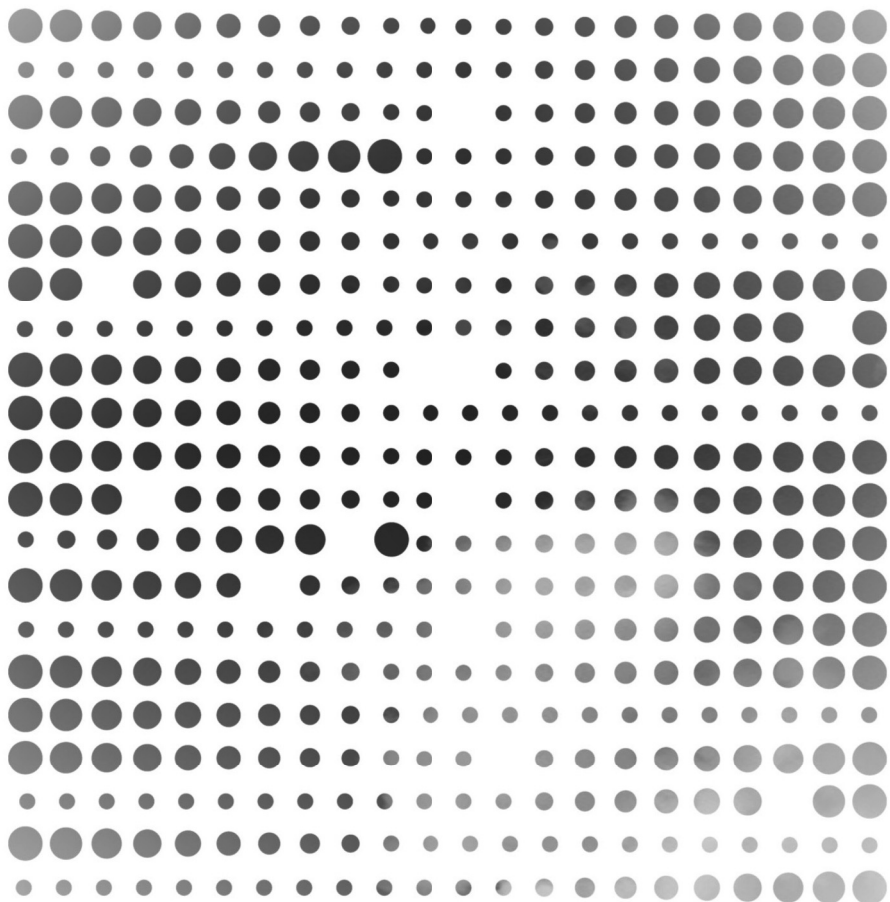


Enhancing the Link between Skills Development and Youth Employment Policies

Edited by Young-bum Park and Young-sup Choi



K R I V E T

Contents /

Chapter 1

Developing Relevant Skills

- Culture and Structure (The case of Norway)_01

Joakim Bakke

Norwegian Ministry of Education and Research

Chapter 2

Vocational Education and Training and Youth Employment

- Some Experiences from Germany_25

Gesa Muenchhausen

Federal Institute for Vocational Education and Training(BIBB), Bonn / Germany

Chapter 3

Getting Qualified for Employment

- How the dual-track VET system in Switzerland matches skills development and the needs of the labor market_49

Erik Swars

Swiss Federal Institute for Vocational Education and Training(SFIVET)

Chapter 4

Linking Skills and Jobs for Youth: Australian case_75

Philip Loveder

National Centre for Vocational Education Research(NCVER) / AUSTRALIA

Chapter 5

Systematic Design to Enhance the Link between Skills Development and Youth Employment in P. R. China_99

Yufeng Liu

Central Institute for Vocational & Technical Education, MOE, P. R. CHINA

Chapter 6

「청년층 숙련 개발과 고용의 연계 강화」

국제세미나 발표 자료 요약_121

최영섭

(한국직업능력개발원 선임연구위원)

List of Figures

Chapter 1

Figure 1. OECD youth unemployment rate 2010, OECD	53
Figure 2. The Swiss VPET system, SERI, Facts and Figures 2014	54
Figure 3. Upper-secondary level qualifications, SERI Facts and Figures 2014	56
Figure 4. Enrolment in upper-secondary level, SERI, Facts and Figures 2014	56
Figure 5. The three learning places in the Swiss VET-system	58
Figure 6. Cost/benefit ratio by apprenticeship duration, in CHF, Strupler Wolter, 2009 ...	60
Figure 7. Development and implementation of VET programmes in Switzerland ...	62
Figure 8. Support of SFIVET to VET stakeholders	63
Figure 9. Cooperation of stakeholder within the VET-system	64
Figure 10. Satisfaction with choice of apprenticeship, Swiss Education Report 2014 ...	66

Chapter 2

Figure 1. Full-time education to population ratios, 15-19 and 20-24 year olds, 1986-2003(August figures)	79
Figure 2. Full-time employment to population ratios, 1978-2013(August figures)	80
Figure 3. Part-time employment to population ratios, 1978-2013(August figures)	81
Figure 4. Unemployment rates, 1989-2013(August figures)	82
Figure 5. Unemployment rates of 15-24 year olds, 2007 and 2012(Selected Countries) ...	83
Figure 6. Not in the labour force or unemployed and not in full-time education as a proportion of all 15-19 and 20-24 year olds, 1986-2013(August figures)	84
Figure 7. Mean weekly earnings in current main job by educational attainment, 2009	92

Chapter 3

Figure 1. Total population and urban population in P.R CHINA(year 2000-2012)	102
Figure 2. Total and urban population in P. R. China since year 2000	103
Figure 3. Age composition of population in China(2000-2012)	104
Figure 4. Percentage to Total Population(2012)	104
Figure 5. Number of urban registered unemployment	105
Figure 6. Youth composition of urban unemployment(year 2002-2010)	106
Figure 7. Age composition of urban unemployment in year 2012(%)	106
Figure 8. Job-off after Graduated in year 2012(%)	107
Figure 9. No.of HE graduates in China	108
Figure 10. Employment rate of HE graduates in China	108
Figure 11. Age composition of migrant workers	110
Figure 12. Industries distribution of Migrant workers employment(2012)	111
Figure 13. Migrant Workers Training	112

Preface

Recently the world economy is looking as though it has recovered somewhat from the aftermath of the financial crisis, but the labor market conditions are failing to show significant improvement. In particular, young people newly entering the labor market upon finishing school are experiencing many difficulties finding a suitable job and the situation in Korea is not much different to that of other countries. Although Korea's education has achieved a remarkably high level of performance over the several decades, the problem of mismatch in the labor market remains a key challenge. Hence, Korea Research Institute for Vocational Education and Training held an international seminar under the theme of "Enhancing the link between skills development and youth employment policies" on June 12, 2014 to discuss ways of tackling the issue of youth unemployment. The seminar brought together vocational education and training experts from Germany, Norway, Australia, Switzerland and China, who presented cases and experiences in linking skills development and employment policies in their respective countries. Also, experts from UNESCO- UNEVOC, ILO and Cedefop joined Korean experts in panel discussion to explore ways of resolving youth employment issue from international and comparative perspectives.

This is a compilation of papers written by experts who participated in the seminar. It is hoped that this publication will prove useful for all those concerned about resolving youth employment issue.

August 8, 2014
Prof. Dr. Young-bum Park
President, KRIVET

Chapter I

Developing Relevant Skills
- Culture and Structure (The case of Norway)

Joakim Bakke

Norwegian Ministry of Education and Research

Developing Relevant Skills - Culture and Structure (The case of Norway)

Joakim Bakke

Why Skills?

According to the OECD skills have become the global currency of the 12st century. Skills matter. Skills matter for individuals, for countries and for societies regionally and globally. It is a commonly accepted fact that education and skills will strengthen productivity in any country by raising the general quality of the work force, by developing new technology and by raising the ability of the work force to absorb new technology.

Why Skills Strategy in Norway?

The Norwegian economy continues to prosper. The financial crisis has so far had little or minimal effect and unemployment is still low (2.8% by April 2014). But skills policy is not only about fixing the problems of today – it is just as much about preparing for the challenges of tomorrow. A prosperous situation today is no guarantee for a prosperous future, as the Norwegian Prime minister underlined when signing the Skills Strategy agreement with the OECD. Norway cannot afford to be complacent. There are already some grey clouds on the sky. Real costs of labor is increasing faster than productivity, the petroleum production(which stands for approx. 25% of the Norwegian GDP) will not last forever and demographic developments will increase necessary public spending on health care and pension payments in coming years.

In 1945 the Norwegian per capita GDP(adjusted by purchasing power) was only 60% of the Swedish per capita GDP. In 1992 we passed the Swedes and in 2006 the Norwegian GDP was 50% higher than the per capita GDP of Sweden.¹⁾ How could this happen? How could neighboring countries differ to this extent in such a short time span? The answer is easy: Oil. The discovery of oil in the North Sea brought Norway from being one of the poorest countries in Western Europe to prosperity and rapid economic growth. But oil and other natural resources is not a guarantee for success. Natural resources need to be paired with relevant skills, sound policies and humility. Even though oil has been the main driving force of the Norwegian economy over the past four decades we still rely heavily on human capital. Calculations made by the Norwegian Ministry of Finance has shown that approx. 80% of our total national wealth is human capital – it is what's in people's minds that matter the most, it is our skills.

Skills needs are in constant change, both qualitatively and quantitatively. Let me use the Norwegian health sector as an example. By 2025 16% of the Norwegian population will be over 67 years of age. 5% will be over 80 years of age. A large number of these elders will be in need of public health care. The health care system needs skilled health care workers. If Norway is to sustain its present level of health care, we will need every fourth youth to choose a health related education by 2025. In 2035 the number will have risen to every third youth. Is that possible? Probably not. The Norwegian health care system will face serious skills challenges in just a few years. How can this challenge be solved? The only realistic solution is to design a smarter and more efficient health care system. In order to accomplish that, we need to develop new skills for a new future.

At this point in time Norway is searching for the appropriate policies for the transition into our post-petroleum era. The Norwegian society is in need of a boost in productivity, better adaptability to changes in working life, a higher

¹⁾ Eika and Olsen(2008): "Norsk økonomi og olje gjennom 100 år"

rate of innovation and new skills for new jobs. Without success in the Skills Strategy Project it will be difficult for Norway to continue to be a country of growth, prosperity and welfare for all.

Main Challenges in the Norwegian Skills System

Through the Skills Strategy Project OECD has defined 12 major skills challenges for Norway sorted under four main headlines:²⁾

Developing relevant skills

1. Ensuring strong foundation skills for all
2. Reducing drop-out
3. Informing educational choices

Activating skills supply

4. Enhancing labor market participation among those receiving disability benefits
5. Encouraging labor market attachment among low skilled youth
6. Ensuring Norwegians remain active longer

Using skills effectively

7. Engaging employers in ensuring a highly skilled workforce
8. Promoting innovation and entrepreneurship
9. Enhancing the use of migrants' skills

Strengthening Norway's skills system

10. Facilitating a "whole-of-government approach to skills"
11. Ensuring local flexibility and adaptability for nationally designed policies
12. Building partnerships at the local and national level to improve implementation

²⁾ OECD(2014): OECD Skills Strategy Diagnostic Report Norway

Challenges for Norway in Developing High Quality Skills

The term “quality and relevance” is often used in the education discourse. Quality and relevance should not be portrayed as two separate issues. Relevance must be regarded as an integral aspect within quality education and the two cannot be separated and investigated separately. Therefore, when using the term “quality” in this paper, relevance is included.

Primary and Lower Secondary Education

Until the 4th of December 2001 Norwegian authorities and the Norwegian society as a whole considered their educational system to be very good, maybe even among the best. Some Ministers of Education had proclaimed the system to be the best, others were a little bit more humble. The truth was that nobody knew exactly what the condition of the system really was. Then came PISA. The launch of the first PISA in December 2001 set the stage for the future development of the Norwegian school system. The media called it “The Great PISA Shock” and in a matter of hours the government had to both defend a system that was suddenly doomed useless by the media and explain how to fix it. But there was no quick fix available.

One of the debates that sprung out of the first PISA launch in Norway was centered on the purpose of the school system. On the one side there was the view that schools should first and foremost put emphasis on creating good citizens with sound morals, democratic values and confidence in themselves. On the other end there was the more instrumental view of the schools being a system for building a high quality work force. The Norwegian school system has always put emphasis on the first, and what might be seen as soft skills. Norway is still doing well in assessments of students’ well-being and confidence in themselves. But after almost 13 years of efforts to improve the academic quality in schools, we are still hovering around the middle in the PISA. The discussion around soft versus hard skills is of course not a dichotomy, but a matter of finding the right balance.

Even though our school system is, and should not be designed solely for the

purpose of doing well in PISA, it still is an indication of some core challenges. The million dollar question is still how to create a school system which allows the students to both learn, thrive and be formed as human beings and good citizens. As stated earlier, any country needs an educational system that supports productivity and welfare.

1. Upper Secondary Education

Completion rates in upper secondary education in Norway are too low, especially among vocational students. And the numbers are varying substantially by region. Even more worrying is the fact that despite substantial efforts from the government for several years, the numbers are remarkably stable on the national level. As of 2012, 16% of all adult Norwegians do not hold an upper secondary education. Since unemployment rates are low and has been low for many years, it might still seem to be some kind of demand for their skills in the labor market. And to some degree it is. But two issues arise: 1) Upper secondary drop-outs are highly over-represented among those receiving disability benefits. And 2) the demand for workers with only basic (lower secondary) education will drop dramatically over the next 15-20 years.

School drop-outs are expensive. The individual cost of reduced quality of life is of course a very severe consequence for each and every individual it affects. On the national level, the economic costs are much higher than most people would expect. Calculations from the Norwegian Centre for Economic Research have shown that reducing drop-out rates by 33% would amount to approx. USD 915 millions in reduced public costs per year.³⁾ And this calculation does not include the effects on health and crime rates explained by education.

We need to get more students through the system and out into the labor market. Graduates from upper secondary vocational education are usually in high demand in the labor market and the employers are overall satisfied with



³⁾ Falch, Johannesen og Strøm(2009): "Kostnader av frafall i videregående opplæring"

the skills. Complaints from employers are more often about their work ethics than about their actual skills.

2. Higher Education

The share of Norwegian youth going into higher education is on a high level compared to other OECD countries. But as in primary and secondary schools, there are issues concerning quality. And also in this sector there is a question about finding the right balance. But this time it is not about the balance between “soft skills” and “hard skills”. In Norwegian higher education there is an embedded struggle between decentralization and quality. There are now 33 public institutions of higher education and 23 private in Norway. The total number of students is approx. 233,000, of which 198,000 are enrolled in the public institutions. On average there are only 6,000 students per(public) institution. The reason for this is the policy of decentralization. Being the least densely populated country in Europe, the Norwegian culture and tradition has always put emphasis on building strong local communities in rural areas. The political discourse has always gone in the direction of limiting urbanization and the structure of the higher education system has been actively used for this purpose. This is not to say that quality has not been an issue or that small institutions are not capable of offering high quality education. But sustaining such a decentralized system as the Norwegian system will put a lot of pressure on the resources, both human and economic. The current government seems to be going in the direction of putting more and more emphasis on quality. The Minister of Education has himself recently very clearly stated “Quality before geography” and “Mediocrity is not good enough”.

The situation for recently graduated candidates with a master’s degree from higher education is still quite good. 6 months after completion only 8.3% reported to be unemployed of those graduating in 2011.⁴⁾ Of those who were

⁴⁾ Arnesen, Støren and Wiers-Jenssen(2012): Arbeidsmarkedssituasjon og tilfredshet med utdanningen blant ulike grupper av nyutdannede

employed, 5% reported to be doing work that was irrelevant for their educational background while their primary target had been to be employed in a relevant position.

All together this short introduction to challenges in the Norwegian education system shows that we, as of today, are not able to develop the right skills. There is an obvious skills mismatch caused by imperfections in the education system.

Aiming for the Perfect Skills System

In a perfect skills world every individual would develop relevant skills in accordance with his/her abilities and be utilized in the world of work through perfect matching of skills supply and skills demand. In the real world this is practically impossible. But we still need to strive to get as close to perfection as possible.

The biggest challenge in designing a perfect skills system is to know what kind of skills your country will need in the future. Projections are always being made despite the difficulties and uncertainties. Statistics Norway project that the demand for workers with upper secondary and tertiary education and upper secondary vocational education will continue to increase in Norway, as it has done for the last decades. At the same time there will be a decrease in demand for workers with primary, lower secondary and upper secondary general education.⁵⁾

Looking at the supply side it seems there will be sufficient supply of candidates from higher education during the next 15 years when looking at the total number. But while there might be a surplus in social science, humanities and arts, there will a shortage in nursing and care giving, teaching and some fields of science. Looking at upper secondary vocational education we see a different picture. Almost all major fields at this level will experience skills shortages during the next 15 years, especially the technical fields and health and

⁵⁾ Statistics Norway(2013): "Forecasting supply and demand for labour by education"

care giving. This scenario is a major concern for both Norwegian businesses and for the Norwegian health care system.

1. Migrant workers

When experiencing skills shortage a country can basically choose between two solutions: Either launch progressive actions for increased recruitment to fields in need, or increase the number of migrant workers. The Norwegian strategy will be to do both. By the end of 2012 about 6.1% of all registered workers in Norway were Non- Norwegian citizens. At the end of 2011 the number was 5.8%. It is highly likely that the number will continue to increase, at least as long as the financial crisis is still effecting a large number of economies in the European region. Already today, some fields of Norwegian industry are dependent on migrant workers, especially in construction. Is that a problem? The Norwegian government's answer is a conditional no. The Norwegian labor market is going well, wages are high and it is relatively easy to attract skilled workers from other European countries, especially from Sweden and Eastern Europe. And these workers are relatively easy to integrate into the Norwegian society. First of all, the government puts emphasis on our common obligation to show solidarity with those in need, but immigration is also a commonly accepted benefit for our labor market. The government has therefore welcomed migrant workers, and it has been doing so since the 1970s. Immigration is of course much stricter regulated today than it was in the 70s, but through our agreement⁶⁾ with the European Union we are legally obligated to accept all citizens from EU member countries into our labor market and providing them with equal rights as any Norwegian citizen. At the moment this system is beneficial to the Norwegian labor market, especially since immigration to Norway is now more about labor migration whereas it used to be more humanitarian. But is this a strategy we can rely on for all foreseeable future?

⁶⁾ Norway is not a member of the European Union, but has signed an agreement on the European Economic Area (the EEA-agreement) which basically includes Norway in the free movement of goods, people, services and capital.

Probably not. Norway needs to rely mainly on our own system for skills development. Relying too heavily on the importation of skills is a dangerous strategy. Migrant workers are a valuable contribution to the labor market and should be welcomed, but mainly as a complementary strategy and as an act of solidarity.

2. The Tripartite System

Norwegian politics and the Norwegian society as a whole are both egalitarian and consensus-oriented. Social partners are heavily involved at some level in almost all major processes of policy development. The most common feature of the tripartite system is the comprehensive system for regulations of the world of work. Another important feature is the system of wage setting through collective agreements. But these are the formal features and formal processes. Beneath this level there is a whole web of more informal consultations, committees and partnerships, all aimed at reaching the highest possible level of consensus. It is often portrayed as a system for anchoring decisions through the policy development process and before decisions are actually made. Ministers have regular and informal meetings with all major labor organizations and employer organizations, social partners are regularly consulted during the process of writing white papers to the Parliament and new partnerships have been formed for certain challenges on both national and regional level.

One example of the tripartite system used in education is an initiative made by the Ministry of Education in 2012. All major labor organizations and employer organizations were invited to join a partnership and sign a *social contract* aimed at recognizing the joint responsibility for recruitment and completion of vocational education and in particular raise the number of apprenticeships offered to the students. This social contract has of course no formal legal status and there are no sanctions if one or more partner fails to live up to its obligations stated in the document. But the social contract was an important initiative for highlighting the moral obligation of all social partners to contribute to education and the visibility and status of vocational education and skills.

Due to the protection of academic autonomy there are not that many formal initiatives of the tripartite system in higher education. But since 2003 the Ministry of Education has appointed four external board members to the boards of all public higher education institutions. These board members are most commonly high level leaders of enterprises or public bodies, and their main mission is to increase the attention given to the development of relevant skills through higher education and research.

3. The challenge of implementation and whole-of-government in the vertical axis

Several initiatives have been made to strengthen the skills system for a number of years, new policies have been decided upon and resources have been allocated accordingly. So why have the challenges not been solved? As mentioned above, Norway has a quite decentralized system in the education sector. The schools are mainly public but except the higher education institutions all schools are owned by either the municipalities or the counties. The government decides the laws and regulations for the schools, but in effect they have no real control over the implementation processes. And even though the government is not able to control the implementation processes, one might still say that the national level have failed to give enough attention to the implementation of policies. The nature of politics is to a certain extent to show leadership through decision-making. When a decision have been made, ministries tend to hurry along to the next decision, feeling happy and content about the previous one and leaving the implementation with lower levels of government. This might be even more prevalent in the education sector where it is often extremely difficult to pinpoint the direct effect of new initiatives within a short period of time, as for instance a parliamentary period of four years.

This is not to say that the local level authorities are predominantly opposed to new policies or reluctant to implement them. It is more an issue of developing national policies with sufficient flexibility for the local level. *One size fits all* is not a good principle to work by. The most populated municipality in Norway is

Oslo with its 645.000 inhabitants. Our smallest municipality has 210 inhabitants. It is quite obvious that such diversity at the local level needs flexibility and adaptability in order to succeed in their implementation of national policies. This aspect of flexibility has traditionally not been given enough attention in Norway.

During the last few years there have been more attention given to implementation policy. One example is a white paper on lower secondary education which was delivered to the Parliament in the spring of 2011. Directly after the white paper was passed in parliament the Ministry started working on a written and comprehensive implementation strategy. The strategy was developed and executed in close cooperation with both public and social partners. This way of working together with both local and regional authorities and several social partners was a new and innovative attempt to solve the challenge of implementation.

4. The challenge of implementation and whole-of-government in the horizontal axis

The challenge of implementation described above is first and foremost a vertical challenge between the different levels of public governance, from national to local level. But there are still major challenges to overcome in strengthening the skills system through better horizontal coordination in a whole-of-government way of working. Different ministries have different goals, strategies, targets and cultures. Sometimes these differences come in conflict with one another, but more often they primarily lack coordination. Cross-sectoral coordination is not a new challenge, but it is a challenge that is very difficult to overcome. A critical issue is responsibility. Who is responsible for making sure that all government policies are coordinated with each other? There is no available quick-fix, but this is an issue that the Norwegian Skills Strategy team is trying to put high on the agenda for the follow-up of the OECD Action Report which will be launched on the 4th of September this year.

