made clear to the visiting team that the board, faculty, administration and students are involved in periodic and regular review of the purpose and philosophy of the organization or that these purposes have been adjusted in its seventeen-year history.

IAA would be more than happy to discuss any changes that would be necessary in outreach, program delivery or any other area that would be needed to obtain credit for the students. The subject of change was not brought up in the application or during the conversations with the VHEC team. We apologize if it was not made clear to the visiting team that the board, faculty, administration and students are in periodic and regular review of the purpose and philosophy of the organization. IAA staff, faculty and board members engaged in an almost constant review of these issues as the nature and timing of the programs, the presence of the employer partners, and the federal and state funding sources force these issues to the forefront on a constant basis.

The Board and staff discuss the purpose and philosophy of the program every time a new program is launched and every time a graduation ceremony is held. These events include poignant reminders from

the students themselves as to why we do what we do and discussions about change come up often. Since the Board is as engaged with the staff in many of the operations of the organization, there are ample opportunities for discussion and conversation unlike in most organizations where a distant Board with highly defined parameters oversees a self-managed staff. Self-reflection and the necessary changes and adjustments are so integral to our work processes and success as a team that perhaps we failed to distinguish this element in our meeting with you. For this lack of communication, we apologize.

II. Educational Program

Current faculty do not appear to have qualifications to teach the proposed general education courses in composition, literature, sociology, history, or science.

From our understanding of the requirements, our faculty does have the qualifications to teach the proposed courses in the stated areas. However, if general education was added to the mix we have discussed the possibility of hiring new staff or adjunct faculty as we understand the current staffing level may be inadequate for such a change. Indeed, our articulation agreement with Burlington College included these options.

We did not see evidence that an integral —as distinct from an "add on" role for general education—has been contemplated or planned for.

Unfortunately, once again we failed to articulate that we believe that general education is already an integral part of our program. For example, during the very first program we ever delivered, (in partnership at the time with VTC and Burlington College), students needed to learn medical terminology. It quickly became apparent that many students had a limited grasp of basic spelling, grammar and composition and we had to adjust the program as we delivered it to provide more emphasis and instruction in these areas. Both of these college partners, reviewing our curriculum and delivery, awarded 32 credits for this 8-month program. Our staff has the credentials and qualifications to deliver many of the general education courses themselves; and where we do not we will engage adjunct faculty until those gaps can be filled. We are more than ready and willing to embrace general education as an integral portion of our program and would be delighted to entertain options that would be required for students to get credit for information they are already responsible to learn.

III. Students and Student Services

Reported: "According to the Student Handbook, the teaching assistant and/or mentor will communicate closely with students to ensure that competency expectations are being achieved during the apprenticeship period. We were not able to confirm that."

We are not clear as to why the team could not confirm this information. A sample of apprenticeship competency evaluations and the evaluation tool of student performance were provided to the team at the site visit. We are happy to provide documented evidence from students, mentors, faculty and

administrators that this policy is practiced in all of our programs. Following is a brief summary of how we approach this task.

The apprenticeships are built in close partnership between the employer and IAA. All apprenticeships contain a progressive series of competencies with specific metrics that are measured on a monthly basis by the employer mentor and IAA staff. IAA staff communicates regularly with the employer mentors and apprentices during the one year period of the apprenticeship; they participate in a review of the performance metrics as scheduled by the employer mentor, and follow-up on the goals and activities established in the Individual Development Plans (IDP). IDPs contain a flow chart of the following:

- 1) expected communication and deliverables between the employer, apprentice, and IAA faculty;
- 2) detailed task-by-task metrics extracted from the apprenticeship's work-process competencies;
- 3) monthly benchmark values for each metric;
- 4) means of measurement for each metric,
- 5) list of expected behavioral competencies and ratings,
- 6) IDP details for any apprentice not meeting a benchmark upon review, and
- 7) both 6 and 12 month summaries of performance.

Note that due to time constraints, this very comprehensive evaluation tool of student performance used by IAA faculty during the apprenticeship phase was provided to the team but not reviewed in detail.

