



Harmonization and Responsiveness.

Lessons From German Apprenticeship Reforms

At a Glance

- Germany's well-functioning apprenticeship system serves as a model for other countries.
- Reforms to Germany's apprenticeship system have created stronger ties between apprenticeship training and the workplace.
- Canada can learn from these changes to strengthen its own apprenticeship system through greater national coordination and more businesses playing a deeper role in apprenticeship programs.

Executive Summary

In Germany, strong public and private investments in apprenticeship training have created a well-coordinated and functional apprenticeship system. Its success renders the German apprenticeship system a model that other countries look to for ideas and inspiration. Nevertheless, German governments, businesses, employee groups, researchers, and other stakeholders continue to seek ways to improve the system.

The key mechanism for apprenticeship reform in Germany is the Board of the Federal Institute for Vocational Education and Training (BIBB). The Board coordinates negotiations among employers, employee groups, the 16 federal states, and the federal government, who work toward a legally mandated consensus on new or revised apprenticeship legislation.

Germany has introduced several important reforms to its apprenticeship system. These include the introduction of “learning fields,” which are based on workplace requirements, but also include interdisciplinary topics such as economics, law, technology, and ecology. Another key reform is the linking of occupational profiles with workplace requirements. This makes it easier to connect training with current workplace requirements. In addition, German apprentices can now complete a portion of their training abroad.

As a result of these reforms, changes in how work is performed are now more accurately reflected in students’ training. Apprentices receive broader training, making them more employable and allowing them to adapt more easily to changes within industry sectors. Businesses benefit from a larger pool of skilled workers that are better prepared for the workplace. A more efficient apprenticeship system has also reduced government expenditures.

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Canada can learn from the strong coordination—across state boundaries and between diverse stakeholders—of Germany’s apprenticeship system. Canada can also learn from the depth of German businesses’ involvement in apprenticeship training. Many Canadian provincial apprenticeship boards include employer and employee groups; Canada should work with these groups, as well as industry associations and sector councils, to coordinate enhanced approaches to apprenticeship training.

Introduction

In Germany, strong public and private investments in apprenticeship training have created a well-coordinated and functional apprenticeship system. Completion rates of German apprenticeships are high, compared with other countries, including Canada.¹ The success of the German apprenticeship system renders it a model that other countries look to for ideas and inspiration. Nevertheless, German governments, business groups, employee groups, researchers, and other stakeholders continue to seek ways to make improvements. The result is a functional system that is responsive to changes in the world of work and accessible to individuals from a range of socio-economic backgrounds.² Canada should look to the ongoing improvement process in Germany to inform its own efforts to enhance apprenticeship opportunities and systems.

Overview

The majority of apprenticeships in Germany are offered within a dual system that combines three to four days per week of workplace training with one to two days per week of classroom training. This contrasts

1 Munro, MacLaine, and Stuckey, *Skills*, 101.

2 Federal Ministry of Education and Research, *Reform of Vocational Education and Training*.

HARMONIZATION AND RESPONSIVENESS
Lessons From German Apprenticeship Reforms

with the commonly used “block release” system in Canada, where apprentices alternate blocks of up to ten weeks of classroom training with workplace training.³

There are 329 recognized training occupations in Germany. These occupations cover traditional trades, such as bricklaying and carpentry, as well as non-traditional trades, including banking, insurance, and information technology. In total, 1,429,977 Germans were registered in apprenticeships in 2012.⁴

Germany’s apprenticeship system offers two alternative formats to the standard dual system:

- **School-based training:** Most training for school-based apprenticeships takes place in public or private schools. Trainees also participate in workplace training, but not as extensively as in the standard dual system. With the exception of occupations in health care and nursing, trainees are not paid. School-based education is most common in health care, business, engineering, and the design and creative industries.⁵
- **Vocational-training preparation:** This transitional education system is designed for youth who are not yet ready for full apprenticeship training. This format provides specialized training to facilitate a successful progression into the dual system or school-based training.⁶ Most vocational preparation programs are delivered through vocational schools, and some incorporate workplace training.⁷

3 Munro, Stuckey, and MacLaine, *Skills*, 102. While there are other approaches to apprenticeship classroom training in Canada, block release remains the most common.

4 Federal Institute for Vocational Education and Training, *VET Data Report Germany*, 9.

5 Make It in Germany, *Vocational Training in Germany*, 5.

6 Spöttl and Windelband, *Innovations in Vocational Education and Training*, 7.

7 Solga and others, *The German Vocational Education and Training System*, 3.

Reforms to apprenticeship training in Germany are aimed at preparing employers and workers for changes in the world of work.