The Vocational Skills Shortage

First of all; there is no doubt among the government and the employers that vocational skills will be in high demand in years to come. It is also a commonly accepted fact that these kinds of skills are a crucial contributor to Norwegian productivity and welfare. Vocationally trained workers are generally well paid compared to those with higher education in the same sectors. Salaries for those with higher education are on average only 17% higher than salaries for those with an upper secondary level qualification in Norway. The OECD average is 57%.⁷⁾ The economic incentive for going into higher education is in effect not a big one. But still we see a move towards more and more applicants to higher education. This is mainly due to social status. Higher education is seen as a prerequisite for a successful carrier and social status in the society by the majority of the population. While choosing education previously was a choice of *what* you want to be, it is now seen more as a choice of *who* you want to be. Your educational background and profession is now seen as a larger part of your identity than it used to be, and a successful carrier is becoming more and more important in people's minds as a symbol of status. Choosing between vocational education and higher education is somewhat seen as a choice between a practical and a theoretical path. And if we stretch it a little bit, one might say that a youth choosing a vocational/practical education is not regarded as a vocationally talented individual, but more as a theoretically weak individual. This is an attitude that needs to change. We need to see the two educational paths as equals and recognize both the need for and the talent of those who choose a vocational education.

The vocational skills shortage in Norway is anticipated to grow in magnitude over the next 10-15 years. It has been talked about for years, but the path from discussions to real actions has not been an easy one. The current government has recognized the severity of the issue and soon after taking up office in



⁷⁾ OECD Education at a Glance 2013

October of 2013 they launched a new strategy for lifting vocational education. The strategy has eight main actions which are currently being developed further by the Ministry of Education and Research:

- Increase public grants to employers for apprenticeships integrated in upper secondary vocational education
- More ambitious goals for apprenticeships with public employers
- Approve more work place-related programs in upper secondary vocational education
- Increase the use of the system for issuing certificates of practice to those who are struggling to complete their upper secondary vocational program
- Increase the possibilities to combine general and vocational programs in upper secondary education
- Introduce a more practical approach to teaching theoretical subjects such as language and mathematics in upper secondary vocational education
- Approve more educational programs which is based on an exchange model between school-based learning and work-based learning
- Increase the access of vocationally trained individuals to certain programs in higher education

The main model for upper secondary vocational education is to do two years in school followed by two years of apprenticeship with an employer. At the end they will take their final exam which is partly theoretical and partly practical. The students are themselves responsible for finding an appropriate apprenticeship with an employer for those two years of practical training. The employers need to be formally approved by a public body before hiring apprentices and thereby committing themselves to following the rules and regulations in the system. This includes wage regulations for the students. The students are paid according to a scale which starts at 30% of the agreed wage for skilled graduates for the first semester of the apprenticeship, and ends at 80% of the wage for skilled graduates for the fourth semester.

This system works well in the sense that those who go through the whole program become well-trained and attractive workers in the job market. All students who have completed the first two years of on-campus education can apply for a theoretical “top-up year” which will allow them to apply for higher education if they so wish. But the system also has its apparent flaws. There are several challenges:

- Too many drop out during the first two years of theoretical training
- Too few manage to find themselves an apprenticeship after the first two years of theoretical training. Without an apprenticeship the students can either apply for work as an unskilled worker, or apply for the “top-up year”.
- Too many opt for the “top-up year” as their first choice instead of looking for an apprenticeship, but fail to pass the exam and end up after three years of effort without an upper secondary level qualification.

In fact, only approx. 35% of those who go into a 4-year vocational upper secondary program graduate within 5-6 years. This percentage has to be changed. Both the economical and individual costs are severe.

1. The apprenticeship system

The actions within the new strategy of the government for strengthening upper secondary vocational education mentioned above are meant to deal with these issues and the role of companies and social partners is crucial for success. Between 18,000 and 19,000 apprentices from upper secondary vocational education are hired in the world of work in Norway each year. Most of them are hired in the private sector. Norwegian industry is in numbers dominated by small and medium sized enterprises. More than half of the total number of employers taking part in the apprenticeship system has either one or two apprentices. Norwegian companies are in general very responsible actors in this regard and their contribution is immensely important. No private business is

obligated to hire apprentices. The arrangement is completely voluntary.

The companies themselves say that the reason for hiring apprentices is both their moral obligation to contribute to society through education, but they predominantly see it as a strategy for long-term recruitment. For the larger employers it is also an economic motivation involved since the apprentices are cheap labor compared to regular workers. This economic effect is not seen to the same extent among the smaller enterprises. 95% of all employers which had apprentices in 2012 saw it as a good strategy for long-term recruitment and 58% says that they generally hire their apprentices after their graduation.⁸⁾ Larger shares of those who usually hire their apprentices permanently after graduation are in the private sector compared to the public sector. This might be caused by the fact that while taking part in the apprenticeship system is completely voluntary for private companies, it is seen more as a moral obligation and as a follow-up of political pressure in the public sector.

The downside of the fact that employers so strongly see the apprenticeship system as a strategy for long-term recruitment is that it is making the whole system much more vulnerable for fluctuations. As of today, most companies are in need of more workers which again make them more prone to hire apprentices. But what will happen when companies experience a need for downsizing, or at least not a need for new recruitment? Educational needs and the need for apprenticeships are quite stable. The government has for many years tried to shift the focus in the apprenticeship system from recruitment strategy to education and the sustainment of the profession, but with no or little effect. When unemployment is going down, the companies hire more apprentices. When unemployment is going up, the companies hire fewer apprentices. These fluctuations are of course predominantly in the industry sector and not seen to the same extent in the health sector or with other public employers.

But most companies do not hire any apprentices at all, even in the present



⁸⁾ Høst, Skålholt and Nyen(2012): Om potensialet for å få bedriftene til å ta inn flere lærlinger

situation when it should be favorable for them to do so. Out of approx. 70,000 eligible companies only 12,000 had apprentices in 2012. Why doesn't a larger share of relevant companies hire apprentices when those who do are experiencing benefits from doing so? This question has been investigated and the findings are that there is no substantial difference which could logically explain the difference in action between those companies that hire apprentices and those who do not.⁹⁾ The researchers behind the report conclude that the main reason for companies not hiring apprentices is tradition and general attitudes towards the system. The three most common reasons given for not hiring apprentices is that the company is not in need of more workers, they feel that the apprentices are not of acceptable quality and they feel that it would be too time consuming to take upon them the responsibility of training an apprentice in accordance with the set standards. The second reason (apprentices are not of acceptable quality) might be worth some attention because this is also a reason given by companies that do hire apprentices when they are asked about why they don't hire more apprentices. This links back to the general quality of education mentioned above and leads us to the conclusion that the quality of the on-campus training is a significant factor for the success of the apprenticeship system and this whole educational model.

The general growth in the number of apprenticeships is not only a result of economic growth and high demand for vocational skills; it is also a result of a stronger institutional framework built up within and around the apprenticeship system. Most employers who hire apprentices seek support from the public offices responsible for the system, both in the hiring process and the follow-up process. These public offices are a quite new construction and their importance will only grow in years to come. They are incremental to the future success of the apprenticeship system as they can be at least a partial answer to the third reason for not hiring apprentices mentioned above (too time consuming and too much responsibility). Also the employer organizations and labor organizations

⁹⁾ Høst, Skålholt and Nyen (2012)

offer assistance to the employers in this regard.

In sum it is quite evident that strengthening the general quality of the on-campus training and building stronger structures for closer cooperation between the different actors involved (employers, schools, local and regional authorities and the social partners) would be the two most important strategies for raising the number of apprenticeships in upper secondary vocational education. Fluctuations in the market, which is the main reasons for companies hiring apprentices, is not a factor that can be controlled by a government and efforts made to shift the focus of companies away from recruitment strategy has been futile so far. The newly launched strategy of the Norwegian government for strengthening vocational education is quite clearly an effort made for building stronger structures for closer cooperation, combined with a strategy of making the programs more flexible and more adaptable to individual and local needs.

2. Transition from education to the world of work

When looking at the transition into the world of work for those who graduates after an apprenticeship, the statistics are quite positive. For instance, in the period from 2005-2012 between 85% and 88% of the graduates got employed by the end of the year they graduated (the majority graduates during the summer).¹⁰⁾ But not all of those who are not employed are unemployed. Some go on to further studies or have from other reasons not been looking for a job. We saw earlier that unemployment among graduated candidates with a master's degree from higher education 6 months after completion was 8,3% in 2011.¹¹⁾ This obviously indicates that graduates from upper secondary vocational programs who have completed their apprenticeship are just as attractive among Norwegian employers as graduates with a master's degree from higher education. Another evidence of this is the fact that by the end of 2012 only approx. 1.5% of those who had graduated in the period from

¹⁰⁾ Høst(2014): Kvalitet i fag- og yrkesopplæringen. Fokus på opplæringen i bedrift

¹¹⁾ Arnesen, Støren and Wiers-Jenssen(2012): Arbeidssituasjon og tilfredshet med utdanningen blant ulike grupper av nyutdannede

2005-2011 were unemployed. That is significantly below the average unemployment rate of the population (2.4%) and even further below average youth unemployment(8.8%). General unemployment among all graduates from higher education was at the same time approx. 1%.

The transition into the world of work is one important and first indication on how well we have managed to match education with actual skills needs. Another aspect is how the government, employers and the workers themselves continue to develop their competence and skills. Career development and lifelong learning will most likely become increasingly important in our society. More and more workers will experience the need for continuing education throughout their careers. Employers will also experience a growing need for their workers to participate in further education at different stages to keep up with national and international competition. If you are not the cheapest country, you need to be the best.

This situation creates a need for more comprehensive and high-quality post-secondary or tertiary vocational education. This part of the Norwegian education system has been growing faster than any other part of the educational sector in Norway over the last ten years. The programs are for the most part within technical fields and health and care giving. Some programs are public and therefore without tuition fees, other are from private institutions and therefore have tuition fees. A growing number of employers advocates these programs to their employees and even contribute financially to workers wanting continuing education at this level. This indicates that creating opportunities for further skills development for workers and different career paths is an area in need of more strategic thinking. And we also need to take into account that an enhanced system for lifelong learning and continuing education can stimulate more workers to choose a vocational and practical education. As a first step towards developing this system the Norwegian government commissioned an official report on post secondary/tertiary vocational education which will be launched in December 2014.

Wages is a third area which could shed light on the attractiveness of graduates

from different parts of the education system. But looking into wages for graduates from upper secondary vocational education in Norway will not provide any clear answers since wages are negotiated on the central and national level, and only a very small portion can be negotiated locally by every single employer. But as mentioned above, there is no huge difference in wages between skilled workers with an upper secondary diploma and graduates from higher education.

Apprenticeships in Higher Education

Some programs in higher education have a legal obligation to provide the students with practical training at a place of work. These obligations are most prominent in teacher education and nursing. But there is an ongoing trend that more and more of the other programs also opt to offer their students possibilities for integrating apprenticeships in their educational programs. Such arrangements are now seen even in programs in humanities and other classical university fields. This development is a response by the higher education institutions to the raised awareness of work relevance in higher education among politicians, employers and students.

Relevance was given quite a bit of attention when Norway implemented the Bologna Process in higher education in 2003. This implementation introduced the 3+2-model with bachelor's and master's programs in Norway. The formal implementation documents written by the government stated that all programs had to be relevant and qualify the student for the world of work. During the last decade we have seen more and more research being done on students' transition from higher education to working life and higher education institutions are using more and more employment statistics in their student recruitment campaigns. Higher education is now to a larger extent seen by young people as a formal and instrumental preparation for the world of work than the general formation of the mind that it traditionally was when admission to higher education was a privilege for the few and not a right for us all. All of this has made all higher education institutions much more prone to modernize their

programs and develop systems for integrating apprenticeships in all kinds of studies.

But does it help? Do the graduates become more attractive in the world of work if they have some form of contact with the world of work during their studies? One report suggests that it does.¹²⁾ In this study from 2012, 43% of the graduates who have had some form of contact with the world of work through their education program say that this gave them job opportunities they otherwise wouldn't have gotten. Another positive effect for students who are in some form of organized contact with one or more employers is that their motivation for studying goes up. This indicates a conclusion which says that apprenticeships or other forms of organized contact between students and the work of work should be explored and developed further also in higher education.

Closing remarks

Skills matter. Globalization, international competition, demographic changes and international migration will continuously increase the focus on skills development and skills utilization in most OECD countries. Some of the challenges are similar or at least comparable across borders, some are not. Either way, the solutions must be adapted to each and every country. Structures are important, but culture might be even more important for success. The scientist Peter Drucker once said that "Culture eats strategy for breakfast". The message is quite evident; a strategy developed without a proper link to the culture surrounding it will most likely fail. But at the same time we all need to learn from one another. The author Douglas Adams wrote in his book *Last Chance to See* that "Human beings, who are almost unique in having the ability to learn from the experience of others, are also remarkable for their apparent disinclination to do so." The OECD is doing excellent work through their

¹²⁾ Næss, Thune, Støren and Vabø(2012): Samarbeid med arbeidslivet i studietiden

comparative analysis and in facilitating learning across countries. The Skills Strategy Project has taken these aspects at least a couple of steps further and all countries participating in the project should exploit this favorable situation to its full potential.

The case of Norway shows that one should never rest in striving for better education and better skills development. Educational needs are in constant change and so should educational systems be. A prosperous situation can easily be turned around by complacency and the lack of humility.

Governments alone cannot provide the solutions to better skills development. High quality education benefits every single individual, every single employer and every single society. The solutions must be located, developed and implemented in close cooperation between the different stakeholders. Employers and social partners have a moral obligation to contribute, and governments must invite them in and allow them to fulfill this obligation. Common trust, efforts and understanding among stakeholders will benefit all and help build stronger skills system that will bring change to our societies.

Chapter II

Vocational Education and Training
and Youth Employment
- Some Experiences from Germany

Gesa Muenchhausen

Federal Institute for Vocational Education and Training(BIBB),
Bonn / Germany

Vocational Education and Training and Youth Employment - Some Experiences from Germany

Gesa Muenchhausen

Abstract

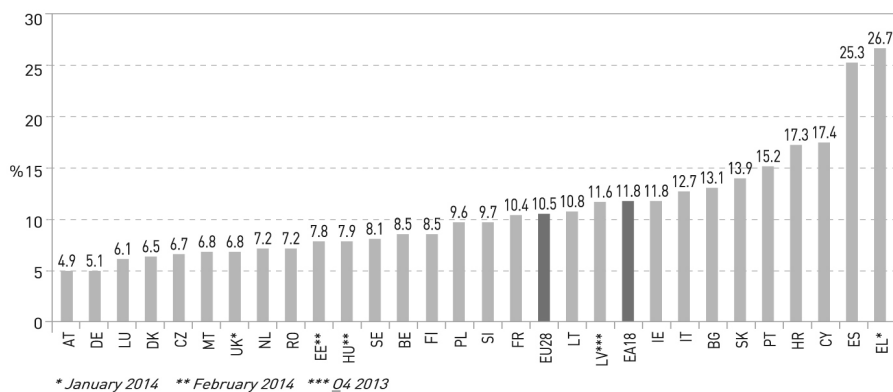
This paper gives an overview of the vocational education and training system and the youth employment in Germany and the linkage between learning and requirements of the labor market. This paper shows several of the relevant elements and also developments of the German VET system.

Introduction

The strategy of the European Union “Europe 2020” was impacted by the economic crisis and one of the aims was to develop labor market-oriented educational policy measures to reduce the youth unemployment in Europe. In its provisional Joint Employment Report, the European Commission estimates that more than one in five young people in Europe was unemployed at the end of 2012, and speaks of the danger of a “lost generation”. Accordingly, the fight against unemployment is a priority target of economic, employment, education and social policy.

Eurostat estimates that 25.699 million men and women in the EU-28, of whom 18.913 million were in the euro area(EA-18), were unemployed in March 2014. The euro area seasonally-adjusted unemployment rate was 11.8% in March 2014(it was 12.0% in March 2013). The EU-28 unemployment

rate was 10.5% in March 2014(it was 10.9% in March 2013). Among the Member States, the lowest unemployment rates were recorded in Austria(4.9%) and Germany(5.1%). The highest rates were recorded in Greece(26.7% in January 2014) and Spain(25.3%).



Source: Eurostat March, 2014, 'Unemployment rate'

In Germany, however, unemployment has fallen to under 3 million, and the unemployment rate decreased to 5.1% in 2014.

Unemployment amongst young people developed along the same lines. Youth unemployment rates are generally much higher than unemployment rates for all ages. Until the end of 2008, the youth unemployment rate in the EU-27 was around twice as high as the rate for the total population, reaching its minimum value(18.1%) in the first quarter 2008. The economic crisis, however, seems to have hit the young more than other age groups. From the beginning of 2009, the gap between the youth and the total unemployment rates has increased, so that at the end of 2012 the youth unemployment rate was 2.6 times the total rate. In the middle of 2012 the euro area youth unemployment rate overtook the EU-27 rate, and the gap increased until the end of the year.

	Youth unemployment rate				Youth unemployment ratio		
	2010	2011	2012	2012Q4*	2010	2011	2012
EU-27	21.1	21.4	22.8	23.2	9.0	9.1	9.7
Euro area	20.9	20.8	23.0	23.7	8.7	8.7	9.6
Belgium	22.4	18.7	19.8	22.0	7.3	6.0	6.2
Bulgaria	21.8	25.0	28.1	28.4	6.7	7.4	8.5
Czech Republic	18.3	18.1	19.5	19.3	5.7	5.4	5.1
Denmark	14.0	14.2	14.1	14.2	9.4	9.6	9.1
Germany	9.9	8.6	8.1	7.9	5.1	4.5	4.1
Estonia	32.9	22.3	20.9	19.3	12.5	9.1	8.7
Ireland	27.6	29.1	30.4	29.4	12.0	12.1	12.3
Greece	32.9	44.4	55.3	57.9	10.0	13.0	16.1
Spain	41.6	45.4	53.2	55.2	17.8	19.0	20.6
France	23.6	22.8	24.3	25.4	8.9	8.4	9.0
Italy	27.8	29.1	35.3	36.9	7.9	8.0	10.1
Cyprus	16.5	22.4	27.8	31.8	6.7	8.7	11.4
Latvia	37.2	31.0	28.4	24.7	13.9	11.6	7.7
Lithuania	35.3	32.2	26.4	24.2	10.4	9.0	5.0
Luxembourg	15.8	15.4	18.1	18.5	3.5	4.2	7.3
Hungary	26.6	26.1	28.1	28.8	6.6	6.4	7.2
Malta	13.1	13.8	14.2	14.5	6.7	7.1	7.2
Netherlands	8.7	7.6	9.5	9.8	6.0	5.3	6.6
Austria	8.8	8.3	8.7	8.7	5.2	5.0	5.2
Poland	23.7	25.8	25.5	27.5	8.2	8.7	8.9
Portugal	27.7e	30.1	37.7	38.4	8.2	11.7	14.3
Romania	22.1	23.7	22.7	22.2	6.9	7.4	7.0
Slovenia	14.7	15.7	20.6	23.2	5.9	5.9	7.1
Slovakia	33.9	33.5	34.0	35.1	10.4	10.0	10.4
Finland	21.4	20.1	19.0	19.3	10.6	10.1	9.8
Sweden	24.8	22.8	23.7	24.1	12.8	12.1	12.4
United Kingdom	19.5	21.1	21.0	20.7	11.6	12.4	12.4

*The quarterly youth unemployment rate is seasonally adjusted.

Source: Eurostat March, 2014, 'Youth unemployment rate'

High youth unemployment rates do reflect the difficulties faced by young people in finding jobs. However, this does not necessarily mean that the group of unemployed persons aged between 15 and 24 is large, as many young people are studying full-time and are therefore neither working nor looking for a job (so they are not part of the labor force which is used as the denominator for calculating the unemployment rate). For this reason, youth unemployment ratios are also calculated, according to a somewhat different concept: the unemployment ratio calculates the share of unemployed for the whole population. So the statistic shows that youth unemployment ratios in the EU are

much lower than youth unemployment rates; they have however also risen since 2008 due to the effects of the crisis on the labor market.

Germany has one of the lowest rates of youth employment in Europe and also in the world (at the end of 2012 it was 7.9%). One reason for this is seen in the well-developed German Vocational education and training system. The “dual system” in Germany for a long time has been seen as a good way to show how the work force can be skilled on a high qualitative and quantitative standard and also a good way how to organize a smooth transition from school to work. The firm-based training is responsible for the more practical part of the training, while the schools are responsible for the subject’s theoretical and general education. Usually trainees spend one or two days in school. Part-time vocational schools and firms are by law defined as equal partners in training.

In the 1990s, the German dual system has come under pressure of globalisation and labor market deregulation just as the other countries. But in Germany the core elements of the vocational system have been maintained despite economic turbulence. The apprenticeship in Germany is still highly accepted. It continues to provide standardised occupational qualifications and an adequate context for socialisation. It supplies a skilled labor force and keeps youth unemployment low.

For young people especially vocational education and training has a special role. The countries with the lowest youth unemployment rates are those with dual systems of initial vocational education and training. As mentioned above the German rates of youth unemployment are still low compared to European standards. This is because of the tight link between the labor market on the one hand and the educational system on the other hand resulting from the still well established vocational training system. Beside Germany, the main countries which exhibit comparatively low levels of youth unemployment are those which have a well-developed vocational education and training systems and dual structures in place like Austria.

Adapting the education and training system to changing demand of the labor market

The role of education and educational institutions has become a key factor in all modern industrialized societies evolving into a knowledge- based economy like Germany. Education has become a lifelong process in which individuals continue to learn in formal, non-formal and informal environments throughout their lives.

At the core of vocational education and training in Germany is the dual system which is based on the Vocational Training Act of 1969 (amended in 2005). Vocational Training Act, Section 2 Learning Locations of Vocational Training:

- *Vocational training shall be provided*
 - 1) *in companies engaged in economic activity, in comparable institutions not engaged in economic activity, especially those of the public service, in establishments of members of the independent professions, and in households(in-company training);*
 - 2) *in vocational schools(school-based vocational training); and*
 - 3) *in other vocational training facilities outside the system of school-based and in-company training(non-company training).*

The *main characteristic of the dual system* are as is known the two learning venues, meaning the company on the one hand and the part-time vocational school on the other hand. Access to the dual system has every young person after having completed the fulltime- compulsory education.

The completing of the vocational education and training by participating successfully at the final examination does not have any automatic right to progress to permanent employment. But in most cases, the collective wage agreement partners in various branches have created regulations which allow employment to be offered on a fixed-term basis, usually for one year.

There are 344 recognized training occupations(in 2012) provided by the dual system. The duration usually lasts 3 years, some of them only 2 and some 3,5 years. The majority of the participants take up employment as a skilled worker after

finishing their training in the dual system. In their employment later on many of them participate in continuing vocational training. Beside the dual system there are also VET pathways in fulltime vocational schools (about 15% of the age cohort).