Reported: "For the most part, any services to students—both academic and behavioral—appear to be managed by the classroom instructor and the project leader. Students experiencing personal issues are referred to external service providers as appropriate to their needs although the instructor interviewed was unclear as to specifics."

Services in support of students outside the academic scope are handled exclusively by the cohort's IAA project leader. The IAA faculty member may or not be aware of the extent of personal support resources available to a student as they are instructed to be focused on academics and not the personal issues. We would love for the committee to have an opportunity to speak with one of the IAA project leaders about our student support services. We are very, very proud of how we support each individual student and were surprised that somehow the committee got the wrong impression apparently based on one conversation with a faculty member.

Reported: "Student and faculty interviews revealed that most issues are handled in the classroom. It is important to note that there are significant differences between faculty skill experience, and credentials in handling student requests and issues. As a result, there appears to be unevenness and inconsistencies in the student/faculty experience. "

We emphatically disagree with the conclusion that most support services are handled in the classroom. Project leaders are solely responsible for student support services and we have many students and faculty that can attest to this fact with specific examples. Perhaps the variance here is caused by not asking enough students or how and when the question was asked.

Reported: "Based on a student interview we conducted, there was no assistance from IAA as he figured out his life and family commitments though he was well-oriented to and prepared for the intense time demands. He appeared unaware that an IAA resource might have been able to steer him to outside resources if he needed them. "Student services are a limited resource in IAA."

IAA arranged for both an alumnus and a current student to be available for interview during the site visit. It is important to note that only one student interview occurred (with the alumnus). While no IAA staff member was present during the student interview and therefore unable to describe what in fact was discussed, it was a surprising observation.

The level of emphasis IAA places on the availability of support leads us to speculate confusion on part of the student in responding to the site visit team's questions. The student's program, like all IAA programs, began with informational materials that outline the extent of support offered by IAA in resolving issues that interfere with the ability to complete the program. This is further emphasized during the mandatory orientation night, specifically (but not exclusively) during the presentation of the project leader's role.

Additionally, a representative from Vermont Department of Labor attends orientation and speaks to a variety of resources available to students and does an extensive intake with each accepted student. The project leader facilitates access to these resources throughout the program. During each weekly review, students are prompted to voice concerns (personal or academic) that are affecting their ability to succeed in the program. Students are required to note any challenges in the daily journal or with the project leader during the weekly review, or by asking to speak with the project leader at any time a personal issue arises. While most students embrace this level of support, some individuals choose to manage their issues outside these services.

Student services are at the center of what is offered to IAA students. The primary responsibility of the project leader is to ensure that the student has what is needed to avoid outside distractions during the education program. The Executive Director and the President are fully committed to providing or obtaining these necessary resources. This full-time resource committed to each cohort is a substantial investment in student services.

At least four IAA faculty members have experience in teaching in larger accredited post-secondary schools. They have noted very limited student support services in comparison to those offered by IAA. It is therefore unclear how student services could be expanded further. At the same time, student services are at the crux of success for IAA students and we would be more than willing to entertain the idea of further buttressing these services.

IV. Faculty and Staff

Reported:" Faculty evaluation as described in the Faculty Handbook submitted as part of this application could not be confirmed. It appears to the team that there is ongoing informal communication among all staff/faculty members that could include performance feedback, but

formal evaluation is not practiced. No one with whom we spoke seemed concerned about the absence of such procedures".

IAA is open to conducting formal, annual instructor reviews and we are very much concerned about procedural excellence. As stressed during the site visit, a high importance is placed on faculty development, with feedback and direction documented in daily updates and other frequent communications. Classrooms are visited often by senior staff (both senior staff and principal faculty) and coaching happens immediately after any communication or classroom visit. Faculty coaching and mentoring happens throughout the year, as opposed to an annual review of past performance. IAA believes that any delay in providing faculty feedback (positive or negative) could have an adverse impact on education quality. By providing documented feedback on a daily or weekly basis during the program, as well as in a subsequent "look back" review of a program delivery, faculty best practices and areas for improvement can be implemented/resolved in real-time. Student feedback on a daily basis, through the use of mandatory student journals, completes the 360-degree feedback look of faculty. If feedback is delayed and therefore corrective action delayed, weakness in program quality may remain for an extended period.