Objectives and Target Groups

Many German businesses would like to offer apprenticeship training. However, in Germany and many other advanced countries, increasing numbers of young people believe that an academic education leads to better career opportunities than apprenticeship training. At the same time, increasing numbers of German secondary school graduates are meeting the requirements to pursue academic education.⁸

Reforms to apprenticeship training in Germany are aimed at preparing employers and workers for changes in the world of work.⁹ As in many countries across the globe, Germany's workplaces are becoming more digitized and automated.¹⁰ Apprenticeship training requirements have been revised in recent years in response to the increased demand for information technology and engineering skills.¹¹

Apprenticeship reforms in Germany have improved conditions for apprentices, skilled tradespeople, and employers. They have also given rise to new opportunities for youth in search of apprenticeship training. Moreover, the reforms to the German apprenticeship training system have brought about new connections and partnerships involving schools, businesses, governments, industry associations, and chambers of commerce.

Processes

In Germany, the legal basis for apprenticeship training is the *Vocational Training Act*. The Act was signed into law in 1969 and revised in 2005. The most significant reforms, however, are not achieved through revisions to the Act, but rather by new programs, regulations, and amendments of the Federal Institute for Vocational Education

8 Federal Institute for Vocational Education and Training, *VET Data Report Germany*, 9.

9 Sondermann, "The German Vocational Training Reform Act," 19.

10 Born, *As a Growth Driver*.

11 Spöttl and Windelband, *Innovations in Vocational Education and Training*, 23.

and Training (BIBB) and its social partners. These partners include representatives of the 16 German Länder (state governments), as well as employee representatives, trade unions, and business groups.¹²

The key mechanism for apprenticeship reform in Germany is the Board of the BIBB. When warranted, industry representatives will request new or revised regulations from the BIBB, or will request a feasibility study from the federal government to determine if reform is needed. If a new regulation or a revision to an existing regulation is deemed necessary, the Board coordinates negotiations among all stakeholders, who work toward a legally mandated consensus. A final draft of the change then passes before the Board, which holds a vote. The four stakeholder groups—employers, trade unions, Länder, and federal government—are given an equal share of votes, regardless of the size of their membership. Once a consensus is reached, the legislation is forwarded to the appropriate federal government department and becomes law.¹³

Innovations

The *Vocational Training Reform Act* of 2005 contained revisions to several areas of apprenticeship training in Germany. These include:

- greater alignment and equivalency of school-based and in-company training;¹⁴
- increased national harmonization of rules and regulations;¹⁵
- increased opportunities for international experiences.¹⁶

Other system-wide revisions are occasionally made as part of a steady and ongoing process of improvement.¹⁷

12 Interview with The Conference Board of Canada.

13 Interview with The Conference Board of Canada.

14 Federal Ministry of Education and Research, *Reform of Vocational Education and Training*.

15 Ibid.

16 Sondermann, “The German Vocational Training Reform,” 19.

17 Interview with The Conference Board of Canada.

To work abroad, apprentices need to ensure that the proposed foreign training conforms to German requirements, or provides them with relevant language or technical skills.

The *Vocational Reform Act* has also simplified the reform process by reducing the number of advisory groups. For example, the Länder Committee of the Federal Institute for Vocational Education and Training has been abolished. Instead, new training regulations are discussed with the federal states through the Bund-Länder Coordination Committee. This committee was developed through individual agreements with each of the states.¹⁸ The BIBB Board—the vocational “parliament”—now remains the only legally regulated federal advisory body.¹⁹

The *Vocational Reform Act* has also made it easier for German apprentices to study abroad. Operating in an increasingly globalized environment, Germany’s skilled workers sometimes need to familiarize themselves with foreign equipment, processes, and cultures. The *Vocational Reform Act* now allows German apprentices to complete vocational training abroad. To have their foreign training recognized, apprentices need to ensure that the foreign training they propose to take conforms to German requirements, or that it provides them with relevant language or technical skills. Apprentices can study abroad for a maximum of one-quarter of their training program; they can also be temporarily released from their German training contracts, and apply to receive credit for their training abroad.²⁰ Apprentices receive approval for foreign training from their employer and chamber of commerce.²¹

Germany has also made several substantive reforms through the board of the BIBB. One of these is the introduction of learning fields. In contrast to previous theoretical approaches to learning, the skills and knowledge described in learning fields are drawn from actual business and work processes. The result is an approach that combines theory and practice as students develop a broad range of skills.²² While the focus of training is on work processes, students also study interdisciplinary topics, such

18 International Business Publications, *Germany Country Study Guide*, 105.

19 Federal Ministry of Education and Research, *Reform of Vocational Education and Training*.

20 Sondermann, “The German Vocational Training Reform,” 19.

21 Euro Apprenticeship, *Germany*.

22 Opel and Brinda, “Learning Fields in Vocational IT Education,” 149.

Linking national occupational profiles to work processes has been another key innovation in Germany's apprenticeship training.