To summarize some *brief statistical facts*:

- The Federal Employment Agency registered about 76,000 unsuccessful apprenticeship applicants as of September 30, 2011. At the same time there are, according to the findings of the BIBB Qualification Panel, 37.4% of the companies offering training places were partially or completely unable to fill their apprenticeship vacancies.
- In 2011 there were 1,460,658 young people in dual vocational training. The number has decreased by 3.2% to the year 2010.
- The number of beginners in the “transition area” in the year 2012 was still 266,732 (cf. results of the integrated training reporting (iABE)).
- The unskilled rate has been gradually declining in recent years: in 2010 the unskilled rate in the group of the 20-to-29-year old was 14.1%.
- The number of *newly concluded training contracts* decreased in the year 2012 in relation to the previous year by approx. 18,000 (- 3.2%).

Source: VET Data Report 2013 / BIBB

Any company in Germany providing training has to pay its trainees an adequate compensation that increases with each year of training. The training allowances are the biggest cost factor for the companies in providing vocational education and training. In the old federal states in 2012 the agreed training allowances based on collective agreements amounted to on average €737 per month. In the new federal states the average monthly remuneration rose to €674.

Total public expenditure for vocational education and training in 2010 amounted to approx. €13 billion, although this figure included some support for continuing education and training as well. Part-time vocational schools received

€3.1 billion, full-time vocational schools providing full initial vocational training approx. €2.25 billion.

Dual vocational education and training forms the basis for entry into employment as well as offering the opportunity to acquire a higher general educational qualification. Such a qualification imparts competence at level three (two-year training occupations) or at level four (three and three-and-a-half year training occupations) of the German Qualifications Framework (<http://www.bibb.de/en/54312.htm>).

Coming back to the title one can say that there are different *reasons of the low level of youth unemployment* in Germany. One main reason for the low level of youth unemployment is seen within the close linking of school-based and company-based learning within the scope of the dual system of vocational education and training. It leads to a relatively good match between the skills demand of the economy and the supply provided by the training system. If those completing training within the dual system are unable to find employment at the company where they have undergone apprenticeship training, it is often possible for them to obtain a position at another company within a short period of time.

So one can say that the close contact with the labor market and therefore with the skills which are necessary at the working place is very essential within the German system.

Further reasons for the low unemployment rate are seen in economical aspects, in smaller school leaver cohorts and increasing numbers of employees making the transition to retirement, in the expansion of vocational preparation and partially qualifying measures within the so-called transitional area, and last but not least in an increasing progression to courses which provide a higher education entrance qualification and rising numbers of higher education students.

Coming to another aspect it has to be mentioned that there is a growing number of young people staying for at least one year within the so called *transition system*. After this they usually start with a regular qualifying training

in the dual system. But one must say that recent research on transition patterns concluded that half of all young people entering the system never start fully qualifying training. Therefore the system has been criticized. What is also criticized is the fact that participating in this transition system sometimes has negative effects because some employers stigmatize these young people as being less capable than those from the regular dual system.

But what about the *future*? All projections come to the conclusion that the number of higher education graduates within the employment system will increase in future. The level of dynamism and the scope which the expansion of higher education that has now been reached make it doubtful that suitable positions will be available on the labor market for all students or graduates. For this reason, one of the major challenges will be to make vocational education and training sufficiently attractive for more highly qualified young people, particularly for those holding a higher education degree. This implies also aspects of the attractiveness of professional careers which do not involve higher education study and the degree of permeability between VET and the higher education sector.

One innovative approach in this context is seen in the dual courses of higher education study which have been developed by universities/ Universities of Applied Sciences in cooperation with companies. The main aspect here is the combination of work within a company or apprenticeship training and a Bachelor degree – what is also a dual principle. Students have a contract of employment or an apprentice training contract with a company and study on a part-time basis at the college.

Social institutions to harmonize and coordinate the different stakeholders' views

In Germany there are several different social institutions and partners playing an important role within the vocational education and training system.

The Federal Government is responsible for in-company vocational training, while the Federal states(the “Länder”) are responsible for vocational training in

schools.

The so called “competent bodies” are responsible for the monitoring that are mainly the chambers (of industry and commerce, crafts, agriculture, doctors, lawyers) but also by competent bodies in the public service.

The governance of the VET system in Germany is characterised by strong partnership between state employers and trade unions. Vocational education and training is adapted to the needs of the employment system on a permanent basis. The updating of occupations usually begins with a recognition that demands within the companies are changing. The companies themselves contact their business organisations and make suggestions for revised or even new training regulations. The business organisations and trade unions then come together to discuss the issue. If there is agreement with regard to the key issues, the Ministry of Economics will be requested to begin the updating process. The development of new or updated training regulations is organised at Federal Government level. Within this process, BIBB assumes the lead management of organisation and development of updated or new training regulations.

A further aspect concerning the “question of social institutions” is the integration of private organisations into the management of the system and the close collaboration that takes place between state and private sector bodies. This finds its expression in such areas as the responsibility adopted by the chambers of industry and commerce, the chambers of crafts and trades and other competent bodies for the registration of training contracts, the monitoring of company-based training and the organisation of final examinations. It is also reflected in the fact that training regulations – the curricula governing company-based training – are drawn up by experts appointed by the trade and industry associations and the trade unions. This ensures alignment towards company practice whilst also guaranteeing a high degree of societal acceptance.

This social consensus is an essential characteristic of German vocational education and training. It contributes to the considerable degree of esteem which VET enjoys amongst the German public, young people and their parents as well as applying to the way in which policy decisions are made. All issues

are debated with the involvement of the relevant stakeholders, and the broadest possible consensus is sought. One example of this are the training regulations themselves, which normally require approval both from the trade and industry associations and from the trade unions. This approach is further reflected in stakeholder participation in the Board of the Federal Institute for Vocational Education and Training – the so-called “Parliament of Vocational Education and Training” – and in committees at federal state level.

Finally in this regard, reference should also be made to the part played by inter-company vocational training centres, which exercise an important quality assurance function for vocational education and training. Inter-company vocational training centres cover the elements of training which the companies themselves are unable to offer due to their size or particular specialisation. And, last but not least, there are full-time vocational schools which also offer training in recognised training occupations. Although such schools play a subordinate role in quantitative terms, they need to be accorded consideration within the overall system.

Measures to address the challenges in terms of youth employment in Germany

One aspect in terms of addressing the challenges of youth employment in this context is the above mentioned transition system itself in Germany. The term ‘transition system’ is somewhat misleading as there is no systematic organisational structure behind this kind of training. It encompasses all kinds of training, education and labor market schemes which are meant to facilitate the transition from school to training for those young people who failed to enter the regular training system. The schemes have in common that they provide no approved vocational qualification and are organised and financed solely by governmental bodies. The major part of the schemes is organised by job centres, public providers(which are publicly assigned) or vocational schools. In 2011 nearly 30 percent of young people entering the vocational training system started in the transition system. Thus, the high numbers of entries into schemes

of the transition system in recent years reflect a stable development: the transition system has become a third pillar of the system of vocational training in Germany.

Four main objectives:

- 1) *Second chance qualification*: young people with missing or only below-average secondary schooling are given a second chance to get a qualification.
- 2) *Vocational orientation*: these schemes seek to improve the participants' trainability by focussing on individual deficits such as low numeracy or literacy as well as on social problems such as drug addiction.
- 3) *Vocational preparation*: low level occupational qualifications are provided. The qualifications can sometimes be approved as a part of regular training.
- 4) *Prevention*: an increasing number of schemes is already implemented in general schools.

Over the past few years, policymakers have focused more closely on improving pupil progression from the general schooling system and the transitional area into vocational education and training. The initiative *Qualification and connection – educational chains until the completion of training* was launched for just this purpose. The initiative is aimed at pupils and school leavers who have achieved no more than a lower secondary school qualification and brings together various individual measures and programs. Its most important elements are career entry support and vocational orientation at inter-company training centres.

Career start coaches have been employed at around 1,000 schools right across the country in order to provide young people, and in particular young people with a lower level of prior school learning, with individual support for the transition from school to the world of work. These career start coaches assist pupils with the career choice process and draw up analyses of pupil potential.

The primary purpose of *inter-company vocational training centres* is to

impart professional competences which the training companies are unable to teach because of the nature of their own machinery and work organisation. The premises and equipment of inter-company vocational training centres are mainly funded by the Federal Government. These and similar training centres provide a vocational orientation program to pupils in Years 7 and 8 which offers an opportunity to gain hands-on experience of three different occupational fields during a two-week practical phase. The aim is a more reasoned career choice. The orientation program is generally followed by a practical company work experience placement.

The *focus has switched* from measures aimed at creating additional training places or at the integration into work of unemployed young people to measures which aim to provide *better vocational orientation for young people and improved matching of supply and demand* on the training market.

Another example in terms of measures: Due to the tense situation in the training market, in the year 2004 the leading organizations of German industry and the Federal Government concluded the *National Pact to Promote Training and Young Skilled Workers in Germany* (Nationaler Pakt für Ausbildung und Fachkräftenachwuchs in Deutschland). Working closely with the Länder, this Pact aimed to provide training opportunities to all young people who are willing and able to undergo apprenticeship training. This ambitious goal was to be achieved through the joint efforts of social partners, particularly the state and industry, and also aimed to avert the medium-term threat of a shortage of skilled labour.

In this Pact, which initially had a time limit of three years, the leading organizations of German industry agreed to add 30,000 new regular training contracts and make 25,000 introductory training positions available for every year of the Pact. The results have since exceeded these targets, with the Training Pact bringing about a shift in the trend in the training market. The number of new training contracts is far higher than before the Training Pact. On account of this positive outcome, on 5 March 2007 the Training Pact was extended and refined for a further three years through to 2010. The Federal

Association of Liberal Professions(Bundesverband der Freien Berufe, BFB) became a new partner to the Pact.

In 2010, the steering committee agreed to continue the Pact until 2014, give it new priority areas and add new partners to the Pact. With their own individual contributions to the Pact, the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder(KMK) and the Integration Commissioner of the Federal Government have signed up as new partners to the Pact.

The *national report on education* periodically presents a major empirical review which covers the entire German education system. Published every two years, each report provides information about the general conditions, features, results and output of education processes. The report analyses the entire structure of the education system from early childhood education and school education to vocational training, higher education and adult education.

The anticipation of future skill needs plays a very important role in Germany. Therefore the systematic recording and research of the development of future skills needs was initiated in the resolutions passed in 1999 by the *Alliance for Jobs, Training and Competitiveness(Bündnis für Arbeit, Ausbildung und Wettbewerbsfähigkeit)* and implemented within the subsequent initiative for the early identification of skills needs launched by the Federal Ministry of Education and Research. The main part of this initiative is the research network *Early Identification of Skills Needs in the Network(www.frequenz.net/)*. It includes several research institutions, an education organisation, the Federal Institute for Vocational Education and Training(BIBB), the German Confederation of Trade Unions(DGB) and the German Employers' Organisation for Vocational Training(KWB).

At BIBB new skills requirements are being *monitored by several instruments*, for example *Occupational and qualifications projections*: The Federal Institute for Vocational Education and Training(BIBB) and the Institute for Employment Research(IAB) work together in order to develop model calculations on the development of the labor market until the year 2025.

Surveys of companies help to build up a comprehensive picture of

technological and organisational developments in the companies and the associated skills requirements. Relevant surveys are conducted at regular intervals with the companies. Furthermore surveys are carried out in selected sectors. These are geared towards particular fields of work, and yield sufficiently differentiated and empirically verified information on the requirements in individual occupations.

Job advertisement analyses yield empirically verified information on the demand for skilled workers in the job market and the qualification profiles desired by companies (the ideal).

Surveys of advertisers are conducted to find out whether the advertised vacancies were filled or the reasons why they were not (the reality).

Surveys of guidance staff generate expertise on in-company strategies for change and skills development.

Representative surveys of people in employment give indications of their subjective perception of expertise requirements, job profiles, working conditions and continuing education and training needs.

Furthermore, the *BMBF* also supports the development of a *Labor market radar* (*Arbeitsmarktradar*), a system of future-oriented labor market monitoring.

The *Länder*, and several regions in different *Länder*, pursue their own region-specific activities for early identification (e.g. regional monitoring of qualification developments, surveys on skill needs).

The *social partners* are also involved in early identification issues, mainly in the context of modernising initial and further training regulations.

All these activities are important contributions to the early identification of qualification needs. At the same time, they contribute to the implementation and transfer of measures to meet qualification needs within the VET system.

Besides that, investigations on skill needs and qualification development are carried out by *sector-specific associations*, such as: the Association of Engineers (*VDI*) and the German Association of Information Technology, Telecommunications and New Media (*BitKom*); the Institute for Employment Research (*LAB*); several foundations, such as the *Hans-Böckler* Foundation,

Friedrich-Ebert Foundation, *Konrad-Adenauer* Foundation and the *Bertelsmann* Foundation or other stakeholders.

Beyond that as another measure to address the employment system one can mention the field of *recognition of foreign professional qualifications* which in the meantime is fixed by law in Germany. The Federal Recognition Act from 2012 has been installed to improve the assessment and recognition of foreign professional qualifications. The act helps ensure that the procedure is made simpler and more transparent. The demand for information about professional recognition procedures is great.

Without prior knowledge of the German system of vocational education and training, people who were interested in recognition of their foreign qualifications found it quite difficult in the past to compile the necessary information on the procedures and competent bodies.

This complex service is the unique selling point of the recognition finder, whose database currently contains over 500 occupation profiles (including 151 regulated occupations) and over 1,400 records with the addresses of the competent authorities(<http://www.erkennung-in-deutschland.de/html/en/index.php>).

Lessons learnt

One big benefit in the dual system is the learning in the companies. The firm-based training provides clear advantages: The occupation- specific orientation of the vocational training generates a highly standardised system, which generates tight linkages between the vocational system and the labor market, because fully-qualified apprentices are not only highly qualified in an occupation, they are also already socialised into working life and into the organisational culture of the company.

Lessons can be learned from the German model which could help to overcome the challenges other countries are facing. Three main elements of the German model are interesting:

- Germany's success can largely be explained by the fact that the dual principle has been systematically institutionalized in the country's Vocational Education System of the country. The dual principle could become an important aspect of reforms in other VET system. This requires the integration of up-to-date theory in vocational schools and practical training in companies. Learning venues in the apprenticeship context should include both classrooms and worksites/factories.
- An integrated approach to VET operates in Germany, in which various stakeholders are actively involved as social partners(private companies, the state, trade unions, employers' associations etc.) in designing curricula, codifying skills and fixing standards. This approach of public private partnerships(PPP) is perhaps interesting for other countries. The Vocational Education and Training Act would make the VET system more organic and integral to the requirements of the economy.
- While more than 80 per cent of training costs are met by the private sector in Germany, the percentage in other countries is more low. So other countries could think about public-private participating in sharing the cost of training be adopted. Maybe by establishing a National Training Fund through which private actors contribute.

The German way of vocational education and training brings future job applicants in closer contact with the job market and generates more reliability when it comes to qualification standards. It also offers a long period in which employers can get to know young employees, offering managers a relatively reliable insight into trainees' skills and potential for development. That limits employers' risks when taking on young workers. The system functions so effectively that Germany's youth unemployment rate is lower than in countries with more open job market regulations.

But this model is also difficult to export. Since training programs are expensive for companies, those headquartered in countries with weak job market regulation will have little reason to introduce such programs. But in

countries that have tight labor laws, the initial costs of setting up such a system act as a major obstacle to creating a country-wide network of training options.

There is a difficulty in systems that emphasize theoretical or school-oriented training. They may educate their students with little concern for the demands of the marketplace.

Nevertheless, there is no denying that work remains to be done to keep improving the functionality of the VET system. Implementation of both the German National Qualifications Framework (*Deutscher Qualifikationsrahmen*, DQR) and the European Qualifications Framework (EQF) will mean driving forward competence-orientation in IVET, with all the positive consequences for systematic quality improvement that that entails. There are impacts on permeability and the equivalence between vocational and general/academic education.

For the reputation of the dual system is very important the level of participation in IVET by companies. There is a decline in the number of companies providing apprenticeships and this should alert us to the need for more specific analysis of the reasons, with a view to responding adequately to the problem.

Another lesson: In Germany the relation of supply and demand of apprenticeship places is decreasing. As a result of the decreasing numbers of apprenticeship places governmental intervention has become important in order to maintain the vocational training system. On the structural level, the growing state intervention creates a publicly organised apprenticeship market, which parallels the regular labor market. The intervention in the existing system of apprenticeship and employment compensates for weak points of the vocational system or job market, for example by providing – particularly in the Eastern part of the country – state financed apprenticeship places.

Third lesson: Chances of leaving the so called transition system for fully qualifying training do not only depend on the individual competences and school performance but are pre-structured by socio economic characteristics, such as migrant background. In this regard, the establishment of the transition

system stratifies young people according to their educational and ethnic background. 83 per cent of young people with no school leaving certificates enter schemes of the transition system. Young people with a migrant background are more likely to enter the transition system than their German counterparts.

Fourth lesson: The BIBB regularly conducts surveys of school leavers to determine their professional orientation and career choice behaviour (destination). The school leavers were polled retrospectively about what career plans they had had in the spring of 2012. It turned out that just under half(47%) of those polled had aspired to in-company vocational education and training at the end of the 2011/2012 school year. A comparison with the previous year showed that affinity to the dual system had decreased in all groups of persons and all categories: Two-thirds(66%) of young men were interested in in-company vocational education and training directly after leaving school or later. Among young women, the proportion was slightly more than a half(55%). BIBB analyses show that the interest of school-leavers in dual vocational education and training is receding because there are more young people to go on to higher education. So it has to work on the attractiveness of vocational education and training.

Despite the benefits of the dual system, unemployment amongst young people still remains to a certain degree. The most significant reason for this is the absence of recognised vocational education and training which concludes with an examination. There is, for example, a group of young people who fail to obtain a vocational qualification by the age of 25. This happens for a wide variety of reasons. These reasons may include:

- Shortage of training places,
- Lack of school education(e.g. failure to achieve a school leaving qualification),
- Dropping out of vocational education and training or, and
- VET extends beyond the age of 25.

Young people who have not completed a vocational education and training qualification are the most likely to be affected by unemployment. The proportion

of young people not in possession of a VET qualification has remained at approximately 15% for a number of years. Around 1.5 million people aged between 20 and 29 are unskilled and not formally qualified. This proportion needs to be significantly reduced in future.

References

- Authoring Group Educational Reporting(The national report on education):
Education in Germany 2012, Bertelsmann Verlag, Bielefeld, URL:
<http://www.bildungsbericht.de/daten2012/summary12.pdf>
- Hippach-Schneider, Ute & Hensen, Kristina Alice: Germany VET in Europe –
Country report. Refernet. Federal Institute for Vocational Education and
Training(BIBB), Bonn
http://www.bibb.de/dokumente/pdf/DE_Country_Report_2012.pdf
- VET Data Report Germany 2013. Facts and analyses accompanying the Federal
Report on Vocational Education and Training – selected findings. URL:
<http://datenreport.bibb.de/html/5679.htm>
- Weiß, Reinhold: Preparing for the Labour Market and Lifelong Learning in
Germany. In: Young-bum Park: Youth Employability and Skills
Development, KRIVET, 2013. URL:
<http://www.krivet.re.kr/apnd/stdy/E120130099201303060910782.pdf>

Chapter III

Getting Qualified for Employment

- How the dual-track VET system in Switzerland matches skills development and the needs of the labor market

Erik Swars

Swiss Federal Institute for Vocational Education and Training(SFIVET)

Getting Qualified for Employment

- How the dual-track VET system in Switzerland matches skills development and the needs of the labor market

Erik Swars

Abstract

The historic, social, political and economic contexts of a society shape its educational system. They provide the background for the policy of education, including the roles and tasks assigned to VET, and the subsequent transition of VET students into working life and continuing education.

Vocational Education and Training (VET) traditionally play an important role in Switzerland. The VET system is generally highly recognised and supported by a policy which advocates a market-oriented system and aims at an early integration of young people into the labour market. The general goal of VET – certainly not only in Switzerland – may be described as follows: Building the competencies needed for successful integration into the labour market and for life-long learning. This means that the qualification needs of the labour market have to be met by teaching occupation-specific knowledge and skills, but also by steering the VET system to match demand and supply for work force as good as possible. At the same time, general education should continue to be fostered, at least in initial VET and transferable, personal and social skills should also be encouraged. Further, the system should offer flexible options for higher professional education.

Some facts and figures about VET in Switzerland will be presented in this paper to show that these goals are not mutually exclusive but can be successfully pursued and met. The attractiveness and competitiveness of the Swiss VET system could so far be preserved and partly even enhanced. This is reflected by the preferred educational choices made by the youth and adults at upper secondary and tertiary level, by the returns on educational investments and by the general employment situation. Around 70% of the school-leavers enrol in VET programmes at upper-secondary level. Switzerland has a comparatively low youth unemployment rate and the dual VET system is certainly one of the success factors. The majority of VET students experience a relatively smooth school-to-work transition in Switzerland, thanks to the proximity of their training to the world of work.

The well established Swiss VET system has to be understood in its socio-cultural and economic context. Key factors like its structure, its governance and the continuous efforts for adaptation and innovation have to be considered. Within the last two decades, economic and societal changes have posed a number of challenges (globalisation, tertiarisation) to traditionally grown, highly organised and specialised VET systems like Switzerland's. Substantial reforms and innovations have been introduced to adapt the system and meet the challenges even if it is to mention that there is only very limited regulation for VET in Switzerland. The characteristics for a successful dual-track system that link skills development with youth employment will be described as well as measures that have been undertaken in order to ensure improved employment opportunities for young people.

The dual-track VET-system in Switzerland

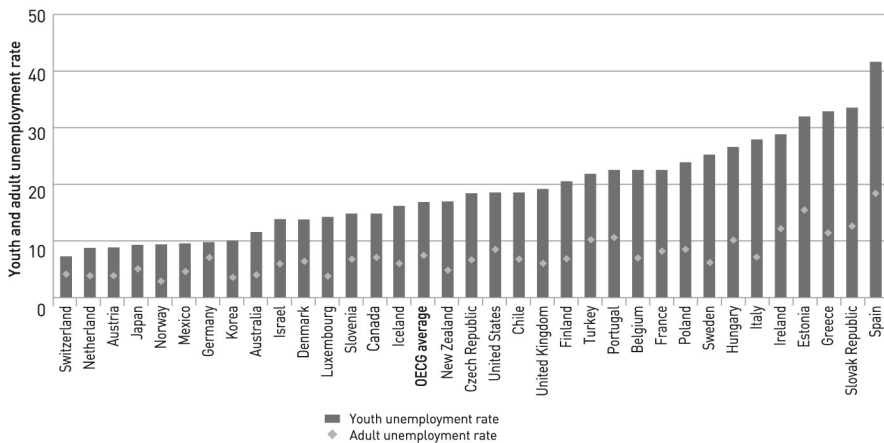
Around the world, governments and businesses face a paradox: high levels of youth unemployment and a shortage of job seekers with critical skills.

The lack of availability of jobs due to structural change and economic crisis is certainly one reason, why youth do not get employed in many countries. But it's far from the whole story.