Reported: "Faculty qualifications to teach in the proposed general education area are particularly weak."

IAA staff indicated during the review that they possess the necessary qualifications (e.g.- advanced master and doctorate degrees supplemented by work/teaching experience, to teach many of the general education courses. Where the existing staff lacks credentials and experience to teach general education courses, new faculty members would be brought in as appropriate and/or adjunct faculty with appropriate backgrounds would be hired.

IAA offers a prescribed sequence of closed courses and cannot today grant degrees, therefore implementing an offering of separate general education courses to be used toward a degree, based on the understanding of IAA staff, would not be allowed until post-secondary approval is granted. In the past, IAA has partnered with other colleges to deliver these courses when requested. IAA has a preliminary plan for offering general education courses that would be meticulously reviewed and implemented, as are all of our education offerings, to ensure the highest quality educational experience for the students.

V. Library and Media Resources

There is no sense from IAA faculty that additional materials would be needed to support the certificate portions of the planned degree programs (those courses directly related to professional training), but the team questions whether students are acquiring the informational literacy skills and experiences necessary to support continued professional learning beyond completion of these training programs.

The team expected that IAA and its faculty would have anticipated the need for expansion of resources to support the higher expectations of seeking credit/degree granting status, particularly in general education. The team did not see evidence that IAA is actively planning to respond to this higher expectation.

The planned degree programs have all been developed in collaboration with industry and academic professionals who have indicated satisfaction with existing materials for credit and degree granting. Indeed, these programs have already been provided credit through articulation agreements with accredited institutions. If a case were to be made to expand materials to enhance the learning, IAA is certainly willing to do so.

The VHEC team is questioning whether students are acquiring the informational literacy skills and experiences necessary to support continued professional learning beyond completion. We strongly believe this is an unfounded concern. We can provide evidence of quite a number of students who have gone on to higher professional careers directly as a result of their participation in the program. Dartmouth Hitchcock alone has three students in professional management careers launched on the basis of their medical transcription program. They will all attest that the program gave them both the launching pad and the necessary experience to support continued professional learning beyond the completion of these programs.

Common sense can prevail here too; think of any student in a music academy who is required to immerse themselves several hours a day in the subject to advance; they not only advance---they learn to excel and much more quickly so than they would in a traditional program. The same is true for students in IAA programs---for confirmation, just ask employers who continue to return to the model again and again to fill vacancies. We ask: who is more of an expert in professionalism than the company who hires the professionals?

VI. Facilities and Equipment

As Vermont HITEC instructors use facilities and equipment provided by employer partners, it is important that the organization evaluates and documents the safety and accessibility of off-site facilities. To that end, HITEC leadership should develop basic standards to support that documentation.

To date, participating employers already undergo extensive scrutiny with respect to the equipment they use both for training and as a worksite and are inclined to require the use of their equipment so that students and faculty are abreast of industry standards, practices and techniques. IAA leadership understands the reasoning for and is willing to develop basic standards to support the documentation that off-site facilities are safe and accessible.

VII. Organization and Governance

The visiting team was given a copy of the by-laws but did not see the Articles that are referenced.

We would be happy to provide the team with the Articles of Association for review. We were not aware they were not included.

The board of directors is made up of five individuals although the by-laws state that the "number of directors shall be not less than six (6) nor more than fifteen (15)."

We have actively sought and identified new Board members for the sixth seat and have also identified others to expand the Board. The new Board members are expected to be confirmed after the next Board retreat scheduled in the fall of 2017.

The board, however, does not seem to follow its own by-laws. There is no evidence that regular elections of directors are held or that members serve on the rotational schedule by-laws describe.

We strive to operate in compliance with the by-laws and will review the history to find any variances and correct the identified issues.

8. TERM OF OFFICE OF DIRECTORS

The initial directors will serve for a period of four years. Any additional directors will serve for a period of two years staggered terms. A director shall serve as such unless and until removed by vote of the directors as provided in the Articles of Association.

