



## Transferring Global and Domestic Workforce Training Innovations to the Northern Virginia Region

### Background

Northern Virginia's short- and long-term workforce challenges are significant. Between 2015 and 2020, 650,000 new workers will be needed in response to the need to fill new and replacement jobs, population growth, retirements, and a rapidly diversifying economic landscape. Across the Atlantic, Germany's "dual-system" of paid-apprenticeships has long been the global benchmark for workforce training. To improve understanding about how Germany's workforce programs could inform equivalent efforts in Northern Virginia, the NVRC convened leaders from Northern Virginia's commercial, educational and governmental sectors for a half-day workshop. Dr. Scott Ralls, the President of the Northern Virginia Community College, opened the workshop proclaiming it an opportunity to "change perceptions" across the region about how workforce training. NVRC Chairman Penny Gross added that workforce training in Northern Virginia stood to profit greatly by learning from the German model.

### OVERVIEW OF WORKFORCE INNOVATIONS FROM GERMANY AND THE UNITED STATES

Parke Nicholson (American Institute for Contemporary German Studies)

- Germany's Dual System is consensus-driven process involving the participating unions, businesses, schools and government towards the establishment of standards for curricula, wages and credentials;
- The Dual System is characterized by paid apprenticeships, and the balance between apprentices' time with hands-on experiences at work (70% of apprentice's time) and theory in school (30% of apprentice's time);
- Employers in Germany pay approximately 75% of the costs of apprenticeship, both directly and indirectly through membership in business associations that provide consulting services and host standardized exams in all certified professions;
- Germany has low nation-wide youth unemployment and substantial societal buy-in and investment.

Sebastian Patta (Volkswagen)

- VW apprenticeships start with investment in people and recognition of a social responsibility between the firm and its workers. VW affirms that successful apprenticeships start with close and constant conversation among the company, the schools and parents to constantly clarify the purpose, goals and conditions of the apprenticeship;

- VW paid apprenticeships in Germany can start as early as age 15 and the plant in Chattanooga offers apprenticeships in sectors such as robot operators;
- VW suggests that apprenticeships in US will strengthen when perceptions and attitudes towards vocational careers were not as disparaged;

#### Monika Irchenhauser (REHAU)

- REHAU apprenticeships started in 2015 at polymer plant in Alabama. Five apprentices with the “Polymer Specialist Apprenticeship Program” work with highly automated machinery;
- REHAU currently recruits for additional apprenticeships to extend the program;
- REHAU apprentices take two years. Apprenticeships spend three days per week at the local community college and two days at the REHAU plant in Alabama;
- REHAU’s headquarters in Leesburg aspires to hire qualified technical staff, but would even more appreciate “White collar” apprenticeships in office jobs in the areas of accounting, purchasing, supply chain, etc.

#### Dr. Scott Ralls (Northern Virginia Community College)

- Successful workforce in Northern Virginia starts with:
  - Priorities that are data-driven;
  - Places to meet and teach;
  - People with the correct skills and expertise and understanding of region;
  - Programs that are industry-defined and third-party certified, stackable and performance-based;
  - Partnerships;
  - Perceptions” about vocational training and apprenticeships, which are stigmatized, need to change.

#### Michele Webb (Fairfax County Schools)

- Fairfax County Schools endeavor to train students for career and college via the FCPS “Career-ready and College Readiness?” programs;
- FCPS encourages goal-directed and resilient education programs for workforce training;
- Work-based learning supported by the school district takes the form of: Internships; Job-shadowing; Resume development workshops; Industry partnerships; Workplace readiness competencies in CTE classes; Career transition services for students with disabilities; Partnerships with VW/NOVA include training mechanics; and, Mentoring.

#### Dr. Robert Lerman (American University)

- Americans are less suspicious of apprenticeships than before, but more work needs to be done to lessen faith in the “academic-only approach”;
- The US needs to change its notion of skill and further study the German workforce training model;
- More empirical evidence suggests that investment in apprenticeships benefits the bottom line (i.e. profitability) of companies and repays investment quickly.



## **FOLLOW-UP RECOMMENDATIONS AND NEXT STEPS FOR NORTHERN VIRGINIA**

### *Defining Scale and Meaning of Apprenticeships*

- Expand conversation in Northern Virginia towards a reliable definition and understanding of apprenticeships that goes beyond just work-based learning;
- Understand how “shadowing” can be used to enhance apprenticeships;
- Educators to focus on designing education programs and curricula for apprentices that suitably meet the needs of employers;

### *Utilize Region’s Demographic Diversity*

- Promote and introduce demographic diversity into traditionally male-dominated sectors (i.e. construction and computer programming trades);

### *Partnerships with Region’s Industry*

- Work with local businesses such as REHAU and its “teachers and industry” (in partnership with GW University) - a multi-week program exposing school teachers to firm’s approaches to product development, real-life career oaths, sought-after skills and potential development and training programs, such as apprenticeships and internships;
- Invest equally in education and entrepreneurship that extend beyond “cut-and-paste” approaches;
- Study South Carolina’s model of extending tax credits to companies supporting properly developed and defined apprenticeships;
- NOVA might encourage an equivalent approach to South Carolina by funding recruitment of apprenticeships in cyber security;
- This recruitment model should be carefully tailored (not half-baked and reliant on poor investment and weak political slogans) state-wide marketing programs that properly focus on apprenticeships;
- Study Charlotte, North Carolina’s apprenticeships which were framed around a “community perspective” as well as a “corporate perspective” in tandem with German firms;

### *Destigmatize Apprenticeships by Re-define Education and Career Expectations*

- Educate teens with “real-world skills” and importance of social etiquette and consequences (i.e. showing up for work regularly and on time);
- Encourage teens to think beyond low-skill careers such as taxi driver while highlighting the benefits of apprenticeships and challenging the “Harvard or broke” mentality so predominate in Northern Virginia;
- In Germany, many corporate executives were promoted through the apprenticeship programs of their firms;
- Highlight that investments in apprenticeships pay for themselves when constructed properly; Need to communicate to youth that education is life-long and a process of “learning how to learn”;
- Emphasize that education is not a perfectly linear process;

### *Change Starts at the Regional Level*

- Localities in Northern Virginia might consider altering rules governing internships to allow interns working at local governments to be hired immediately following their internships;
- Apprenticeships in Northern Virginia might be served if the US Federal Government could be encouraged to relinquish insistence on strict interpretation of credential for government contracts.

### *Continue Pursuit of Studying the German Model in Further Detail*

- German engineering and “Made in Germany” are global brands. Northern Virginia may need to consider an equivalent effort for re-branding;
- Study how German firms nurture skills, savvy and innovation from apprenticeships;
- Facilitate more peer-to-peer policy and technical exchanges with counterparts in Germany. Perhaps by considering an “Articulation Agreement” between firms and schools in the Stuttgart region and Northern Virginia.