Despite the large increase in joblessness in many countries, employers continue to have difficulty finding the right talent. These shortages arise due to a lack of appropriately qualified candidates but also to the inability or unwillingness of firms to offer competitive pay and attractive working conditions, to poor recruitment and training policies. A critical reason for youth not getting the skills employers need is that education providers, young people, and employers do not understand one another and operate in “parallel universes”.

The youth unemployment rate figure of OECD shows that countries with a dual economy based VET-system(e.g. Switzerland, Netherland, Austria, Germany) have advantages and lower youth unemployment rates than countries without VET-tradition. This trend is similar if the analysis is based on the NEET-rates(Not in Employment, Education or Training).

Figure 1. OECD youth unemployment rate 2010, OECD

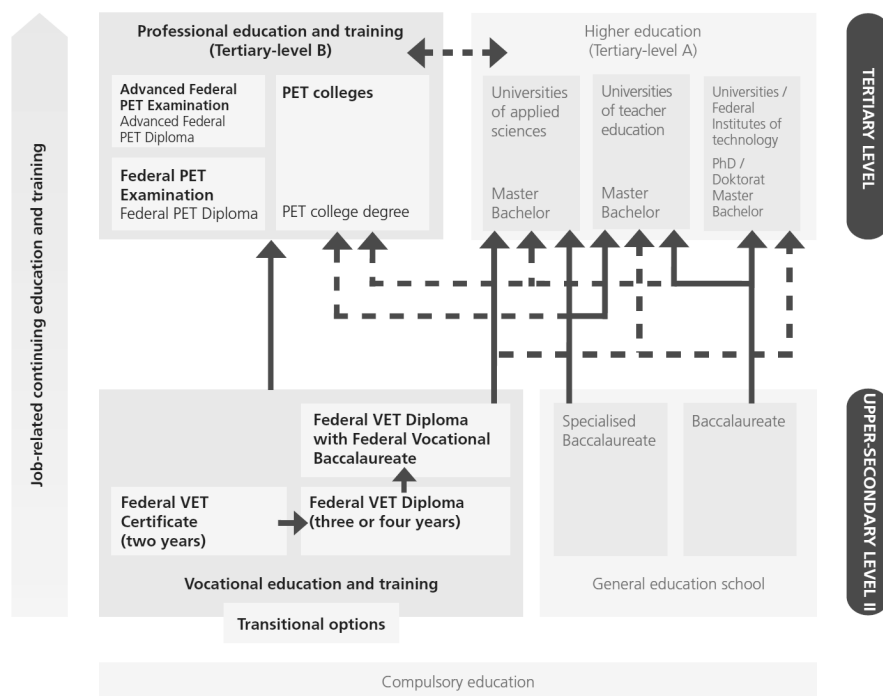


Switzerland has a comparatively low youth unemployment rate and the Swiss dual VET system is certainly one of the success factors.

The Swiss VET system(see Figure 2) has proven to be successful in the three intersections: enrolling in VET-programmes, building the right skills, and finding work. The majority of young people is integrated into post-compulsory

education and into the labour market.

Figure 2. The Swiss VPET system, SERI, Facts and Figures 2014



VET programmes are offered at upper secondary level with an entry directly after compulsory school or after transitional offers (so-called bridge-year courses). VET programmes last 2, 3 or 4 years. Two-year programmes make up about 5% of all programmes. About a third of the graduates of these programmes subsequently continue their education in a 3- or 4-year programme.

The education system offers a number of pathways to higher professional education and training (PET). National PET Diplomas and PET College Degrees may be obtained at tertiary B level. At tertiary A level, the Universities of Applied Sciences (UAS) offer Bachelor and Master programmes. Holders of a Federal VET Diploma who obtained a Federal Vocational Baccalaureate (FVB) have direct access to the UAS.

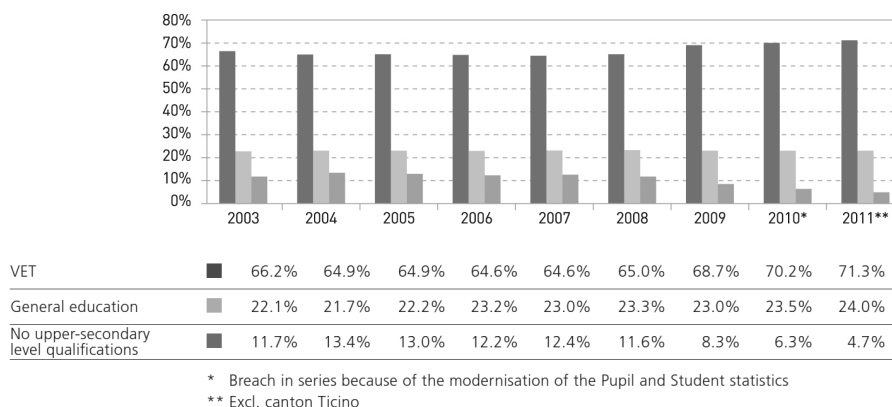
Besides these main pathways, other options show the permeability in the Swiss education system: e.g. students graduating from general education schools at upper secondary level (baccalaureate schools, specialised schools) may continue in a track of professional education.

Holders of a FVB have access to the universities or federal institutes of technology if they pass an University Aptitude Test.

The PET system (at tertiary B level) contributes substantially to tertiary education. In 2009, 20% of the Swiss labour force held a PET degree, equaling the proportion of tertiary A degree holders.

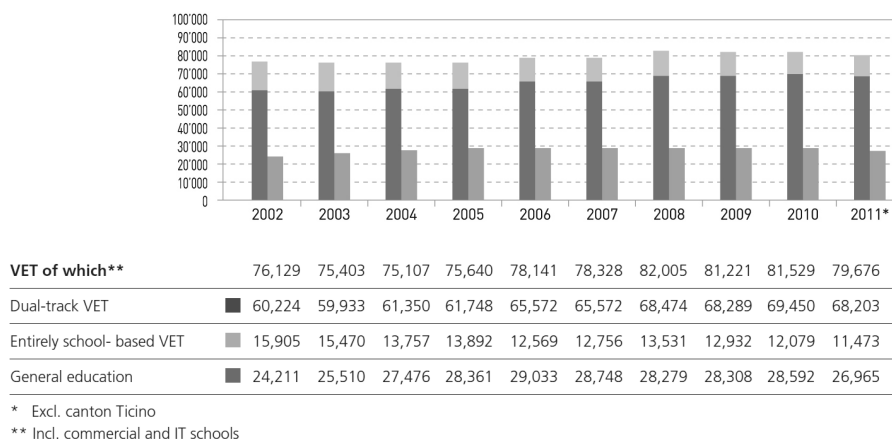
Starting a VET career is a valued and a flexible option in Switzerland. Around 70% of the school-leavers enrol in VET programmes at upper-secondary level (see Figure 3). This high proportion of VET entries has remained remarkably stable since 1995. A decrease is expected in the next decade for demographic reasons. Constant efforts to adapt and innovate the VET system will be needed to respond to the demand for skilled workforce and to ensure the attractiveness of VET, especially for higher-performing students (who might also opt for general education offers). But also the integration of weaker students is important, by providing VET programmes that prepare them successfully for the labour market and for life long learning. Without a qualification at upper-secondary level there is a high risk of unemployment nowadays.

Figure 3. Upper-secondary level qualifications, SERI Facts and Figures 2014



Almost 90% of all VET students choose an apprenticeship in which work-based training in a company and education in a VET school run in parallel, the dual track system(see Figure 4).

Figure 4. Enrolment in upper-secondary level, SERI, Facts and Figures 2014



Work-based training and school education are complemented by a third learning arrangement, the industry courses so that practical and theoretical teaching and learning are distributed on three learning environments(see Figure 5). The industry courses mostly take place at special training centres run by the involved industries. Because of this third element, the industry courses, we sometimes also speak of a “triadic” system.

Apprentices gain occupational experience and practice at their workplace, by participating in the productive processes and being coached by their trainers or other qualified workers.

VET-schools provide classroom instruction. This consists of instruction in vocational subjects as well as subjects falling under the Language, Communication and Society(LCS) category. Classroom instruction is intended to develop technical, methodological and social skills of learners while imparting the theoretical and general principles needed to perform occupational tasks. Classroom instruction covers one or two days per week. VET schools also offer a preparatory course for the Federal Vocational Baccalaureate Examination. About half of the school time is dedicated to occupational subjects, the other half to general education. More performing students may choose a VET programme with extended general education requirements in order to obtain a Federal Vocational Baccalaureate(FVB).

Industry courses are meant to complement classroom instruction at VET schools and work-based training at host companies by providing learners with essential practical skills. Industry courses often take place at third-party training centres run by the industries involved.

The time spent in industry courses depends on the occupation. If high-level technologies are involved, apprentices may spend up to 60 days in industry courses, usually distributed on several, block-released courses over the duration of the apprenticeship

Figure 5. The three learning places in the Swiss VET-system



Linking skills development and labor market

- Characteristics of a successful dual-track VET-system

1. Involvement of the private sector

1) VET programmes' content has to match the needs of the labor market

The influence of the professional organizations is fundamental for the VET and PET sector and, compared to other countries, it is very high in Switzerland. The influence of professional organizations ensures that the content of VET programmes matches the needs of the labor market. The Swiss solution guarantees, on the one hand, a high match between learning content and the skills required on the job market and, on the other hand, a high mobility of trainees on the job market. This is achieved by the «organised» channeling of the employers' influence, rather than by having companies influence the learning content individually. Both these factors are similarly decisive for the appeal of company-based VET programmes for those completing their compulsory education.

The professional organizations have the lead in defining the occupation-related competencies to be built up in their VET programmes. They get didactical and methodological support from an external institute (e.g. Swiss Federal Institute for Vocational Education and Training, SFIVET) but the professional organizations are

responsible for the content.

Therefore, apprenticeship-based programmes have a high level of acceptance among employers since the trainees build up occupational competencies through participation in work processes in their host company, which are further completed and deepened in sector-specific industry courses(a feature that also ensures that work-based learning is not too company-specific).

In general, it can be expected that dual-track VET programmes (apprenticeships) are more closely related to the needs of the labor market than entirely school-based programmes.

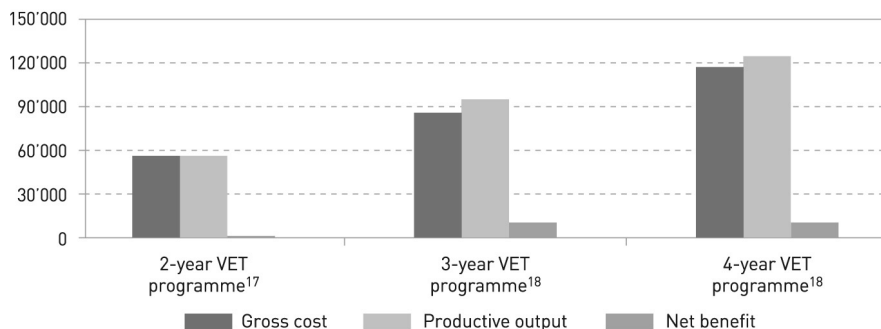
2) Companies need a benefit from training apprentices

The VET sector is funded by the Confederation, the cantons and professional organizations, each to their own degree. Public expenditure for Switzerland's VPET system stood at around CHF 3.5 billion in 2012. The cantons are responsible for implementing VPET. As such, they cover at least three-fourths of associated costs.

Professional organizations provide both services and funding for the Swiss VPET system: they do the groundwork, run their own training centres and promote specific occupations(VET sector) and professions (PET sector). Generally speaking, host companies stand to benefit from taking part in VET programmes, a benefit generated by the productivity of apprentices during training or by their take-over after training.

According to a cost/benefit study conducted in 2009, gross costs of involvement in VET amounted to CHF 5.3 billion. This figure was outweighed by the productive output generated by learners, which amounted to CHF 5.8 billion. Economic driven economic orientated VET.

Figure 6. Cost/benefit ratio by apprenticeship duration, in CHF, Strupler Wolter, 2009



To summarize, it can be said that, with few exceptions, the Swiss VET sector offers very good conditions enabling host companies to derive a net benefit from their investment in apprenticeship training. These conditions also lead to an efficient outcome on an economic level since there are enough companies willing to offer an adequate number of good-quality apprenticeships. This, in turn, brings benefits to society since all young people coming out of lower-secondary school will be able to find a suitable apprenticeship on the basis of their individual skills and background. Such apprenticeships are a decisive factor for their future entry into the labour market.

3) Flexibility and liberty to fix the wages

It is important for the companies to have the liberty to determine the apprentices' salaries. There is no regulation from the state. Professional organizations usually do recommendations for their branches concerning the salary for apprentices but this is not mandatory for the companies.

4) Limited regulation

The VET system (apprenticeship market) should not be regulated too strongly. Regulations like subsidies for training or the obligation to take over apprentices as employees should not be imposed. One exception in Switzerland is that at the request of professional organizations, the Secretariat of Education, Research

and Innovation (SERI) can, under certain conditions, declare funds for training in the respective branches mandatory for all companies that are active in a branch. This means that the companies that do not train will have to pay money into the fund to help to cover for the costs of VET/PET (e.g. development of VET programmes, organisation of industry courses and qualification procedures).

2. Quality assurance

Quality needs to be ensured in all three learning environments(host company, VET school, industry courses).

The SERI has defined core curricula for each category of VET teacher or trainer, in which the minimal pedagogical standards to be attained are defined.

For every VET programme a federal ordinance is issued by the SERI. VET ordinances are prepared jointly by the Confederation, the cantons and the professional organisations. They cover the legal aspects of an occupation: Definition of the occupational profile, duration and content of the VET programme, the criteria that qualified workers must meet and the qualification procedures(exams).

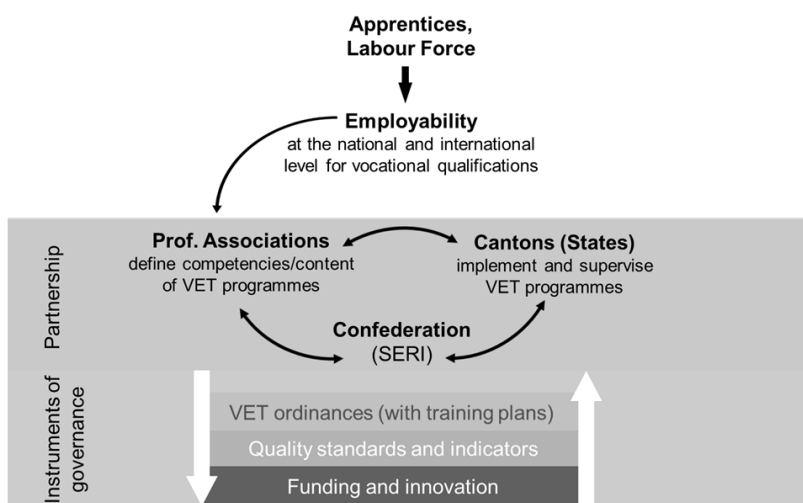
All VET programmes had to be reformed and new ordinances issued as a consequence of the VPETA, the new Vocational and Professional Education and Training Act, which came into force in 2004. This was done following a master plan and a procedure defined by the SERI. Originally, this process was expected to be finalised within 5 years but the last ordinances are still under revision. This shows that it takes time to define market-relevant VET programmes and qualification standards. Until an ordinance is issued it may last 2 to 3 years. Until the first cohort will graduate, 6 or 7 years will have passed.

VET qualification profiles and training plans therefore have to be based on current and future occupational requirements. The professional organizations have the lead in defining the occupation-related competencies to be built up in their VET programmes. They get some financial support for this work(75,000 CHF per ordinance) but, at the same time, they are obliged to ground their qualification profiles and training plans on analyses. For this, most professional

organizations get some external support(e.g. from SFIVET). The training plans structure the VET programmes and guide the teachers and trainers. They define the technical, social and personal skills to be acquired in the three learning arrangements(company, industry courses, VET school). To test the consistency between the training plan and the qualification procedure of an occupation, there will also be a “consistency check” by a third party(i.e. not the institution that helps the professional organizations during the development phase).

The development and implementation of VET programmes is illustrated in the following figure.

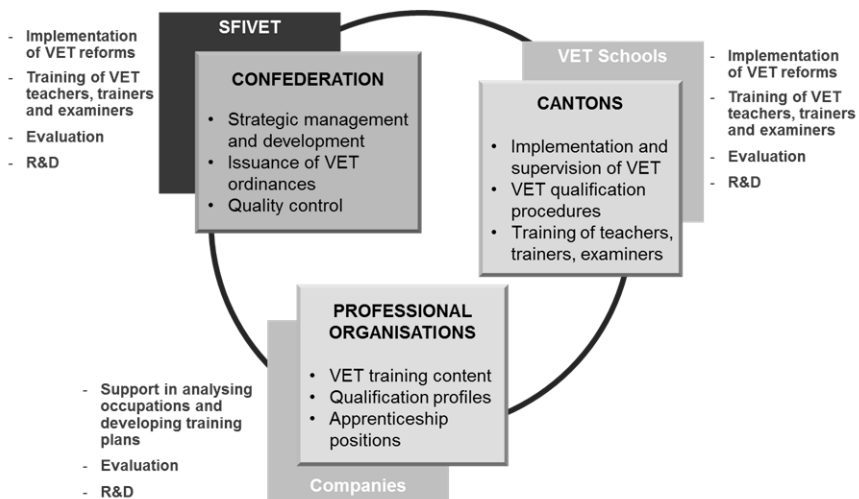
Figure 7. Development and implementation of VET programmes in Switzerland



When a VET ordinance is issued, a Commission for Quality and Development for the given occupation, composed of members representing all VET partners(Confederation, cantons, professional organizations), is formed. Its role is to monitor the development of the occupation and, if necessary, to adapt the VET programme to the needs of the labour market. Thus the partnership between the stakeholders and the underlying instruments of governance ensure an adequate number of VET programmes and their quality.

Swiss Government set up the Swiss Federal Institute for Vocational Education and Training(SFIVET) in order to ensure that the training of instructors and trainers in all regions of Switzerland meets the highest standards. The following figure shows the support of SFIVET for all main stakeholders:

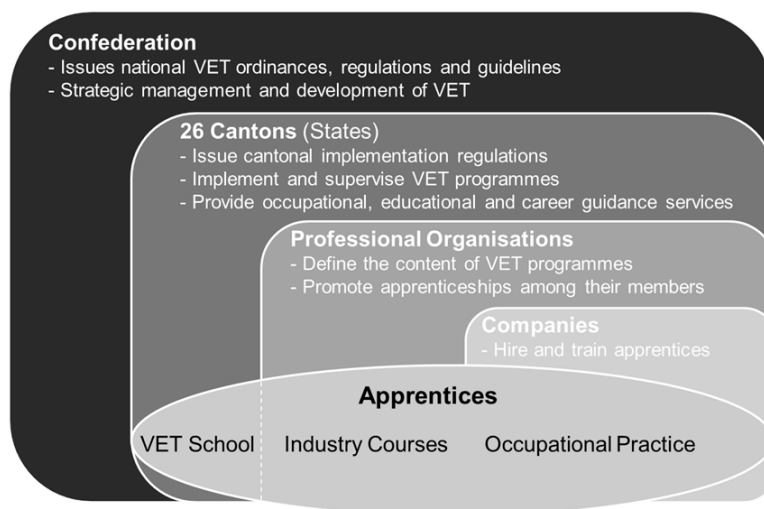
Figure 8. Support of SFIVET to VET stakeholders



3. Close cooperation of stakeholders

The provision of VET and PET is a mission shouldered by the Confederation, the cantons and Professional organisations. These three partners are jointly committed to the highest possible standard of VPET.

Figure 9. Cooperation of stakeholder within the VET-system



The Confederation, cantons and professional organisations all work together and share their tasks and responsibilities in VET by acting on different levels. According to the principle of subsidiarity, a lot of autonomy is accorded to the cantons, the intermediate professional organizations and the companies: Everybody takes responsibilities at the corresponding level.

The Confederation is responsible for the strategic management and development of the VET/PET system as a whole, which means implementing legal provisions and supervising VET and PET activities, comparability and transparency of courses throughout Switzerland, enactment of around 250 VET ordinances and the recognition of around 400 examination regulations and 40 core curricula for PET.

The Cantons are responsible among others for implementing the Federal Vocational and Professional Education and Training, supervising apprenticeships, VET schools and PET colleges and Providing occupational, educational and career guidance services.

Professional organisations establish training content of VET programmes and the skills needed to obtain a qualification. Here, professional organisations

work with social partners, other organisations and VET providers to develop the VET system further.

4. Permeability

What do Sergio Ermotti and Monika Walser have in common? Not only are they CEOs of two internationally renowned Swiss companies - the banking giant UBS and iconic bag brand Freitag respectively – but they are also graduates of the Swiss dual vocational training system. Other top Swiss managers and leading professionals have also opted for the vocational route.

This shows that the Swiss VET-system is highly recognized in the Swiss Labor market and that it is highly permeable. The Swiss Education system follows the principal that there are no dead ends. The system is highly permeable and VET forms the basis for lifelong learning and opens up good career prospects. The Swiss VET system is the first rung on the lifelong learning ladder. Students who have successfully completed their basic training can choose to embark on an advanced programme which equips them with specific occupational skills and prepares them for leadership roles. There are around 400 federal vocational exams, as well as 52 college degree programmes in 8 different occupational fields. Generally speaking, the Federal Vocational Baccalaureate entitles the holder to enrol in a Swiss University of Applied Sciences(UAS) without having to sit an entrance exam. The high degree of permeability within the Swiss education system means that anyone, any time, can build on their existing basic knowledge and skills, acquire advanced professional qualifications, re-train, or even – if they pass the University Aptitude test, study for a degree at a traditional university or at one of Switzerland's two Federal Institutes of Technology in Lausanne and Zurich(EPFL and ETHZ).

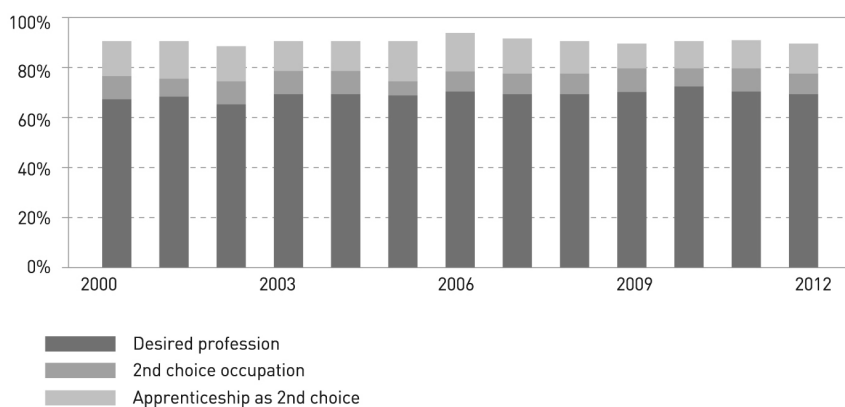
Integration measures for young people

A successful start in working life is essential for personal development. Two transitions are critical in determining the future prospects of young people and young adults: the transition from lower-secondary to upper-secondary level(transition I) and the transition from school to working life(transition II).