It interprets its own by-laws as allowing for continued membership as a director, and can "serve as such unless and until removed by vote." We believe these are issues that can be easily resolved and would like clarification on why it is relevant to providing students with credit they deserve for the academic work they do.

The structure of the board would appear to fit the founding mission of IAA/ Vermont HITEC in its commitment to be quickly responsive and "lean enough" to proceed quickly in its important work of "creat(ing) employment opportunities for underemployed and unemployed Vermonters..." The tight overlap between those individuals who serve as board members and those who occupy the top tier of administration and leadership at IAA, as well as the lack of new input into board membership would seem to signal a more closed approach to governance than the standard encourages.

The HITEC Board has recognized that there may be a perception of a closed governance approach during the course of an extensive evaluation conducted in consultation with an accreditation consultant in 2013-2015. Since then the Board has been working towards rectifying this issue by identifying new Board members without specific ties to the organization. We have like many other small nonprofits find it challenging to recruit Board members. We believe it would be less challenging if students could be awarded credit for the academic work they complete.

Related to the questions of governance that may be raised by the overlapping roles of board members (including officers) and executive leadership of IAA is the related question of management. We were unable to make a meaningful distinction between governance and management..... The selection of senior administrators and the evaluation of their effectiveness—also part of the standard on organization and governance-- is, in keeping with the prevailing communication model, informal and undocumented.

Over the course of our 18 year history, we have encountered numerous situations where individuals working for a given education, business or government entity are wearing multiple hats to fill the

necessary roles that for a variety of reasons (often budgetary) are not fulltime positions. We are comfortable moving back and forth between management and governance among ourselves but recognize that there may be perception issues.

Related to issues with Board expansion, this change has stalled some of the adjustments to governance issues we hope to address in the near future. At the same time we hope to preserve what we believe is an efficient and well managed education organization. We have been told on numerous occasions by officials at US DOL that they consider HITEC to be the gold standard in terms of its operational management and quality programming and we would not want to dilute these standards.

The issues of governance were also identified in the 2013-2015 consultations with an accreditation professional and HITEC has been working towards resolving them. In 2015, at the request of existing faculty and staff, the Board approved a trial run to implement a team approach to management. The faculty and staff felt that they wanted to formalize the existing practices which allowed for self-management within programs as long as both students and employer goals were met. This approach has been more challenging to implement than was expected and is currently under review.

The faculty and staff section within this report includes a brief discussion of academic governance and organization. It does not appear that faculty members have formal and predictable ways to regularly influence curriculum or program design. Nor is there evidence of faculty participation in promotion or other advancement.

This statement is perhaps the most surprising section of the review report. Faculty are at the centerpiece of everything thing we do and every decision we make. We are not clear on how we failed to make it clear to the VHEC site visit team that faculty influence is central to both curriculum and program design. Our faculty not only teach in our programs, they are solely responsible for developing the curriculum in collaboration with the employer.

Before an IAA curriculum is developed, faculty is required to successfully perform the professional duties of a given position at the employer site. For example, if a medical coding program is launched, the lead faculty member has to become a certified medical coder before they are allowed to teach in the program.

Our programs are successful because our faculty include only highly seasoned professionals whether they be adjunct or full-time staff. Additionally, our faculty has been critical to ensuring that our programs are of a level of quality consistent with those who receive college credit from accrediting institutions. The fact that we have previously received academic credit for our programs, after significant review of faculty and curriculum, from two- and four-year institutions of higher education underscores this point.

Additionally, it is important to note that most of our programs have been developed in collaboration with accredited institutions in both New Hampshire and here in Vermont. We believe the quality of our faculty and academic programs is at least as good as any accredited institution here in the state of Vermont. Perhaps the different paradigms we operate within contribute to a level of confusion that we

could not anticipate. Given this state of being, we hope you reconsider this statement and/or request another opportunity to gain a more complete understanding of our operations.