as economics, law, technology, and ecology.²³ Individual instructors are responsible for selecting appropriate work processes and learning situations, allowing them to tailor learning to the requirements of specific industry sectors and, if warranted, individual businesses.²⁴

Linking national occupational profiles to work processes has been another key innovation in apprenticeship training. As with the training programs, occupational profiles in Germany had traditionally been linked to theoretical concepts. The approach has changed over the past 15 years, and occupational profiles are now linked more closely with work processes.²⁵ Since training programs are based on these occupational profiles, the revised orientation makes it easier to link training with current workplace requirements.²⁶

Because training programs are closely aligned with workplace requirements, it is easier for training programs to respond to innovations and changes in the workplace. A key component of this responsiveness is that changes can be made without involving the social partners (federal government, Länder, employers, and trade unions). For example, when a manual production process becomes automated, the occupational profile in question—and thus the training program—can be quickly adjusted to reflect the revised process.²⁷

Challenges

Germany's apprenticeship system is well-coordinated on a national level, but it is not immune to jurisdictional challenges such as those faced in Canada. For example, responsibility for the *Vocational Training Act* is almost entirely the prerogative of Germany's federal

23 Bauer and Przygodda, "New Learning Concepts Within the German System," 24.

24 Interview with The Conference Board of Canada.

25 Spöttl and Windelband, *Innovations in Vocational Education and Training*, 22.

26 Ibid.

27 Spöttl and Windelband, *Innovations in Vocational Education and Training*, 23.

government.²⁸ However, during Federalism Commission consultations leading up to the Act's reform in 2005, some Länder requested that responsibility for the "law on vocational training in non-school settings" be transferred to them.²⁹ The federal government viewed this approach with caution, as such a transfer traditionally required federal approval through the Bundesrat, Germany's federal representative council for the Länder.³⁰

Reaching consensus across jurisdictions and among stakeholder groups can be challenging. Until recently, the legislative process of making reforms consisted of discussions between the federal government and the business sector; neither the Länder nor the trade unions were included. Today, the legislative process includes federal and state governments, employer groups, and trade unions. Chambers of commerce also play an important role in coordinating apprenticeship training. Once the diverse stakeholder groups, including businesses and trade unions, have reached consensus, apprenticeship-reform legislation must still be approved by the BIBB Board.³¹

The different regions of Germany have found it challenging to align their own requirements with the standardized learning fields and the apprenticeship system's work process orientation. In regions with many large businesses, a single business, such as Mercedes, may fill five classes with its own trainees. This type of situation simplifies the task of offering training, as a large group of apprentices may be taught similar material. In regions with many smaller businesses, however, students' learning needs are more diverse, making it difficult to offer customized training.³²

28 Sondermann, "The German Vocational Training Reform," 18.

29 Ibid.

30 Ibid.

31 Interview with The Conference Board of Canada.

32 Spöttl and Windelband, *Innovations in Vocational Education and Training*, 24; Interview with The Conference Board of Canada.

Solutions and Keys to Success

Germany's tradition of apprenticeship dates back to the Middle Ages, and remains strong today.³³ Reforms to Germany's apprenticeship system build on this tradition, and succeed through the strong commitment of all stakeholders. There is a high degree of collaboration and cooperation between government and industry in Germany, and there is also considerable social acceptance of national standards for apprenticeships.³⁴ Business and employer groups play vital roles in the apprenticeship system and positively influence its outcomes through their input and advice.³⁵

Successful reforms depend on stakeholders' ability to compromise. With such diverse stakeholders, meeting every need of all parties is not always possible. To ensure negotiations are successful, stakeholders must be prepared to accept that new or revised legislation will meet most, but not all, of their demands.³⁶

Benefits, Outcomes, and Impacts

Reforms to Germany's apprenticeship system have made it more effective and responsive than ever before. For instance, reducing the number of statutory advisory bodies has shortened the time required to implement revised training regulations. Revisions now take an average of one year, meaning that training programs can quickly respond to changes in technology or work processes.³⁷ In addition, because training programs are now linked more closely with work processes, changes in how work is performed are now more accurately reflected in students'

33 Ibid.

34 Esser, "Interview With Prof. Dr. Friedrich Hubert Esser," 1.

35 Ibid.

36 Interview with The Conference Board of Canada.

37 Ibid.

Hiring back former apprentices reduces turnover rates and helps keep recruitment costs low, as businesses spend less time looking for outside workers.

training. Apprentices also receive broader training than previously, making them more employable and allowing them to adapt more easily to changes within industry sectors.