Increasing the graduation rate at upper-secondary level is among the various education policy objectives established by the Confederation and the cantons. By 2020, 95% of all 25-year-olds should have an upper-secondary level qualification. Today the graduation rate at upper- secondary level stands at 90%.

The vast majority of young people manage to find an apprenticeship. The apprenticeship market in Switzerland is quite well balanced with a supply of 92,000 apprenticeships and a demand of 96,500 in 2012. In 2011 the supply of apprenticeships for the first time even exceeded the demand by young people looking for apprenticeship positions. As the following figure shows about 70% of the apprentices got an apprenticeship in their desired profession.

Figure 10. Satisfaction with choice of apprenticeship, Swiss Education Report 2014



However, the interest of young people in a given occupation and available apprenticeships are not the only factors influencing the apprenticeship market. Other factors such as structural change, demographic change and economic conditions also influence the apprenticeship market. In recent years, the Confederation, cantons and professional organisations have taken a series of measures to help young people enrol in VET programmes and find suitable apprenticeships, thereby lending support to development of the next generation of qualified workers.

A solid battery of instruments is available to help young people gain access to VET programmes.

The three main partners regularly review these measures (e.g. in the Annual Apprenticeship Conference) to assess effectiveness and make changes as needed. VET and PET should be perceived by young people, adults, employers and HR officers as an appealing pathway to education and training, with a clear understanding of all of the associated benefits. Various partners work at all levels to make this happen.

The Swiss Service Centre for VET/PET, Occupational, Educational and Career Guidance (SDBB) provides information through various media channels, teaching and working materials on all occupations and professions as well as on academic, vocational, professional and continuing education and training options. The SDBB also maintains a website www.berufsberatung.ch that provides an overview of the full range of options. In addition, the SDBB provides VET/PET offices, host companies and learners with important documents and working materials relating to VET.

Marketing of occupations is handled mainly by trade associations. They produce brochures, fliers, videos, websites and other communication media for the purpose of raising the profile of their occupations and drawing young people. In addition, job fairs are organised each year in Switzerland for young people, teachers and parents.

The Annual Apprenticeship Conference is led by the head of the Federal Department of Economic Affairs (FDEA). This event offers representatives of the

Confederation, the cantons, professional organizations and the Swiss Parliament the opportunity to discuss the current state of the apprenticeship market and to review existing instruments and decide on any necessary adjustments.

Here are some examples of measures that have been taken to help young people to enroll in VET programmes and at the end have access to the labor market.

- Occupational information and advice
Cantonal guidance offices work closely with schools to provide young people with assistance in choosing an occupation and finding a corresponding apprenticeship.
- Apprenticeship postings
Apprenticeship postings show a list of vacant apprenticeship places advertised by host companies. These apprenticeship places can be searched by occupation and canton.
- Bridge-year courses
Bridge-year courses are intended to help young people gain access to VET who face social barriers and/or had poor academic performance in lower-secondary school. Bridge-year courses also serve as a stop-gap measure for young people who are unable to find a suitable apprenticeship immediately after completing lower- secondary school.
- Coaching /mentoring
Coaching and mentoring are intended to provide individual support to pupils in lower-secondary school. Examples include measures to develop relevant occupational, social skills and application skills. The programmes and projects are sponsored by both the cantons and private organisations.
- VET Case Management
VET Case Management is a structured process: a single agency is responsible for ensuring a coordinated and systematic approach. The focus is on the principle of empowerment and on maximising the efficiency and effectiveness of measures taken(see page 71).

- Apprenticeship placement services
Measures to help learners find a suitable apprenticeship begin from the fourth quarter of the last year of lower-secondary school. Apprenticeship placement services are an additional means of easing the transition from lower-secondary to upper-secondary level.
- Individual tutoring
Individual tutoring is intended to provide slower learners in two-year VET programmes with complete support. Host companies, VET schools, third-party training centres and social workers all work together to ensure the learner's progress. Individual tutoring is provided for in Art. 18 para. 2 of the Vocational and Professional Education and Training Act. While mainly intended for learners in two-year VET programmes, learners in three-year and four-year VET programmes may also benefit.
- Trials
One-week trial periods to get in closer contact with occupations and companies they are interested in.

And a few examples of measures to help host companies.

- VET promotion agents
VET promotion agents deal directly with companies to encourage them to create apprenticeship places for learners.
- Host company networks
The creation of host company networks enables small-sized or specialised companies that would otherwise be unable to train learners, to offer mini-apprenticeships in combination with one or more other companies. This allows the participating companies in the host company network to share resources. The SEFRI provides start-up funding for the creation of host company networks.

Lessons learnt for Korea and other countries

The Swiss dual-track VET system has a very long tradition with an excellent reputation. It will not be realistic to transfer a system that has grown over decades into another country. Nevertheless, to learn from dual-track systems may be beneficial and the transfer of important elements should be possible.

In comparison to the dual-track system school-based VET programmes may have some serious disadvantages which may be inferred from different observations and experiences that are interrelated. From our point of view there are several disadvantages that Swiss VET policy generally tries to minimise by strongly advocating the dual model. School-based VET

- *tends to be more expensive*(either for the state or the individual participants) because the state not only has to fund the vocational schools, but also has to come up for practical training. In the private-public partnership of the dual system these costs are covered by the companies.
- *has limited or no productive goals* and cannot make use of the students' productive potential during training. Research studies on the cost-benefit situations of companies in Switzerland showed that the apprentices' productivity made up for the training costs in two thirds of the trained occupations. If the costs cannot be compensated during the training period(e.g. due to intensive support and/or expensive technologies needed), the companies may still have a profit afterwards. They have invested in training qualified staff that they can perhaps subsequently employ. So they save costs for recruiting qualified labour and for getting them introduced to their workplace.
- *risks to produce inert knowledge* which is not transferred and applied by the students in work situations. Learning research showed that knowledge and skills are to a great deal situated and therefore better instructed and learned within the intended contexts of application and their social setting. For VET students it seems particularly relevant to be immersed in

authentic and situated practice from the start to become adaptive and flexible professionals.

- *risks to produce work force that is not needed or do not meet the qualification needs of the labour market.* In the Swiss dual system, the companies and professional organisations are directly involved in defining the goals(content and competencies) of VET. Further, the companies will offer apprenticeships and hire apprentices on the market when they need for qualified work force.

Based on these observations, a few recommendations are described below from our point of view that of course would need a deeper analysis:

- **Involve companies**

As seen before, the success of a work-based VET-system is built on the involvement of the private sector. Companies have to be aware of the value to offer training. Private companies define their needs for future staff. When they see that curricula can be developed by them and therefore young people be trained exactly according to the companies' needs, when they see that offering work-based learning can be profitable, companies will play an active role in vocational education and training even without financial support of the government.

- **Start small with a few sectors and build on success stories**

Our experience shows that it is helpful not to change a whole VET-system from the beginning with a top-down approach but to pilot an alternative model(based on the Swiss practice or others) in which curriculums are developed on the ground of the immediate working experience in the companies. A recommendation could be to start with a few companies of selected industries. Programmes (of different lengths) for 2-3 professions can be developed in collaboration with the private companies starting with the very admission of the students, passing the actual dual education and training process, based in companies and vocational schools, and finally

ending with an official exam for the students.

- Be patient

It takes time to implement elements of a dual VET-system. In Switzerland for example reforms of market-relevant VET-programmes and new occupations may take several years. Until an ordinance is issued it may last 2 to 3 years. Until the first cohort will graduate, 6 or 7 years will have passed. When work-based learning is not implemented in a country and not part of the culture yet, even more time has to be considered.

- Promote a positive public image of VET

In countries where VET has no long tradition and the image of VET is in general poor it is important to promote a positive image of VET. Based on the above mentioned success stories for the 2-3 professions it should be shown that dual-track VET offers good opportunities and provides students with the skills that matches the needs of the labor market.

Literature

- Federal Office for Professional Education and Technology OPET: Entering the labor market - Report on measures to ease the transition to upper-secondary level, 2012
- McKinsey & Company: Education to employment – designing a system that works, 2013
- Scharnhorst, Ursula: Presentations held in China and Denmark, 2013
- Swiss Coordination Centre for Research in Education: Swiss Education Report 2014
- State Secretariat for Education, Research and Innovation(SERI): Facts and Figures VPET, 2014
- State Secretariat for Education, Research and Innovation(SERI): Higher Education and Research in Switzerland, 2013
- Strupler Mirjam and Wolter Stefan C.: Dual-track VET: a success story – also for host Companies, 2012
- WEF-Global Agenda Council on Employment: Matching Skills and Labour Market Needs, 2014

Chapter IV

**Linking Skills and Jobs for Youth:
Australian case**

Philip Loveder

National Centre for Vocational Education Research(NCVER) / AUSTRALIA

Linking Skills and Jobs for Youth: Australian case

Philip Loveder

Abstract

Youth employment and transitions are occurring within a constantly changing social and economic environment. The critical influences on youth transitions are around educational achievement and the state of the labour market with young people in Australia being particularly vulnerable to changes because they are essentially new entrants to the labour market.

This paper looks at the Australian case in terms of the factors behind current patterns of youth educational participation and employment and discusses some of the responses and interventions occurring to address the skills development and employment needs of young people. In particular, it addresses the need to have ‘connected’ policy responses that ensure young people do not ‘fall through the gap’ and can participate actively in a modern economy. It focusses on some of the evidence around whether youth and social policy interventions have a ‘pay-off’ in terms of productivity, and ends with a discussion of some of the constraints to effective action and possible lessons for other countries context.

The Economic and Social Context of Youth Education and Employment

Changes to the Australian labour market have been influenced by macro-economic and local factors such as the Global Financial Crisis (GFC) of 2007 - 2008 and internal structural adjustments occurring in Australian

industry(in particular a response to contraction of the traditional manufacturing, food and the public services sectors). These collectively have had a noticeable impact on full-time employment rates, especially for young people.

In addition to the changes to the labour market, there have been significant efforts to increase the educational profile of young Australians. The Council of Australian Governments(COAG) has established targets for educational achievement. In addition, the Commonwealth Government's National Partnership on Youth Attainment and Transitions(and related partnerships) has also established initiatives to increase educational achievement.¹³⁾ For example, the Compact with Young Australians component of the partnership requires young people to complete year 10 schooling and then participate in full-time¹⁴⁾ education, training or employment(or a combination of these until the age of 17).

FYA(2013) find that young people who have obtained a post-school qualification have a strong chance of getting a 'good' job compared with the rest of the workforce. This point highlights the importance of education and training; and that for young people without post-school qualifications they are likely to find entry to the labour market more difficult.

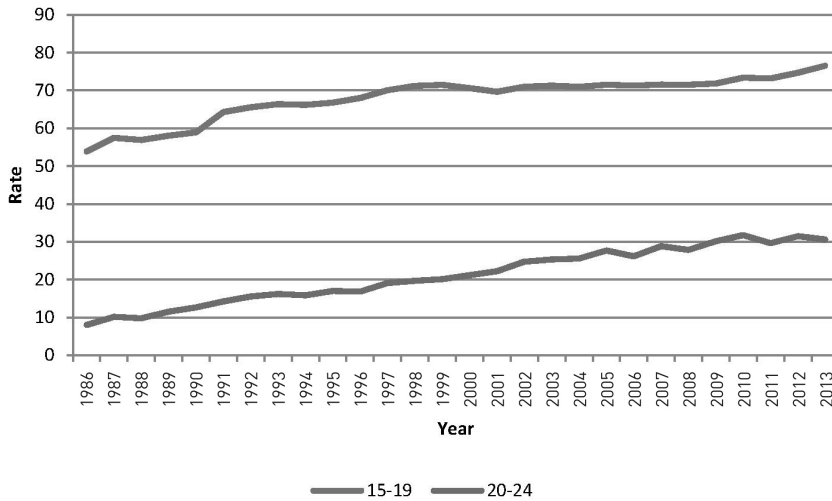
The changes that have taken place in the labour market and education do not occur completely in isolation from young people's own circumstances either, so for example, increased educational participation and more precarious labour markets may lead more young people to remain in the parental home longer(NCVER 2014, forthcoming).

Figure 1 shows that full-time education rates have increased since 1986. For both 15-19 and 20-24 year olds there has been an increase of over 20 percentage points in the proportion of the population of these age groups participating in full-time education. For 15-19 year olds there has been an even more significant upturn since the GFC.

¹³⁾ The Council of Australian Governments committed to lift year 12 or equivalent attainment to 90% by 2015.

¹⁴⁾ At least 25 hours per week.

Figure 1. Full-time education to population ratios, 15-19 and 20-24 year olds, 1986-2003(August figures)

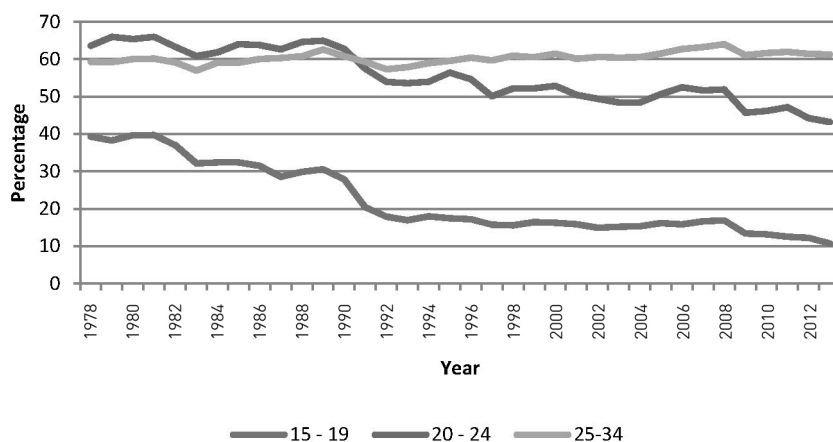


Source: ABS Labour force, Australia, detailed, cat.no. 6291.0.55.01, LM3

In parallel with the increase in full-time education rates among young people there have been substantial decreases in the rates of full-time employment and increases in part-time employment. The younger age groups (15-19 and 20-24 year olds) in particular have been vulnerable to changes in employment rates compared to the comparator group of 25-34 year olds, which are considered post 'new entrant' stage.

As an example of this, full-time employment to population rates have declined over the period 1978-2013 from 39.3% to 10.7% for 15-19 year olds and from 63.6% to 43.2% for 20-24 year olds. In comparison the rate has increased slightly for 25-34 year olds from 59.3% in 1978 to 61.3% in 2013. All three age groups suffered a reduction in full-time employment after the GFC, however while for 25-34 year olds the full-time employment rate has flattened somewhat since then, for the two younger age groups there is still some decline.

Figure 2. Full-time employment to population ratios, 1978-2013(August figures)

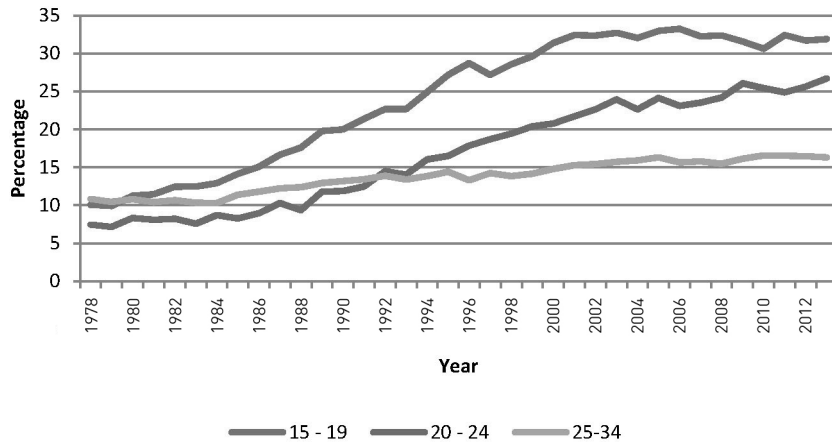


Source: ABS Labour force, Australia, detailed, cat no. 6291.0.55.001, data cube LM2

In contrast to decreasing rates of full-time employment, part-time employment has increased substantially for young people, as can be seen from figure 3. While part-time employment rates have increased for the 25-34 year olds as well, it has not been to the same extent as the 15-24 year olds.

For 15-19 year olds, the rate of part-time to full-time employment has increased from 0.26 in 1978 to 1.93 in 2008, and then up to 2.97 in 2013. Since then, there has been a large rate of increase in part-time employment as compared to full-time employment for 15-19 year olds.

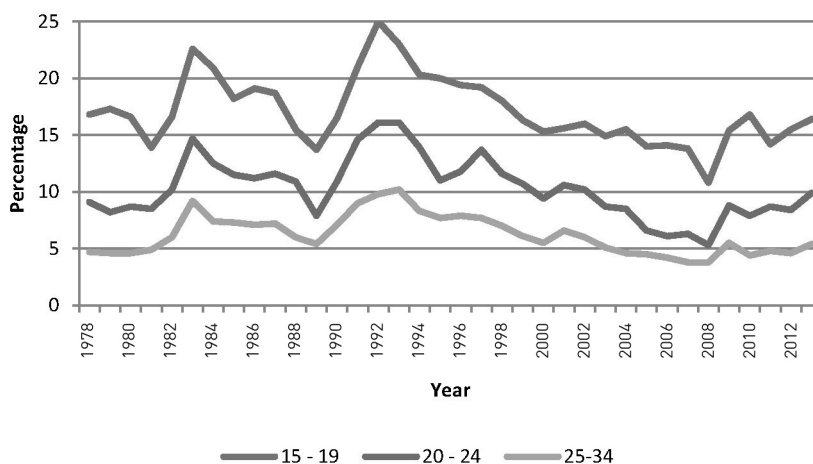
Figure 3. Part-time employment to population ratios, 1978-2013(August figures)



Source: ABS Labour force, Australia, detailed, cat no. 6291.0.55.001, data cube LM2

In terms of the labour force, the unemployment rate provides an indication of the stability of the economy for young people. Figure 4 shows that the worst period for unemployment was actually 1992/93 but after a slow decline in unemployment from then until 2008 it has increased again post GFC. The change in economic conditions hits the 15-19 year age group the hardest as discussed – the increase in unemployment rate from 2008 to 2013 was 5.6 percentage points. This compares to an increase of 4.6 percentage points for 20-24 year olds and 1.6 percentage points for 25-34 year olds.

Figure 4. Unemployment rates, 1989-2013(August figures)



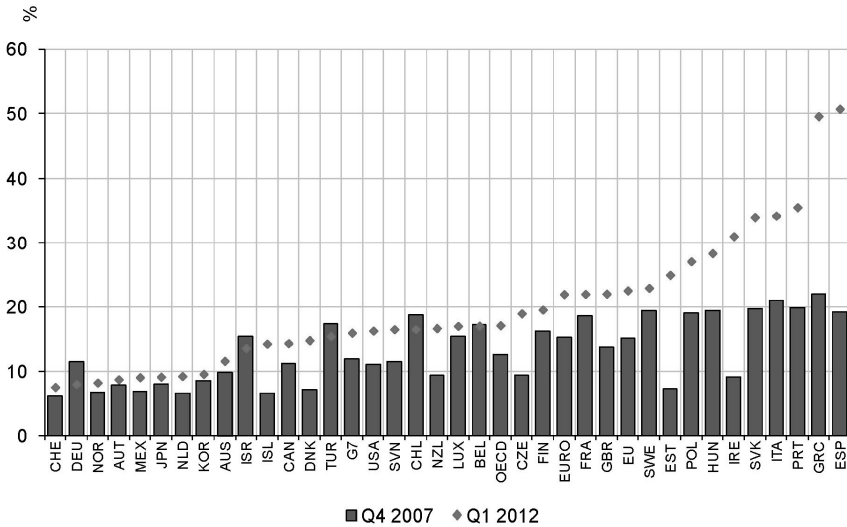
Source: ABS Labour force, Australia, detailed, cat no. 6291.0.55.001, data cube LM2

Australia fares somewhat better than the OECD average though in terms of youth unemployment. According to the OECD¹⁵⁾ in 2012 the unemployment rate for 15-19 year olds in Australia was 16.7% and for 20-24 year olds 8.6% whereas for the OECD average it was 19.8% for 15-19 year olds and 14.9% for 20-24 year olds. The OECD average is however inflated somewhat by some countries facing particularly difficult economic circumstances.

Figure 5 aggregates the unemployment rates for the 15-24 age groups for a selection of comparator countries in 1997 and 2012. It shows that youth unemployment has increased almost universally (but at greater rates for some countries) while increases in Australia have been more modest. It has been pointed out by the Brotherhood of St Laurence (2014) however, that youth unemployment is not uniform across Australia, with some regions experiencing much higher rates of unemployment than others – in particular rural, remote and economically depressed areas.

¹⁵⁾ Statistics available at <http://stats.oecd.org/seeLFSindicatorsbysexandage-indicators>

Figure 5. Unemployment rates of 15-24 year olds, 2007 and 2012(Selected Countries)



Source: National Labour Force Surveys(sourced from the Australian Office of Youth).

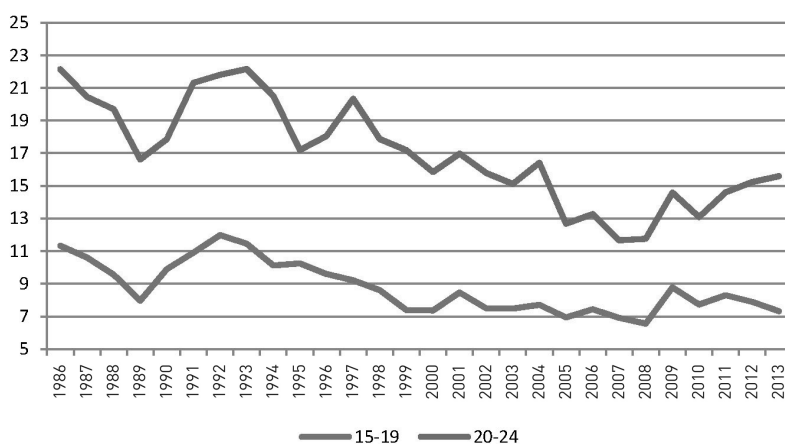
Of interest, in addition to direct education and employment participation, are proportions of young people who are not fully engaged in employment, education and training; as these people are potentially at risk of suffering long term disadvantage. By this we mean young people who are unemployed, in part-time study only, in part-time employment only or not in the labour force. From the Australian Bureau of Statistics we can derive proportions who are unemployed or not in the labour force and not in full-time education.¹⁶⁾

Figure 6 shows the extent that young people are not fully engaged over the period 1986-2013. The first peak was around in 1986 when the data series began, followed by a second peak in 1993. Both of these periods reflect recessions in Australia's economy. After 1993 there was a steady decline in the proportion not fully engaged until 2008. However, following the GFC, there was another smaller peak which has not declined since for 20-24 year olds. For 15-19 year olds the proportion not fully engaged has fallen since 2009, but it's

¹⁶⁾ We cannot derive those in part-time employment only or part-time education only from the ABS data.

worth keeping in mind that higher proportions of 15-19 year olds are staying in full-time education since 2009. Proportions of 15-19 year olds in full-time education remained steady at around 71-72% from 2002-2009 but as of 2013 this has risen to 76%.