VIII. Financial Management

The evaluation team was not made aware of any recent changes in the financial condition of Vermont HITEC that might jeopardize the current programs. Although this assumption has not yet been tested, Vermont HITEC senior leadership are confident that employer partners will provide increased revenue to the organization to fund the increased expenses of an expanded Vermont HITEC should credit and degree-granting approval be authorized. The organization has a history of securing funding before it launches a training program at an employer partner location and has a history of prudent financial management.

Any changes regarding the finances of HITEC are only those with an improved outlook and there were no other changes to report. At the time of the committee report, Senior Leadership was confident that employer partners will be a revenue source even if federal and state grant funding was not available. Since the time of the meeting, this assumption has been tested and HITEC has been assured by two of its largest employer partners that IAA will continue to receive a substantial source of ongoing funding for the next three years.

Additionally, HITEC has recently been informed by the US DOL that Apprenticeship models involving intermediaries such as Vermont HITEC are likely to have a substantial increase in funding opportunities over the next couple of years. This is future supported by the current Administration and the White House (*see* attached article). HITEC is held up nationally of the future of workforce development and educational models. We have been featured in numerous national public policy institute publications as well as the White House and USDOL reports. Based on these facts we expect the committee can do nothing but applaud the level of excellence that prevails in this area and we would appreciate a statement to this effect.

IX. Publications and Advertising

Reported: "The design and layout of printed publications is standardized and one document looks very much like another without any design differentiation. The sameness of each piece to another might limit reader's attention or comprehension of what they are reading. We did not see evidence that IAA is able to provide prospective students an alternative means to access information on training programs other than reading standard written documents or web pages."

IAA does seek to standardize its materials and we are not clear on what the issue is here. We have never had any complaints from prospective students as to how the sameness of each piece limits their understanding but would be happy to adjust the materials to be more consistent with any vision the committee believes is appropriate. But first we must try to understand what the issue is and how that issue ties to anything related to the standards we will be operating under once approved.

We were not asked but can provide evidence that we are able and often do provide prospective students with alternative ways to access information. Prospective students can contact IAA via office visit, email fax, and phone and when a prospective student requests an alternative means to access information, Project leaders respond directly to the student to identify and provide what they need. For example, PDF documents with 'read aloud' functionality are available to hearing-impaired individuals and we often partner with prospective student sponsors such as Voc-Rehab to gain assistance in ensuring prospective students get the information they need in a way they can readily access it.

X. Evaluation and Planning

Reported: "The [Institutional Assessment and Improvement] Plan is presented as a "1-3 year plan" which could carry it through to 2018. The goals appear sturdy and ambitious enough to justify three years' worth of activities. It should be noted, however, that no formal planning group is currently constituted, nor are there regular assessments of progress on goals and strategies or updates. For example, among the strengths listed is the "Partnership with Burlington College". There is no mention of an organizational intention to make application to be recognized as a credit or degree-granting entity.

IAA acknowledges that the strategic plan is due for review and update in 2017 to capture current and future efforts following the closure of Burlington College. Note however that there continues to be progress made on the goals, objectives and activities for this project and that there is documentation available.

Section II – Evaluation of Strengths, Concerns and Suggestions

Reported: We saw only scant evidence of planning for the critical general education portion of the associate degree curriculum should IAA be awarded degree-granting status. At this point, planning seems to be limited to course lists and possible instructors—already on IAA staff—to serve as faculty.

IAA again emphasizes the limitations of implementing general education courses prior to acquiring post-secondary approval. IAA offers a prescribed sequence of closed courses and cannot yet grant degrees, therefore, based on our understanding of what IAA is currently allowed to offer, an offering of separate general education courses to be used toward a degree has not been implemented pending post-secondary approval.

Reported: The application materials, particularly the self-study, describe IAA/HITEC as it currently functions. There is little attention given to the ways in which the organization would change were it to become a credit and degree-granting institution. While there is justifiable pride in what IAA does and how it functions, we saw little interest in and evidence of the changes that would comprise the next phase of growth and recognition as a college.