Businesses have benefited from apprenticeship reforms through access to a larger pool of skilled labour. When they hire apprentices who have completed a work placement with them, businesses further benefit from new employees who are already familiar with the company. Hiring back former apprentices reduces turnover rates and helps keep recruitment costs low, since businesses spend less time looking for outside workers.³⁸

Reforms to the apprenticeship system have also led to significant benefits for government and the country as a whole. For example, legislative reforms and other improvements to Germany's apprenticeship system have contributed to low rates of youth unemployment.³⁹ In 2014, Germany's unemployment rate for 15–24 year-olds was 7.8 per cent. This is lower than many countries in the OECD, and lower than the OECD average of 15 per cent.⁴⁰ In addition, improved employment rates—a result of more apprenticeships—are reducing requests for social assistance payments.⁴¹

Lessons for Canada

Increase National Coordination

Canada can learn from the German apprenticeship system's strong coordination across state boundaries and between diverse stakeholders. Lack of national coordination is a significant challenge for Canada, and differences in provincial training requirements pose barriers to apprenticeship completion and mobility. Reducing national barriers would help Canada leverage the economic and social benefits of a skilled

38 Ibid.

39 Ibid.

40 OECD, *OECD Employment Outlook 2015*, 273.

41 Ibid.

and mobile workforce.⁴² Reducing these barriers will require strong leadership to ensure that harmonization initiatives are successful over the long term.

Achieving Germany's level of national coordination may be difficult, given that education is mandated by the provinces and territories in Canada. However, there are several examples of interprovincial coordination in Canada that can inform national efforts to enhance apprenticeships. Taking a step forward, Canada's premiers recently signed the Provincial-Territorial Apprenticeship Mobility Protocol, which provides the basis for recognizing apprenticeship skills, work experience, and exam results.⁴³ A long-standing initiative, the Red Seal Program, harmonizes exams and standards for many apprenticeable trades across the country. In addition, the Canadian Council of Directors of Apprenticeship (CCDA) recently introduced a national harmonization initiative that seeks to develop national training standards and exam requirements for 10 Red Seal trades.⁴⁴ There is also the ongoing work of the Atlantic Apprenticeship Harmonization Project (AAHP), which covers "the harmonization of 10 trades (common processes/common standards) over three years and the development of an Atlantic shared IT system."⁴⁵

Ensure That Businesses Are Involved in Apprenticeship Reform Initiatives

In Germany, businesses play an important role in education through their participation in developing apprenticeship training regulations, assuring quality of training, and maintaining standards in training contracts. German businesses are also partly responsible for organizing final apprenticeship exams.⁴⁶ In most cases, business involvement

42 Munro, MacLaine, and Stuckey, *Skills*, 103.

43 The Council of the Federation, "Provincial-Territorial Apprentice Mobility Protocol."

44 Nova Scotia Apprenticeship Agency, *Canadian Council of Directors*.

45 Nova Scotia Apprenticeship Agency, *Atlantic Apprenticeship Harmonization Project*. See the Spotlight Study on the Atlantic Apprenticeship Harmonization Project for a discussion of its merits.

46 Interview with The Conference Board of Canada.

Germany's apprenticeship system is consistently referenced by other countries looking to improve their own systems.

is coordinated through chambers of commerce. In Canada, most provincial apprenticeship boards include both employers and employees. Canada has numerous industry associations and sector councils that have a ground-level understanding of the challenges facing Canadian businesses. Canadian businesses could work with these groups to coordinate enhanced approaches to apprenticeship training.

Ensure That Apprenticeships Reflect Industry Demand

Germany offers apprenticeships in several non-traditional trades, such as banking, insurance, media, information technology, and others.⁴⁷ Expanding Canada's apprenticeship system to include these professions—as well as professions in the government, non-profit, and charitable sectors—would help strengthen the link between education and the workplace. However, this approach would depend on the ability and willingness of organizations in new areas to change their employment methods and introduce apprenticeship opportunities. Canada could consider expanding the occupational coverage of apprenticeships on a case-by-case basis, depending on the requirements of particular occupations.⁴⁸

Conclusion

Germany benefits from a strong tradition of apprenticeships and business involvement in education. Its apprenticeship system is also consistently referenced by other countries looking to improve their own systems. Germany's continued success is due to its approach of ongoing review and reform. The most significant reforms have created stronger ties between apprenticeship training and work processes, and have increased

47 Interview with The Conference Board of Canada.

48 Munro, MacLaine, and Stuckey, *Skills*, 106.

HARMONIZATION AND RESPONSIVENESS
Lessons From German Apprenticeship Reforms

the system's responsiveness to changes in the workplace. Canada can look to these changes, and to Germany's apprenticeship system as a whole, as it seeks to improve its own apprenticeship system. Canada should work toward greater national coordination and stronger roles for businesses to help position its apprenticeship system for future success.

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APPENDIX A

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