Figure 6. Not in the labour force or unemployed and not in full-time education as a proportion of all 15-19 and 20-24 year olds, 1986-2013(August figures)



Source: ABS Labour force, Australia, detailed, cat no. 6291.0.55.001, data cube LM2

The OECD also provides information on the Not in Employment, Education and Training(NEET) group of young people. For 15-19 year olds, the size of the NEET group in 2011 for Australia was 7.8%, compared to the OECD average of 8.2%. For 20-24 year olds, the size of the NEET group in Australia was 11.7% compared to the OECD average of 18.5%.

All of this signals that for young people; their connection to the workforce is at best ‘tenuous’ and gaining and holding onto ‘good jobs’ has become a challenge.

In addition to changes in education and employment, young people’s life circumstances having also been changing. Transitions are getting longer. People in the 15-24 year age group are less likely to be married and have children than in the past, less likely to own their own home, and more likely to still be living in the parental home. This picture is consistent with increasing rates of full-time education and decreased rates of full-time employment amongst young people.

Adapting the Education and Training System to Address the Needs of Youth

It is pertinent here to mention as an introduction to this section; the *Gonski Report on Funding for Schools* which found that Australia has a significant gap between its highest and lowest performing students. Gonski highlights that a concerning proportion of Australia's lowest performing students are not meeting minimum standards of achievement. He also noted there is an unacceptable link between low levels of achievement and educational disadvantage, particularly among students from low socioeconomic and Indigenous backgrounds (Gonski, 2011).

In light of this picture of a challenging labour market for young people and patterns of uneven participation and achievement in education, a range of substantial policy responses have been put in place in Australia; actioned primarily through a range of *National Partnerships* agreements between the Commonwealth (national) and state and territory governments and other important stakeholders. These are in addition to the key elements of a robust training system including an advanced Apprenticeship system and skills training.

The feature of these partnerships is that they are deliberately 'connected'; that is they are comprehensive enough to link together a range of skills acquisition, employment and (in some cases) other social and health-related interventions.

As mentioned earlier in this paper; there has been the establishment of 'targets' by governments to increase the proportion of young people with senior secondary and post-school qualifications; and in particular higher-level qualifications. The *National Partnership Agreement on Youth Attainment and Transitions* (COAG, 2009) established performance targets aimed at increasing participation and achievement by young people in education, training and employment. The particular focus is on 15 to 24 years old, young people at risk and the engagement of Indigenous Australians. This includes a target by 2015

of 90 percent of young people completing a Year 12 or a Certificate II or above qualification. In addition, 25% of young Australians should be undertaking a University under-graduate degree in the same timeline.

The National Partnership on Youth Attainment and Transitions comprises a range of programs that focus on skills development, career management, community partnerships and employment. The individual components include:

- Maximising Engagement, Attainment and Successful Transitions (MEAST)
– Primarily state and territory-based initiatives supporting multiple learning pathways, career development and mentoring
- School-Business Partnership Brokers – An Australian government program focused on building partnerships involving schools, businesses, community groups and families
- Youth Connections – An Australian Government program that provides support to young people who are disengaged or at risk of disengaging from education or training
- National Career Development – Funding for a range of national projects and resources, including the development of a National Career Development Strategy
- The Compact with Young Australians – Strengthened youth education and training participation requirements and changes to income- support entitlements
- Reward funding to States and Territories – For achievement against agreed National Partnership Year 12(or equivalent) participation and achievement targets.

Each of these components has designated targets and Key Performance Indicators(KPI's) which must be met and reported against.

The *Maximising Engagement, Attainment and Successful Transitions Program* is flexible enough to allow different jurisdictions to invest in initiatives that best

suit their local circumstance. These might include state governments running programs and developing resources for the benefit of young people in government and non-government education and training institutions. Such programs might include mentoring and careers guidance.

The *School Business Community Brokers Program* supports some 1,900 partnerships country-wide designed to support the learning and transitions of young people in local communities. Assessment of the effectiveness of these brokerage partnerships shows that 90% of schools in the program indicated that they had experienced benefits; especially in developing closer relationships with local businesses (Dandalo, 2014).

The *Youth Connections Program* is focussed on early school leavers and helps young people who have not completed, or are at risk of not completing Year 12 or equivalent qualifications and have barriers that make it difficult to participate in education, training or employment.

The *Compact with Young Australians* is focussed on legislative requirements for young people to complete year 10 and remain engaged full-time in education, training and/or employment until 17 years of age.

In addition, several jurisdictions have introduced or expanded more formalised processes for managing early school leavers. For example, the Northern Territory has introduced truancy legislation that has allowed greater powers to track young people and compel them to establish school attendance plans. In Victoria, the Compact has been extended to a more formalised school exit program to ensure young people wishing to leave school prior to Year 10 are not exited until a proper, agreed 'pathway' has been established. Similarly, the ACT have established a student transfer register to track students changing schools to ensure they can be contacted if they do not make a successful transfer (i.e.) ensuring they don't slip through the gap (Dandalo, 2014).

The *National career development* element of the partnership has involved supporting existing initiatives around the provision of career development advice (such as My Skills, Job Guide, Australian Career Development Studies and the Australian Blueprint for Career Development) and new activities

including projects under the *Making Career Connections* project.

The Australian Government has entered into additional National Partnerships with the states and territories in the key areas of addressing disadvantage, improving teacher quality, and raising literacy and numeracy outcomes.

The *Smarter Schools National Partnerships* are part of a new funding approach that engages all school systems, including the non-government sector, in partnerships to improve educational outcomes for all students and targets support to students with high needs. Over a quarter of all Australian schools are presently participating in the *National Partnerships for Low Socio-economic Status School Communities and Literacy and Numeracy*, whilst all teachers and school leaders are targeted under the *National Partnership for Improving Teacher Quality*.

Smarter Schools is funding a range of pilot programs to improve literacy and numeracy outcomes for students most in need of support. In addition, the Australian Government, in partnership with state and territory governments, is developing a data bank of literacy and numeracy evidence-based teaching strategies to improve outcomes for Australian students (Department of Education, 2014).

In addition to the National Partnership approach; the Commonwealth government and many jurisdictions have embraced the concept of a training ‘entitlement’ where all people have access to particular skills training and other support that assists them to make successful transitions.

At the national level; the *Skills for All Australians* is a skills reform package which includes a combination of:

- a national entitlement to training at a minimum of the first certificate III qualification so working age Australians have the opportunity to gain the skills needed to get a decent, sustainable job in Australia’s new economy
- wider access to student loans to reduce upfront cost barriers to study at the diploma and advanced diploma level
- increased availability of information about courses, costs and training

provider quality through a new *My Skills* website so students and business can make well informed choices about their training options, linked to their own needs and the needs of the economy; and choose a high quality training provider to help them develop the skills they seek

- support for quality teaching and assessment, including trialing models for independent validation of training provider assessments so students and employers can have confidence in the quality and consistency of training they purchase
- support for a strong public training provider network through the implementation of the reforms to ensure a high quality training system is accessible to all Australians; and
- incentives to achieve improved completion of full qualifications, particularly at higher levels and for disadvantaged students, to deliver the qualified workers that business needs and give all Australians the opportunity to develop skills and participate in the workforce(DPM&C, 2014).

Similarly, individual jurisdictions have implemented entitlement models(for example: *VET Investment Plan* in Queensland, *Skills for All* in South Australia, *Refocusing Vocational Training* in Victoria and *Future Skills* in Western Australia).

Government has also implemented a range of other policy interventions that pay special attention to disadvantaged and low socio-economic status students.

This has included expanding access to income-contingent loans(for example: VET FEE-HELP) for study in subsidised higher level VET courses which are aimed at encouraging more students to pursue higher level and higher cost qualifications.

Closing the Gap is a whole-of-government framework for reducing inherent disadvantage for Indigenous Australians including in health, education and training, early childhood development and housing. An important focus of this is to assist Indigenous people to make successful transitions into further education and training and work.

Finally, skills development is only part of the answer; and a raft of programs have been assembled to assist people into the workforce. These include wage subsidies for new labour entrants and the unemployed, youth allowances, job seeker workshops, jobs and skills expos and improved access to literacy and numeracy training.

The Involvement of Social Partners and the Harmonisation of Views

There are a wide range of bodies and agencies in Australia who have an interest in understanding, funding and advocating for young peoples' participation in education, training and the world of work.

In line with many advanced economies that possess a well developed skills development system; Australia has adopted a tripartite model of governance where governments, industry and unions/social partners all play a part in defining training need and in managing the system. Rather than the typical consensus model that operates in Scandinavia and in some European countries(such as Germany and Switzerland) Australia uses a more negotiated model that reflects compromise between the parties.

As mentioned earlier, government at all levels in Australia maintain involvement in funding education and employment programs ranging from formal VET programs, career management and advice through to brokerage, funding community employment programs and direct employment subsidies.

Industry is represented through key peak bodies such as chambers of commerce and industry(national and state and territory equivalents) and the Australian Industry Group(AiG), industry skills councils(who's role is to understand and communicate industry training needs) and specific trade and industry registration bodies.

Unions also play an important role in skills development through workplace-based training and ensuring that their individual membership are provided with proper and equitable access to education and training and are

properly skilled.

In addition, there are a substantial number of long established ‘social partners’ such as the *Dusseldorp Skills Forum* and advocacy and research groups such as the Foundation for Young Australians, the Brotherhood of St Laurence, Youth Connect and Social Ventures Australia who work to focus efforts in the youth space.

There has been the emergence of partnerships between agencies, employers and industry, local and regional development boards established across the country to support local and regional development objectives – such as Regional Development Australia. Schools and training providers are clearly key players in these relationships.

Returns to Investing In Skills Development Policies

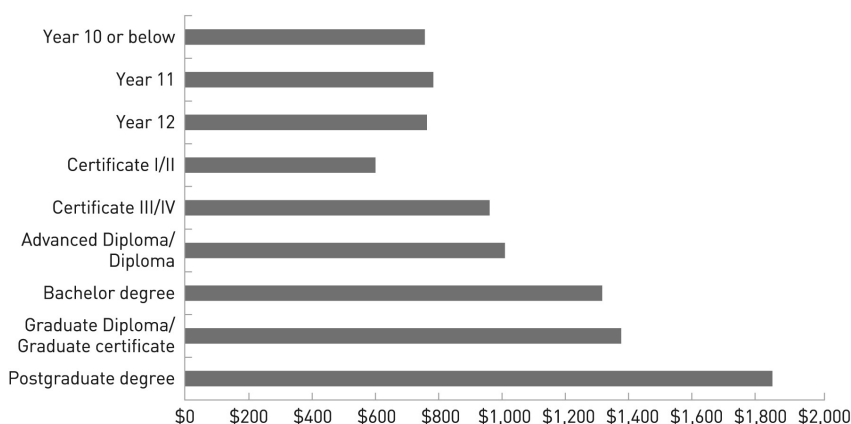
Does investing in these types of skills development programs and interventions make a difference? Proving a direct causal link is difficult; as is making direct comparisons between returns to investment in VET versus say higher education.

Evidence from Australia, is that the attainment of higher levels of education and skills have been found to be strongly associated with higher levels of workforce participation and productivity. This is because higher skilled workers generally earn more. For example, in Australia a person who has only completed senior secondary school earns around 20 percent less than somebody with a certificate III or IV, 24 percent less than someone with a diploma or advanced diploma, and 42 percent less than a university graduate (DEEWR, 2010). This amounts to significant differences in potential earnings over the course of a working lifetime. For example, a diploma provides some \$10,000 a year of additional income over a school leaver and more than \$400,000 across a 40 year working life (DEEWR, 2010).

Figure 7 shows the mean weekly earnings for employees across a range of qualifications from secondary school through to post-graduate degrees. It shows

a clear earning premium is associated with having a higher-level qualification; and that for some lower-level qualifications (such as certificate I/II; essentially enabling courses) the return is poor and less even than completing senior secondary school.

Figure 7. Mean weekly earnings in current main job by educational attainment, 2009



Source: ABS 6278.0 Education and training experience customised report – Employees aged 15 years and over, excluding owner managers of incorporated enterprises. Sourced from DPM&C website at http://www.dpmc.gov.au/publications/skills_for_all_australians/chapter3_skilling_more_australians.html, accessed May, 2014.

Modelling undertaken by the former Skills Australia supports this finding and they identified that a certificate III is the first level of post-school qualification demonstrated to have a significant impact on earnings and employment and, in many industries is emerging as the minimum qualification needed for entry level jobs (Skills Australia, 2009).

Karmel, (2014) similarly finds that for all age groups, those with a degree or a diploma have higher wage rates than average. He also finds that having a certificate is not always superior to completing year 12 in terms of wages.

Another way of looking at returns beyond simple comparisons of wage differences (according to Karmel, 2014) is the relative average hours worked. Using data from the Australian Bureau of Statistics, Survey of Education and Training, he estimated the impact of increasing education levels on economic

growth in Australia between 1997 and 2009. Karmel found that increasing education levels have had a sizeable impact on the hours worked by the workforce. In fact between 2001 and 2009 this impact (of over 3% on hours worked) was larger than the improvement in labour quality. This effect was almost entirely due to increases in the number of women with degrees and postgraduate qualifications.

He also found that increasing education levels have contributed to improved productivity at a rate of 0.14% per annum.

The research shows (in the Australian context) that for young people, having a job is better than no job, given that the wage penalty of having no job a year after leaving full-time education is worse than taking a low-skill job. However, young people who are in more permanent part-time work are likely to remain in low-skill jobs, although part-time or casual low-skill jobs can be a positive pathway for young people to progress into full-time or permanent positions (Karmel et al, 2014).

Not surprisingly, young people who possess high human capital (education, ability, and experience) have more opportunities to move into the workforce and to a high-skill job.

Then there is the issue of skills utilisation (and under-utilisation). A challenge related to the state of the economy is how to ensure that young people are actually trained for the types of jobs that exist. An enduring issue (and not only in Australia) has been skills under-utilisation and wastage where people have been trained in areas where jobs are scarce or even redundant or their skills are not being effectively utilised by the labour market (Eddington, 2010).

The Foundation for Young Australians (FYA, 2013) found that 15% of Australian higher education graduates are underutilised three years after completing their course. Underutilisation rates can vary considerably between courses and tend to be highest in the creative arts and sciences fields and lowest in the health and engineering fields.

Underutilisation appears to be even greater among young people with VET qualifications (Sissons, 2012). Only one-third of all public VET graduates in

2012 in Australia were employed in the same occupation as their training course; and a further third who were not employed in the same occupation as their training found the training even relevant(FYA, 2013).

Wibrow(2014, forthcoming) found that occupation groups with licensing requirements and regulations, such as the trades, carers and aides, and education professionals, have stronger matches between the intended occupation of training and actual occupation. Certificates III and IV qualifications result in a higher overall match between intended and destination occupation than certificates I and II and diplomas and higher-level qualifications.

Implementation Issues and Constraints

The lessons from one country are not always easily applied to the context of another country. However, there are a few ‘lessons’ from Australia which probably has salience elsewhere in the world.

Australia faces many of the challenges of other countries including how to better *identify* early youth at-risk and ensure that skills development and social programs are appropriately linked.

The OECD in its 2010 *Jobs for Youth Thematic Review* identified a range of issues of relevance to Australia including ensuring assistance is flexible, programs and policy responses are ‘joined up’ and are sensitive to local needs; that involve families and not only the individual in the program of assistance; and which place emphasis on fostering not only cognitive but also non-cognitive skills; and requiring participation by benefit recipients(OECD, 2010).

A major challenge however is the current funding environment. Australia has run successive national government deficits and the new federal government has signalled the need for greater fiscal restraint. The government has signalled that some funding approaches for example will need to be re-considered. In addition, many of the proposed funding arrangements identified in the *Gonski Report* previously mentioned are unlikely to be acted upon in the foreseeable

future.

Another issue that has emerged is that employers have indicated they are not happy with the more generic skills that young people bring to the workforce. The Australian Government's White Paper supports this view indicating that the broad capabilities required of young people include general literacy and numeracy, problem solving and communication skills are not up to scratch (Department of Human Services, 2014).

At the macro-policy level, in addition to a focus on interventions around education, training, wages and labour market programs, the Australian experience indicates that "social policies", such as income support, financial incentives, and measures to support participation are also very important.

A key challenge is the ability and willingness to see longer-term programs through, often in a political environment that is relative short-term in focus. Comprehensive interventions usually take some time to have impact and are best realised where they are not constrained by shorter-term funding objectives.

Similarly, is the often complex governance environment that involves numerous agencies from the different levels of government and other stakeholders not necessarily working harmoniously to deliver essential programs.

Finally, is the rise of *credentialism* or the general increase in the level of education of workers that is unrelated to the underlying requirements of the job in which they are employed (Dockery and Miller, 2012). In the Australian context, this has seen jobs that previously did not require, for example, a Diploma or Degree that now do. The consequence has been that young people with lower skill levels are either being pushed out or cannot compete for many jobs, further exacerbating social inequality. In a similar vein, there are examples of both under-skilling and over-skilling occurring in pockets of the Australian workforce.

References

- Brotherhood of St Laurence(2014) Australian Youth Unemployment 2014: Snapshot: http://www.bsl.org.au/pdfs/MyChanceOurFuture_Youth_unemployment_snapshot_Feb2014.pdf, viewed May 2014
- Commonwealth of Australian Governments(COAG)(2009) The National Partnership Agreement on Youth Attainment and Transitions. Canberra: Commonwealth of Australia.
- Commonwealth of Australia(2012) Skills for All Australians: National Reforms to Skill More Australians and Achieve a More Dynamic Economy. Canberra: Commonwealth of Australia.
- Dandolo Partners(2014) Evaluation of the National Partnership on Youth Attainment and Transitions. Final Report for the Department of Education. Department of Education(2014) Smarter Schools <http://smarterschools.gov.au/> viewed May, 2014
- Department of Human Services(2012) Building Australia's Future Workforce: Federal Budget Package 2011-2012. <http://www.humanservices.gov.au/corporate/government-initiatives/building-australias-future-workforce>, viewed May, 2014
- Department of Prime Minister and Cabinet(2014) Skills for All Australians website http://www.dpmc.gov.au/publications/skills_for_all_australians/chapter1_overview.html, viewed May 2014
- Dockery, M and Miller, P(2012) Over-education, under-education and credentialism in the Australian labour market. Adelaide: NCVER.
- Eddington, D, (2012) A skills shortage? Skills formation strategies in Queensland. Geneva: OECD Program on Local Economic and Employment Development program.
- Foundation for Young Australians(2013) How young people are faring? Melbourne: FYA.
- Gonski, G(2011) Review of Funding for Schools: Final Report, Canberra: Commonwealth of Australia.

- Karmel, T, Lu, T and Oliver, D(2014) Starting out in low skill jobs. Longitudinal Surveys of Australian Youth Research Report No. 64. Canberra: Commonwealth of Australia.
- Karmel, T(2014) The contribution of education to economic growth in Australia, 1997-2009. Adelaide: NCVER.
- NCVER(2014 forthcoming) Longitudinal Surveys of Australian Youth – Annual Statistical Report. Canberra: Commonwealth of Australia.
- OECD(2010) *Jobs for Youth* thematic review: Australia. Paris: OECD.
- Sissons, P(2012) The Skills Dilemma: Skills under-utilisation and low wage work, London: The Work Foundation.
- Skills Australia(2009) Economic modelling of skills demand: state results. Report prepared by Access Economics. Canberra: Commonwealth of Australia.
- Wibrow, B(2014 forthcoming), Qualification utilisation: occupational outcomes. Adelaide: NCVER.

Chapter V

Systematic Design to Enhance the
Link between Skills Development and
Youth Employment in P. R. China

Yufeng Liu

Central Institute for Vocational & Technical Education, MOE, P. R. CHINA

Systematic Design to Enhance the Link between Skills Development and Youth Employment in P. R. China

Yufeng Liu

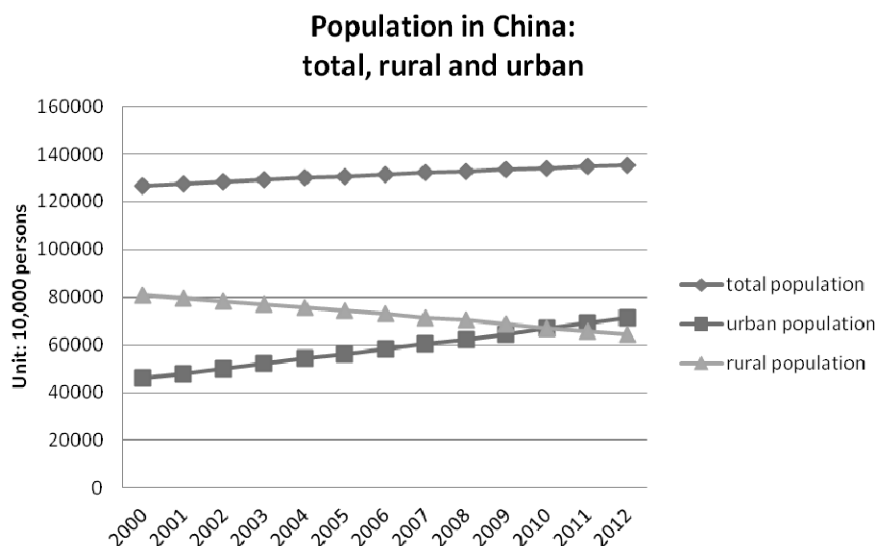
Abstract

Youth unemployment is one of the most serious problem need to be resolved. The biggest percentage of youth unemployment locates at the age of 20-24 age group. After graduation from different kinks of schools, youth could not get job. From education point of view, the main reasons include: lack of effective communication system between education and labour market; lack of incentive system or mechanism of industries and enterprises involved into education and training. To resolve these problems, China will guide a number of general universities to transit to universities of applied technology, To promote “three dockings” in VET, To pilot modern apprenticeship system, and To provide skills training program and “open your own business” training program for youth.

General situation of population and unemployment

Total population in P. R. China has been increasing gradually since new century from 1267 million in year 2000 to 1354 million in year 2012. Urban population has also been increasing gradually. The percentage of population in urban area has been increasing from 36.22% in year 2000 to 52.57% in year in 2012. For details, please see Figure 1 and Figure 2.

Figure 1. Total population and urban population in P.R CHINA(year 2000-2012)¹⁷⁾



¹⁷⁾ China Statistical Yearbook (2013), P 95. China Labour Statistical Yearbook, 2000-2009, China statistics press.