IAA appreciates the various benefits of acquiring credit and degree-granting status, though is not seeking this status to change its operation. IAA wishes to continue operating under its current mission

and vision, with growth comprising of increased access to higher education pathways for its existing target student body, as well as providing the value these pathways may provide to its employer-partners.

IAA does not intend to significantly increase enrollments through post-secondary approval, nor offer open courses or programming to the public. IAA is open to implementing changes that increase its accountability and quality as a post-secondary education institution, however seeks recognition of its existing operation's academic quality, infrastructure, mission, vision and philosophy.

The above paragraph concludes our response analysis. It is my hope that this letter will assist you in recognizing that IAA does operate at a high level of <u>academic quality</u> consistent with that of other post-secondary institutions, and that IAA is willing and able to respond quickly and effectively to resolve any of the issues you see as an obstacle.

Your approval of our application will provide the recognition of, and value to, the accomplishments of our extraordinary students, and their families. They inspire us on a daily basis to continue the very challenging work that we do.

On behalf of our board members and the IAA staff/faculty at Vermont HITEC,

Gerald P. Ghazi, J.D. President

Institute for American Apprenticeships at Vermont HITEC

156 Commerce Street

PO Box 1548

Williston, Vermont 05495

Business

Acosta, Trump's man on Labor, wants more apprenticeships

By Laurie Kellman | AP May 19 at 12:33 PM

WASHINGTON — U.S. Labor Secretary Alexander Acosta on Friday made public-private apprenticeships his debut issue as President Donald Trump's point man on matching American workers with specific jobs.

"CEO after CEO has told me that they are eager to fill their vacancies, but they cannot find workers with the right skills," Acosta told the labor ministers of the Group of 20 industrial and emerging-market nations gathered this week in Germany. Apprenticeships that pay salaries and often lead to careers, he added, "are a major priority for President Trump and the Department of Labor."

The declaration, and a new campaign of tweets on the subject, represent the first indication since Acosta's swearing-in three weeks ago that apprenticeships are at the core of the Trump administration's plans to train a new generation of workers.

The discussion of apprenticeships is a relatively new one for Trump, who campaigned for the White House on promises to restore manufacturing jobs that he said had been lost to flawed trade deals and unfair competition from China, Mexico and more.

But it's not new to policymakers of either party or the private sector, whose leaders have for years run apprenticeship programs. Some are modeled on those in such countries as Germany and the United Kingdom.

In a discussion in February, some of the two dozen CEOs gathered to discuss manufacturing jobs suggested there were still plenty of openings but too few qualified people to fill them. One executive said his company has 50 participants in a factory apprenticeship program, but could take 500 if enough were qualified.

Unemployment is historically low, but there are gaps in some sectors. Government figures show there are 324,000 open factory jobs nationwide — triple the number in 2009, during the depths of the recession.

At a White House round table discussion, some executives challenged Trump to generate a "moonshot" of 5 million new apprenticeships over five years.

"Our companies are some of the greatest universities in the world. We shape these employees, we train them, we educate them, we bring them in," said Salesforce.com CEO Marc Benioff, who issued the challenge to Trump.

"Let's do that, let's go for that 5 million," Trump replied at the event in March.

There's also evidence of rare bipartisan agreement, at least on the value of apprenticeships, which generally combine state and federal government money with support from universities and companies looking to train people for specific jobs. In some cases, students split their time between school and work, and the companies pay some portion of wages and tuition.

The budget compromise funding the federal government through September passed this month with \$95 million for apprenticeship grants, an increase of \$5 million — in part to increase the number of women apprentices.

"@POTUS & I are focused on boosting the number of women who participate in apprenticeship programs," Acosta tweeted from Germany on Thursday. While there, Acosta toured the BMW assembly plant in Munich. The company has an apprenticeship program in Spartanburg, South Carolina, with three community colleges in the area.

Trump's "skinny" — or abbreviated — budget blueprint released in March proposes a 21 percent cut in the Labor Department budget, but also pledges to help states expand apprenticeship, an evidence-based approach to preparing workers for jobs. His more detailed, or "fat," budget, is due out next week and is expected to contain more details.

Copyright 2017 The Associated Press. All rights reserved.