Figure 2. Total and urban population in P. R. China since year 2000

Unit: 10,000 persons

Year	total population	urban population	Urban/total
2000	126743	45906	36.22%
2001	127627	48064	37.66%
2002	128453	50212	39.09%
2003	129227	52376	40.53%
2004	129988	54283	41.76%
2005	130756	56212	42.99%
2006	131448	58288	44.34%
2007	132129	60633	45.89%
2008	132802	62403	46.99%
2009	133450	64512	48.34%
2010	134091	66978	49.95%
2011	134735	69079	51.27%
2012	135404	71182	52.57%

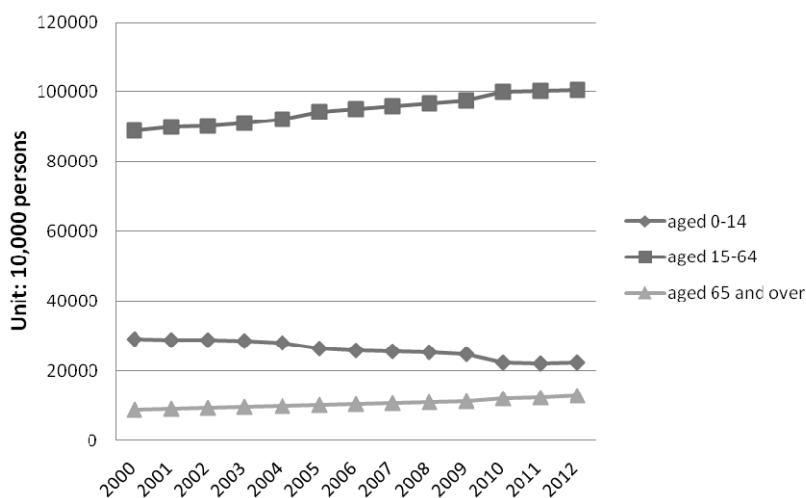
Resources: China Statistical Yearbook(2013), P95

The working age population in China is still biggest part of the total population. In year 2012, the population aged 15-65 was about 100.4 million, that's 74.1% of total population. aged 0-14 years old (including with less than 15 years old) was about 222.87million, that's 16.5% of total population, and population over the age of 65 was 127.14 million, that's about 9.4% of total population. For details, please see Figure 3.¹⁸⁾

—

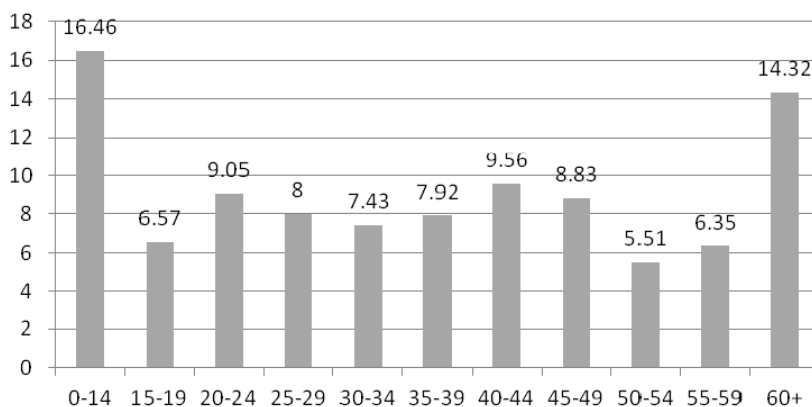
¹⁸⁾ China development report 2013, China statistics press, P99.

Figure 3. Age composition of population in China(2000-2012)¹⁹⁾



In year 2012, 40-44 and 20-24 years group were the first two biggest age groups among the working age groups, there were 9,56% and 9.05% of total population separately. For details, please see Figure 4.

Figure 4. Percentage to Total Population(2012)²⁰⁾



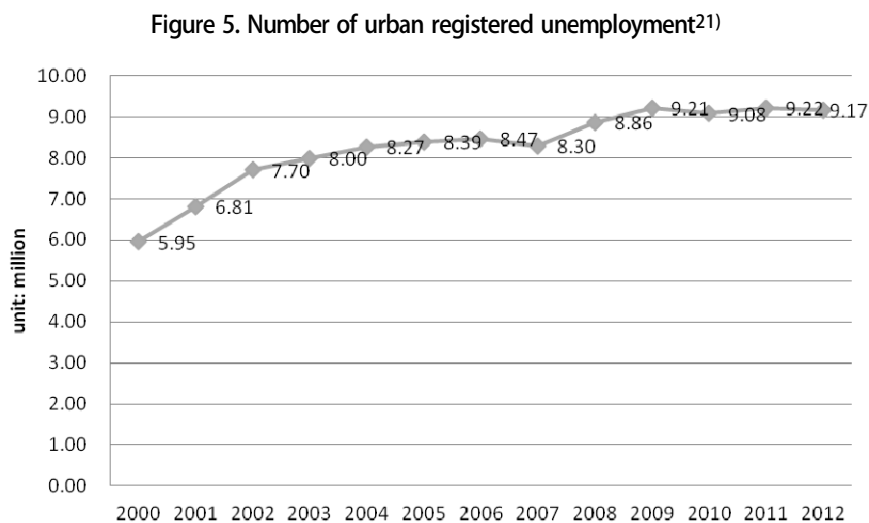
¹⁹⁾ China Statistical Yearbook (2013), P97.

²⁰⁾ China Population & Employment Statistics Yearbook 2013, P52-54, China Statistics Press.

The Youth unemployment situation in China

1. Youth unemployment situation in urban areas

The Number of unemployment population in urban areas increased from 5.95 million in year 2000 to 9.22 million and 9.17 million in year 2011 and 2012 separately. For details, please see the following Figure 5.



The biggest group of the unemployed in urban areas was the group of age 20-24 in year 2012, which 19.4% of total unemployment in urban areas.

²¹⁾ China population & Employment Statistics Yearbook 2013, P24, China Statistics Press.

Figure 6. Youth composition of urban unemployment(year 2002-2010)²²⁾

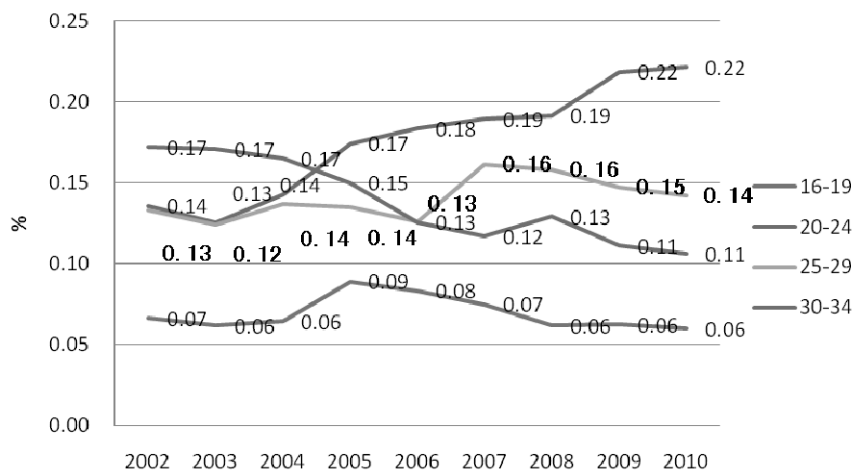
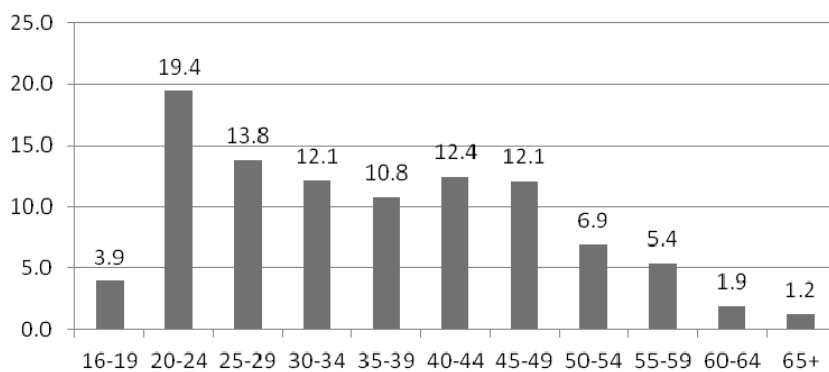


Figure 7. Age composition of urban unemployment in year 2012(%)²³⁾



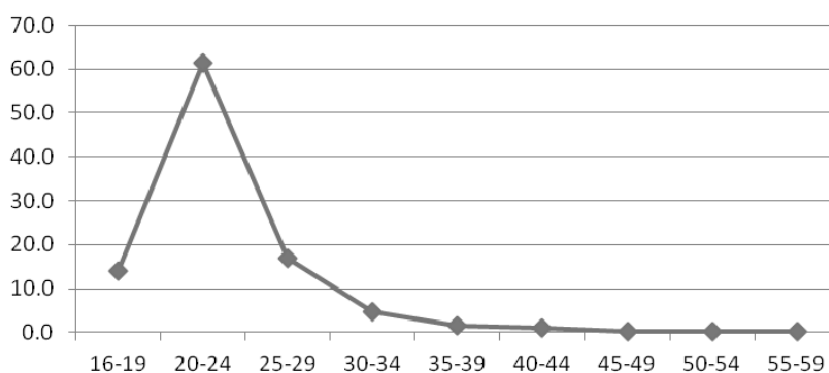
Since year 2003, unemployment rate of youth of age 20-24 in China has been increasing. In year 2004, it has been ranking the highest among that of the youth of age 16-19, 25-29 and 30-34. The unemployment rate of youth of age 16-19 is lowest. For details, see Figure 6.

²²⁾ China labour Statistical Yearbook (2003-2011), China Statistics Press.

²³⁾ China labour Statistical Yearbook 2013, P113, China Statistics Press.

This situation was the same in year 2012. The biggest unemployment group located in the age group of 20-24 years old. One of the main reasons was that most of the people which didn't get employment after graduation from different kinds of schools were at the age of 20-24 years old group. The percentage of job-off after education of age group of 20-24 was 61.3%, 16-19 and 25-29 years old was 13.9% and 17% respectively. For details, please see Figure 8.

Figure 8. Job-off after Graduated in year 2012(%)²⁴⁾

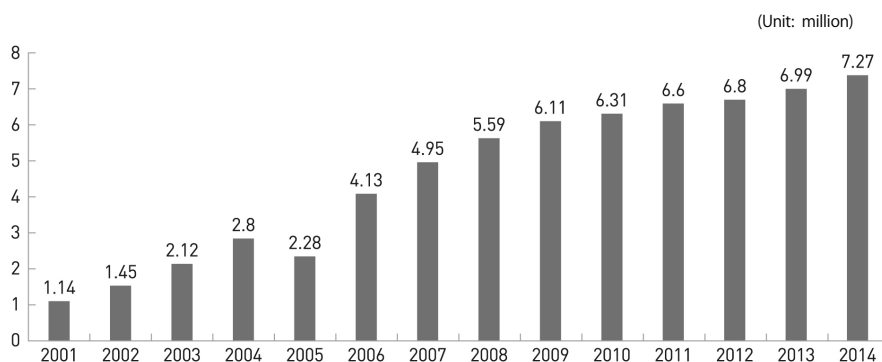


Youth at the age of 20-24 years old could be classified into urban youth and rural youth. Urban youth are mainly composed of senior secondary school and higher education institutes graduates. Rural youth at this age most are migrant workers.

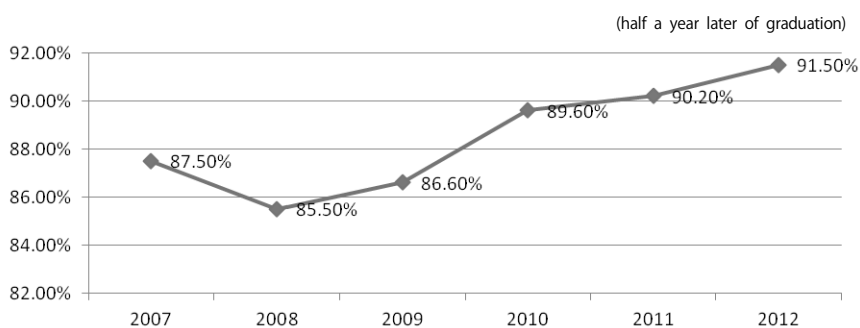
2. The employment situation of higher education graduates

Since the year of 1999, Chinese government has been carrying out a policy of expanding the scale of higher education. Therefore, higher education students have been increasing rapidly. For details, see Figure 9.

²⁴⁾ China Labour Statistical Yearbook 2013, P100, China Statistics Press.

Figure 9. No. of HE graduates in China²⁵⁾

The employment rate of higher education graduates has been increasing gradually since the year of 2008, from 85.5% to 91.5% in year 2012. But due to the reason that the numbers of higher education students increased rapidly, the employment of higher education graduates in China is facing big challenges.

Figure 10. Employment rate of HE graduates in China²⁶⁾

²⁵⁾ MOE.

²⁶⁾ Mycose 2013 higher education graduates reports.

The employment situation of higher education institutes graduates in 2013 was very serious. By April 10, the contract signing rate of Master's degree graduates was 26%(11% lower than year 2012), the contract signing rate of undergraduate was 35%(12% lower than year 2012), and higher VET institutes was 32%(13% lower than year 2012).²⁷⁾

According to a survey carried out by MYCOS Co, graduates employment rate of higher education institutes ranked first was "985" universities, second was the higher vocational colleges, and the third was 211 universities, and others was after.

Though employment rate of secondary and higher education graduates were very high, the employment quality was not so good. A survey shows that graduates satisfactory rate of employment from 4 years higher education institutes was 58% in year 2012. Among them, this rate from "211" higher education institutes was 62%, from other institutes were 57%. Graduates employed by governments and research institutes had highest satisfactory rate of employment, that's 69%; Graduates employed by private enterprises had lowest one, that was just 50%. Therefore, the turnover rate of vocational education graduates is high.

3. The employment situation of secondary VET graduates

In year 2013, employment rate of graduates in secondary vocational school was 96.81%. This is the eighth year which secondary VE schools have been maintaining employment rate higher than 95% since 2006.

In year 2012, 66.21% of secondary VET graduates had no job change within one year, 20.01% had one time job change, and 8.95% had more than 2 times change.²⁸⁾

²⁷⁾ Mycose 2013 higher education graduates reports.

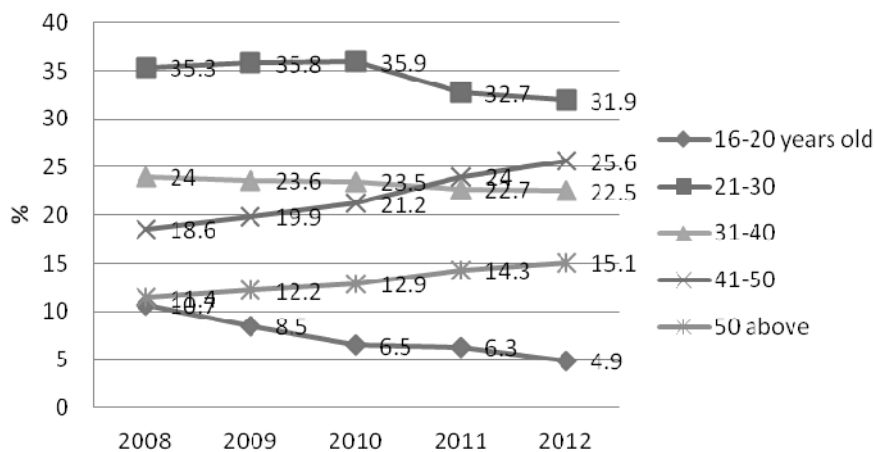
²⁸⁾ National report on employment of secondary VET schools(2006-2012), P18, Beijing Institute of Technology Press.

4. The migrant workers employment situation

In 2012, the total amount of migrant workers reached 262.61 million people, an increase of 9.83 million over the previous year, growth of 3.9%. 66.4% of total migrant workers were male, and female was just 33.6%.

Age composition of migrant workers was various, from 16 years old to 50 above. 4.9% migrant workers was 16-20 years old, 31.9% was 21-30 years old, 22.5%, 25.6 and 15.1% were 31-40, 41-50 and 50 above. For details, please see the following Figure.

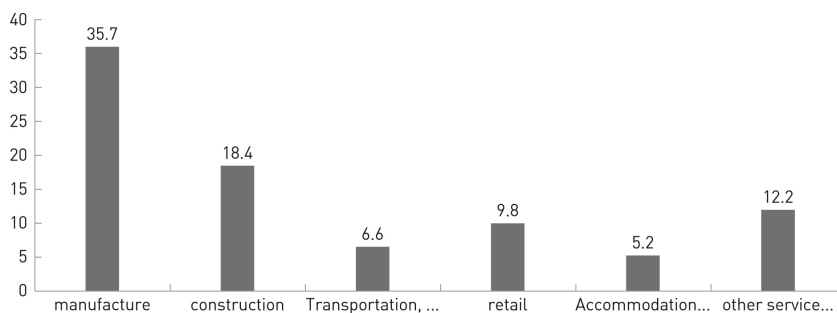
Figure 11. Age composition of migrant workers²⁹⁾



²⁹⁾ 2013 China development report, P113, China Statistics Press.

Migrant workers mainly work in the industries of manufacture, construction and service. In year 2012, 35.7% worked in the industry of manufacture, 18.4% in construction. For details, please see Figure 12.

Figure 12. Industries distribution of Migrant workers employment(2012)³⁰⁾

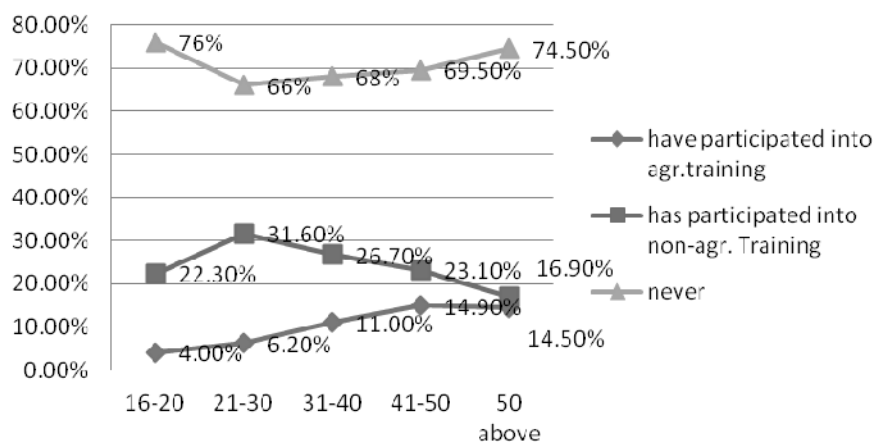


The stability of migrant workers' employment is poor. The average time of engagement in the current job is 3.2 years. There was 11.7% migrant workers had worked in the current job less than one year, 45.5% was for 1-2 years, and 27.8% was for 3-5 years. 15% was for 5 years.³¹⁾

In year 2012, the percentage of migrant workers has accepted agricultural technological and skills training was just 10.7%, 25.6% has accepted non-agricultural technological and skills training. But 69.2% of migrant workers have never accepted any kinds of training. For the specific information about the training acceptance situation of migrant workers in different age group, please see the following Figure.

³⁰⁾ Resource: 2013 China Development Report, P114, China Statistics Press.

³¹⁾ Resource: 2013 China Development Report, P114, China Statistics Press.

Figure 13. Migrant Workers Training³²⁾

The analysis of youth unemployment

Youth unemployment has many reasons, the economic downturn, traditional culture, one child policy, etc. But education and training system could not reflect the changing demand of the labor market is one of the main reasons.

1. Youth unemployment: structural unemployment

Some youth after graduation from different kinds of schools doesn't mean "Over education". "Over education" is relative rather than absolute issue, is structural not total quantity issue. One the one hand, higher education graduates could not find jobs; on the other hand, some jobs could not find appropriate persons. Therefore, it could be said that youth unemployment is a problem of structural unemployment.

This situation reflects the fact that the education and training supply could not meet the demand of the market demand on human resource, and the problem that specialties offering in schools or universities could not meet the changing demand of human resources, that's "two pieces of skins" problem. Even top

³²⁾ Source: 2013 China development report, P113, China Statistics Press.

universities exit the problem mentioned above. In year 2013, Wuhan University has 110 specialties. Graduates employment rate was higher than 95% in 31 specialties, which in 7 specialties was 100%. But there were still 7 specialties lower than 80%. Local universities are facing most serious problem of graduates' employment.

Though VET graduates employment rate were very high, employment quality is not high, therefore, graduates turnover is very high after one year employment.

2. Reasons analysis

The major concerns in China in adapting the education and training system to the changing demand of the labor market include two main aspects: communication has no smooth system, cooperation without comprehensive and strong mechanism. This problem could be well explained in VET system.

1) Labour market information system: lack of communication between demand and supply

To match education supply and labor market demand needs effective labor market information system which could provide effective information for education to offer programs, develop curriculum, etc. It's requirements for university and vocational colleges to know labor force demand in the process to offer new programs, but it's hard to get comprehensive information about future labor market demand. China has made great progress in the aspect of labor market information collection since the reform and opening up policy carried out, Ministry of human resources and social security has established a web <http://www.chinajob.gov.cn> which provides data publication related to labor demand. Data could be found about employment and unemployment, training and appraisal, and mobility of rural labor, etc. But these data mainly focus on the current or past situation. It's hard to find data related future demand on human resource.

There is an organization affiliated to Ministry of Education which provides students of higher education institutes information and employment guidance

service, CSICC. CSICC provide lots of information which include recruitment, internship, job fairs, employment policies, career guidance, etc, for higher education institutes. It also provide great amount of successful experiences in improvement of students employment. But it's lack of a system to do analysis on labour market demand and education supply. Therefore, it's hard for education institutes to adjust their programs and curriculum to meet the fast changing of the labour market demand.

2) Plural VET participation system: lack of effectiveness

Chinese government has recognized the importance of stakeholders' involvement into VET, therefore, has made lots of efforts to establish a plural VET participation system.

At policy level, VET has established ministerial joint meeting system, industry guidance committee system, and VET and industry dialogue system. At VET practical level, many VET schools or colleges has establish VET council system and VET specialty teaching and learning advisory committee system.

In year 2004, ministerial joint meeting system for vocational education in China was established. This system is composed of 7 ministries or commissions, including the Ministry of Education, Development and Reform Commission, Ministry of Finance, the Ministry of Personnel, Ministry of Labor and Social Security, the Ministry of Agriculture, Poverty Alleviation Office of State Council. The Ministry of Education is the lead unit. The main function of this meeting is to coordinate the development of vocational education, to study the way to solve relevant problems of vocational education. The joint meeting in principle convenes a meeting every six months. Due to the reason that MOE lacks of enough authority, it's hard for MOE to coordinate this ministerial joint meeting. MOE just convened several times of these meetings since it established.

The Ministry of education in 2012 led the establishment of the 59 *industry guidance committee*, to promote the industries and enterprises to participate in

Vocational Education. These committees include agriculture, manufacture, tourism, transportation, etc. But most members of these committees come from VET colleges or schools, they don't really understand the current and changing demand of industries. Meanwhile, these committees could not get continuous financial support. Therefore, it's hard for industry guidance committee to play the functions they should play.

Since the first VET and industry dialogue was held in March of 2010, *VET and industries dialogue* has been carried out as a system and platform to improve the mutual understanding between VET and industries. More and more enterprises and VET schools or colleges participated into this dialogue, which improve the effective docking, resource sharing, complementary advantages, cooperation and win-win situation. In year 2011, more than 1500 enterprises, more than 1600 schools, etc participated into this dialogue. These dialogues focused on the reform of education and teaching, industry technological change and the demand for talents. In 2014, MOE plan to organize 16 times dialogue, including the dialogue with manufacture industry, tourism industry, electronics industry, and automobile industry, etc. But these dialogues face two problems: industry associations in China are generally speaking weak, they don't understand very well about the comprehensive development of the industry; these dialogue is lack of follow-up actions, therefore related outcomes could not be introduced into VET.

At practical level, many VET schools or colleges have established *school and enterprises cooperation council*. These councils mainly composed of delegates from industries, enterprises, and VET schools or colleges. The council system is actually a system of mutual benefits and resource sharing system. Enterprises usually provide training places and equipments for VET students, VET schools or colleges provide training for enterprises employees, and carry out technological research for enterprises. Enterprises provide "talent order" to VET schools or colleges, which include quality and quantity requirements, and then cultivate students in "order class" with VET schools or colleges.

VET schools or colleges have established *teaching and learning advisory*

committee, which composed of enterprises delegates. They will put forward suggestions on the specialties offering, curriculum reform, etc, to VET school/institutes.

Though at policy level and at practical level, Chinese VET system has established a framework of plural participation system, due to lack of systematical design and incentive system, the framework could not played the functions it should.

3) System to plan specialties offering: lack of scientific overall planning methodology and system

At the moment, there is still lack of scientific overall planning methodology for specialties offering in VET and higher education institutes.

Ministry of education of China has put forward requirements to schools for specialties offering. How to plan specialties offering comprehensively and scientifically, there is no specific requirement. MOE has put “Secondary Vocational School Specialties Offering Management Approach(trial)” into effect. It stipulates that VET schools or colleges have to get approval to offer new specialties from schools authorities. To get the approval, VET schools have to submit required materials which include labour market demand, conditions to provide specialty, etc. Meanwhile, this approach requires that “Various regions and secondary vocational schools should plan specialties offering scientifically, optimize the allocation of resources and specialty structure, to offer specialties according to the school running conditions and regional industry structure, therefore to avoid blindly setting up specialties and repeated construction”(Article six). Not all schools authorities understand economic development situation clearly, it’s hard for them to plan specialties offering scientifically. Meanwhile, it’s lack of overall specialties offering methodology and system, therefore, it cause the mismatch of specialties supply and labour market demand. Higher education institutes also face the same problems of specialties offering.

4) Incentive system and mechanism: is imperfect

Lots of enterprises, especially small and middle sized enterprises, belong to labour -intensive enterprises. They could employ labour force directly from labour market. They don't want to be involved into VET. It means that the involvement of VET lack of attractiveness for lots of enterprises.

At the moment, China still lack of enough incentives mechanism for industries and enterprises involvement into VET. "VET law of P. R. China" just stipulate obligations of industries and enterprises. It stipulates that 'Industrial organizations should run VET schools or training organizations'(article 19), "Enterprises shall, in accordance with their actual situation, provide vocational education in a planned way for their staff, workers and persons to be employed. Enterprises may jointly run or run on their own vocational schools and vocational training institutions; they may also entrust vocational schools or vocational training institutions with the vocational education of their staff, workers and persons to be employed by them(article 20). "If any enterprise fails to conduct vocational education in accordance with Article 20 of this Law, the local people's government at the county level or above shall order it to make correction; if the enterprise refuses to make corrections, the vocational educational funds that the enterprise should bear may be collected, and such funds shall be used for vocational education in the locality"(Article 29).

Systematic design to enhance the link between skills development and youth employment: new policies and measures

Education needs to be reformed systematically to improve the link between supply and demand. At the end of year 2010, the State Council announced a pilot reform of the education system, there were totally 52 projects related to vocational education. Among them, there were 4 projects belong to comprehensive reform of education, 48 projects belong to reform on vocational education running mode. The pilot has achieved good results, for instance, it has formed overall coordination system between VET and industries, meanwhile,

has formed some enterprises and VET cooperation model, VEG groups, for instance.

Chinese government will promulgate “State Council Decision on acceleration of the development of modern vocational education” soon, and will hold a national vocational education conference in April, 2014. The main objective of this decision is to enhance the link between labour market demand and education supply, therefore, to improve the link between skills development and youth employment.

On February 26, 2014, the State Council put forward the requirements to accelerate the development of the modern vocational education in the following aspects:

- To guide a number of general universities to transit to universities of applied technology.

Biggest percentage of university graduates that could not get employment come from local universities. The cultivating objectives of these universities at the moment are still academic. The labour market has no big demand on academic occupations. Therefore, the Decision requests to guide general 4 years universities to transform from academic to university of applied technology. Meanwhile, the Decision also asks to build a classification system of higher education institutes, carry out classified management system. The quota and investment policies and measures will be tilt to the universities of applied technology.

- To pilot modern apprenticeship system.

There have several types of successful models of enterprises-VET schools cooperation, “Order Class”, for instance. Though enterprises have involved into VET, generally speaking, this involvement is far more enough.

To improve youth employment, China will put modern apprenticeship into experiment. Modern apprenticeship is not only a teaching and learning model, but also an employment system. Enterprises cooperate with VET schools to train apprentices. Most of the training time apprentices get is

inside enterprises. Enterprises play a subjective role in this system. After training, apprentices could become skilled workers which could meet the requirements of enterprises. In the process of implementation of this system, enterprises could be more easily to find appropriate employee.

- To promote “three dockings” in VET

To make VET graduates meet the requirements of enterprises, MOE has put forward “three dockings”, that’s dockings between specialties offering and industrial demand, occupation standard and curriculum, teaching process and production process. To fulfill these dockings, China has piloted a series of systems which include teaching and learning advisory committee system, etc.

- To develop actively modern agriculture vocational education

The decision requires to establish farmers cultivation and training system with the characteristic of public welfare. Students studying the majors of agriculture and forestry, etc, will get bigger financial support. Meanwhile, the migrant workers VET subsidies policies will be improved.

- To provide skills training program and “open your own business” training program for youth.

To promote the employment of university students, China has carried out a series of policies and measures related to vocational education and training. In 2011, the State Council issued a notice to ask for great efforts to help general university graduates to get employment. This notice put forward concrete requirements and policy support measures to encourage students to participate in vocational skill training and entrepreneurship training. This notice stipulates that government will provide three kinds of subsidies to higher education graduates: training subsidies, skills testing subsidies, and enterprises training subsidies.

Chapter VI

「청년층 숙련 개발과 고용의 연계 강화」
국제세미나 발표 자료 요약

최영섭

(한국직업능력개발원 선임연구위원)

「청년층 숙련 개발과 고용의 연계 강화」 국제세미나 발표 자료 요약

최영섭(한국직업능력개발원 선임연구위원)

□ 노르웨이: ‘적합한 숙련’의 개발-문화와 구조

- 노르웨이의 발표는 최근 OECD가 노르웨이를 대상으로 실시한 Skills Strategy Review의 주요 내용들을 중심으로, 최근 노르웨이에서 이뤄지고 있는 숙련 시스템 개선 노력들을 소개
 - 우선 노르웨이의 OECD Skill Strategy Review의 참여 배경에 대해, 비록 노르웨이가 석유자원을 바탕으로 양호한 경제 및 노동시장 성과를 보이고 있지만(전체 실업률 2014년 4월 현재 2.8%), 미래를 준비하는 입장에서 숙련 시스템 전반에 대한 재평가가 필요한 상황임을 지적
 - 특히 노르웨이 재정부 추정 결과에 따르면 노르웨이 전체 국부의 80%가 인적자본으로 간주되는 상황에서 인적자원의 생산성 제고, 노동 생활에서의 적응 가능성 제고, 혁신의 촉진, 새로운 직업에 필요한 새로운 숙련 개발 등을 위해 Skill Strategy 프로그램에 참여
- OECD의 Skill Strategy Review 결과는 노르웨이가 직면하고 있는 문제점들을 다양하게 지적
 - OECD는 Skill Strategy Review를 통해 다음과 같이 4개 영역에 대

해 12개 도전과제들을 확인

- 적절한 숙련의 개발 - 탄탄한 기초 숙련의 확보, 중도 탈락 학생의 감축, 교육 선택에 대한 정보 제공 강화
- 숙련 공급의 확대 - 장애수당 수급자의 노동시장 참여 확대, 저숙련 청년층의 노동시장 참여 확대, 생애 노동시장 참여 기간의 연장
- 숙련의 효과적 활용 - 사용자의 고숙련 근로자 활용 촉진, 혁신과 기업가 정신의 장려, 이민 근로자의 적절한 활용
- 노르웨이 숙련 시스템의 강화 - 범정부 숙련 정책의 적절한 조율, 지역 수준에서의 정책 유연성 확보, 지역 및 전국 수준에서의 파트너십 강화

○ 이러한 결과들을 고려하여 현재 노르웨이가 고품질의 숙련 개발이라는 점에서 당면하고 있는 주요 과제들을 정리

- 초등 및 초기 중등교육의 경우, 2001년 PISA 결과 발표 이후 노르웨이 학생들의 학력수준이 크게 높지 않다는 점이 인식되었는데(PISA shock), 이를 어떻게 개선할 것인가 하는 점
- 전통적으로 노르웨이 학교는 선량한 시민의 육성 이라는 점에 관점을 두어 왔으나 2001년 PISA 쇼크 이후 양질의 노동력 육성이라는 점에 대해서도 더 많은 관심을 기울여야 한다는 인식이 확산되고 있음.
- 중등교육과 관련해서는 노르웨이에서 후기 중등교육 수수료가 낮다는 점이 중요한 과제임.
- 예를 들어 2012년 현재 전체 노르웨이 성인의 16%가 후기 중등교육을 마치지 않았는데, 이런 상황의 개선이 필요한 것은 학교 중퇴가 이후 사회적으로 상당한 비용을 발생시키기 때문임.
- 고등교육과 관련해서는 현재 노르웨이에서 교육의 분권화와 품질 사이의 관계에 대한 논쟁이 이어지고 있음.
- 현재 노르웨이의 56개 고등교육기관에 약 23만명이 등록하고 있으며, 특히 공공 고등교육기관 1개당 약 6,000명의 학생들이 등록, 이는 노르웨이의 지형적 특성상 고등교육기관들이 전국에 흩어져 있을 수밖에

없기 때문인데 그 결과 고등교육 품질에 대한 우려가 제기, 이에 따라 최근 노르웨이 정부는 품질이 지역 geography 보다 중요하다는 입장을 발표

- ※ 물론, 발표자의 이러한 우려에도 불구하고 노르웨이의 고등교육 성과는 한국에 비추어 상당히 우수하다고 할 것임. 예를 들어 2011년 석사 학위 취득자의 6개월 이내 취업 상황을 봤을 때 불과 8.3%만 실업자이며, 취업자 중 단 5%만이 자신들의 교육내용과 맞지 않은 일을 하고 있다고 보고, 이러한 점은 한국의 상황에 비추어 볼 때 상당히 양호한 성과로 판단됨.
 - 결국 이러한 점들은 발표자가 지적하듯 노르웨이 교육 시스템이 적절한 숙련을 개발하는데 다양한 도전과제를 갖고 있으며, 그로 인해 노르웨이에서 숙련 불일치가 존재하고 있음을 시사함
- 숙련 시스템의 개선에서 이민 노동자의 활용, 사회적 합의와 정책 조율 문제가 지적
 - 숙련 시스템의 개선을 위한 노력들 중 가장 먼저 언급되고 있는 것이 이민 노동자의 적절한 활용 문제로, 이는 노르웨이가 갖고 있는 인적 자원의 제약을 적극적으로 돌파하려는 시도로 판단됨
 - 특히 이러한 접근은 노르웨이에서 고등교육과 후기 중등 직업교육 졸업자에 대한 수요는 많아지지만 부문별로 미스매치가 이어질 것이라는 예측에 따른 것임. 이에 따라 2012년 등록 근로자의 6.1%가 이민 근로자(2011년 5.8%). 물론 전적으로 이민 노동자에만 의존할 수 없다는 것은 분명하다는 점에서 어느 정도 제한이 있을 것이나 당분간은 관용적 이민 정책이 이어질 것으로 예상
 - 또한 노르웨이에서는 전통적으로 사회구성원 사이에 공식적, 비공식적 대화를 통해 합의를 도출하고 그에 기초하여 정책이 이뤄져 왔음. 이러한 3자 합의주의적 시스템의 교육 분야 사례로 2012년에 직업교육의 활성화, 특히 도제 참여자 증가를 목표로 사회 이해 관계자 사이에 Social contract이 맺어졌던 사례를 들 수 있음.

- 이와 관련된 발표자의 언급 중 특기할 점은, 전통적으로 노르웨이에서 고등교육이 학문 자체의 순수성을 강하게 유지해 오면서 사회적 이해 관계자, 예를 들어 기업의 참여가 제한되어 왔으나, 2003년 교육부가 모든 공공고등교육기관 이사회에 기업 고위 관계자 등이 중심이 되는 외부 이사 4인을 추가하여 고등교육의 숙련 개발 적합성을 높이며 하고 있다는 점
- 또한 발표자는 노르웨이도 실제 정책의 시행 과정에서 정부 내부에서의 다양한 조정 문제를 가지고 있으며, 숙련 시스템의 보다 원활한 작동을 위해 중앙과 지방 사이의 수직적 조정, 또한 중앙정부 내에서의 수평적 조정의 원활한 추진도 중요하다고 지적하고 있음.

○ 직업교육훈련을 통한 숙련 개발의 필요성

- 발표자는 현재 노르웨이에서 직업교육 출신자들이 상대적으로 양호한 노동시장 성과를 거두고 있으며, 이러한 양호한 성과가 노르웨이에서 직업교육훈련에 대한 지속적 수요를 반영한다고 지적
- 이와 관련하여 현재 노르웨이에서 고등교육 학력 소지자는 후기 중등 학력 소지자에 비해 단지 17% 높은 임금을 받고 있음. 반면 OECD 평균은 57% 수준. 따라서 현재 노르웨이에서 순수히 경제적 측면에서는 고등교육을 선호할 이유가 크지 않음. 물론 최근 들어 임금 이외에 사회적 이미지 등으로 인해 직업교육에 대한 선호가 떨어지는 상황이 등장
- 이러한 상황에서 직업교육훈련 참여자의 부족 현상이 향후 10년 혹은 15년 동안 지속될 것으로 예상되면서 2013년 10월 노르웨이 정부는 직업교육활성화에 대한 새로운 정책을 발표
- 도제 교육과 관련하여 노르웨이 기업들은 도제 교육에 적극적으로 참여하고 있으나 상당수가 절반이상이 한 명 혹은 두 명 정도의 도제만 채용하고 있는 소규모 기업임
- 기업들의 참여 동기는 교육을 통해 사회에 기여한다는 일종의 도덕적 의무감도 중요하고 다른 한편으로는 이것이 장기적으로 직원 채용에

유리한 전략이라는 점이라는 인식에 기초하고 있음

- 예를 들어 95%의 도제 활용 기업이 장기채용 전략 측면에서 효과적인 전략이었다고 응답
 - 그러나 도제 교육을 이와 같이 기업의 채용 전략 측면에서 접근하면 경기 상황에 따라 도제 시스템이 크게 영향을 받는 문제가 있어 노르웨이 정부는 교육차원에서 도제 프로그램의 안정성을 높이기 위해 노력하고 있음.
 - 물론 현재 노르웨이에도 상당히 많은 기업, 예를 들어 7만 개 기업 중 1만 2천 개 기업만이 도제를 활용하고 있어 여전히 많은 기업들이 도제를 활용하지 않고 있음.
 - 그 이유로 여러 가지가 제시되지만 도제가 적절한 역량을 갖지 않고 있다는 지적도 중요하게 지적됨.
 - 그에 따라 노르웨이 정부에서는 사회 훈련의 품질을 높이고 다양한 이해 관계자 사이의 협력을 강화하는 전략을 통해 도제 참여자의 숫자를 늘리기 위한 노력을 하고 있음.
- 학교로부터 일터로의 이행과 관련하여 노르웨이의 성과는 상당히 주목할 만함.
 - 즉, 2005년~2012년 사이에 도제제도를 마친 학생들의 각 연도 말 취업률은 85%~88%, 또한 2005~2011년 사이에 후기 중등 직업교육 도제 프로그램을 마친 학생들이 2012년 말까지의 취업상황을 보면 단지 1.5%만이 실업 상태임.
 - 그러나 노르웨이 정부는 이러한 상황에 머무르지 않고 새로운 학습 수요의 증대에 대응하기 위해 다양한 조치들을 취하고 있음.
 - 우선 성인학습과 평생학습의 요구 증가에 대응하기 위해 고등단계, 혹은 중등교육 이후 단계에서의 직업교육 활성화를 위한 정책들을 개발하고 있으며 그 결과가 2014년 12월에 발표 예정임.
 - 또한 고등교육분야에서도 과거와 달리 직업세계에 대한 준비가 강조되고 있으며 그에 따라 고등교육분야에도 실제 직업세계와의 접촉이 늘

어나고 있음. 그 성과는 비교적 만족스러운데, 2012년 이후 실시된 조사에서 대학 재학 중 직업세계와 접촉을 가진 학생 중 43%가 그러한 접촉이 취업기회를 높였다고 응답하고 있음. 따라서 도제교육 혹은 그와 유사한 형태의 학생과 직업세계 사이의 체계적인 접촉이 앞으로 더욱 확산되어야 한다는 것을 의미함.

- 결론적으로, 노르웨이의 사례는 교육에 대한 수요가 계속 변화하는 상황에서 교육 시스템의 변화도 지속적으로 이뤄져야 함을 잘 보여줌
 - 특히 발표자는 이러한 변화가 사용자 및 사회적 파트너들과 긴밀한 협력 하에 추진될 필요가 있음을 강조

□ 독일: 직업교육훈련과 청년고용—독일의 사례

- 최근 독일의 전반적인 노동시장 상황은 OECD국가들 중에서도 상당히 양호
 - 2014년 3월 전체 실업률 5.1%, 2012년 4/4분기 청년 실업률 7.9%로 유럽국가들 중 가장 낮은 편
 - 이렇게 낮은 청년 실업률의 이유 중 하나로 독일의 잘 발달된 직업교육시스템, 특히 듀얼 시스템(학교와 일터에서 일과 학습을 병행)이 언급되고 있음을 강조
 - 이를 통해 근로자들이 질 높은 직업훈련을 받고, 이를 바탕으로 학교로부터 일터로 순조롭게 이행할 수 있기 때문
 - 물론 발표자는 90년대의 독일의 듀얼시스템도 글로벌화나 노동시장 규제완화 등으로 인한 압력을 받았음을 지적
 - 그러나 독일에서 여전히 전통적 직업교육 시스템의 골격이 유지되어 왔으며, 그에 따라 독일의 청년 실업률이 낮게 유지되고 있다고 강조
- 독일 듀얼 시스템의 기초 통계
 - 2011년 현재 약 146만명이 듀얼 훈련에 참여, 2012년 현재 344개

듀얼 훈련 직종이 3년~3.5년 동안 운영, 훈련기간 동안 (구)서독지역 참여자 737유로/월, (구)동독지역 참여자 674유로/월의 훈련 수당을 기업으로부터 지급받음

- 직업교육훈련에 대한 전체 공공지출은 2010년 현재 약 130억 유로(일부 계속교육훈련 포함), 파트타임 직업학교 31억 유로, 풀타임 직업학교 22.5억 유로 지원받음

- 독일의 양호한 노동시장 성과의 기초로서 듀얼 원리(dual principle)
 - 발표자가 특히 강조하는 바는 독일 노동시장의 양호한 성과가 듀얼 시스템의 성공적 운영에 바탕을 두고 있으며, 그러한 성공적 운영의 비결이 듀얼 시스템을 통해 습득하는 숙련(skill)이 실제 일터에서의 필요에 가깝기 때문이라는 점
 - 특히, 발표자의 발표에서 주목해 볼 것은 최근 독일에서 듀얼 원리(dual principle), 즉 기업에서의 일과 대학에서의 학업을 병행하는 숙련 개발 시스템이 전통적인 중등단계 직업교육만 적용되는 것이 아니라 고등 단계에서도 적용되고 있다는 점
 - 즉 중등단계 직업교육에서의 전통적 듀얼 시스템에 더해서, 최근 독일에서는 기업과 대학의 협업에 기초한 ‘응용과학대학’ (universities of applied sciences)이 나타나고 있음
 - 학생들은 기업과 근로자 혹은 도제 훈련 계약을 갖고 대학의 파트타임 프로그램에 참여
 - 한편 기초 역량을 갖추지 못한 청년층을 대상으로 공공부문 중심으로 이루어지는 트랜지션 시스템(transition system)이 전통적 듀얼 시스템의 준비 단계로서 운영 중이며, 그 참여자 숫자가 확대 추세
 - 이에 대해 발표자는 이러한 트랜지션 시스템이 최근 독일 직업훈련 시스템의 세 번째 축으로 발전하고 있다고 평가
- 듀얼 시스템의 사회적 기초는 탄탄한 사회적 협력
 - 이러한 듀얼시스템이 작동하는 기반을 이루는 사회적인 제도 중 가장

중요한 것이 독일 사회 내에서 정부, 사용자, 노조 사이의 튼튼한 사회적 파트너십임.

- 이러한 파트너십에 기초해서 직업교육의 내용이 계속 갱신되는데 그 출발점은 기업 내에서 숙련에 대한 수요가 계속 변화하고 있다는 점에 대한 인식임
- 또한 실제 제도의 운영과정에서 국가와 민간이 긴밀하게 협력하며 민간 부분이 사실상 제도 관리 시스템 내에 통합되어 있다는 점도 중요

○ 독일 정부는 직업교육 활성화를 위한 노력을 지속 중

- 독일 정부의 최근 관심은 일반 교육 및 트랜지션 시스템 학생들이 직업교육훈련으로 전환을 개선하는 것.
- 최근 발표된 정책은 Qualification and Connection-educational chains until the completion of training이란 정책으로, 핵심 세부 정책으로는 Career start coach와 Intercompany vocational training center임.
- Career start coach는 학업성취도 부진 학생들이 학교-일터 이행을 지원하는 학교 단위 프로그램이며, Intercompany vocational training center는 개별 기업에서 제공하기 어려운 전문적 역량 함양을 위해 정부 재정으로 설립, 운영하는 훈련센터임
- 이러한 정책들의 초점에 대해 발표자는 새로운 훈련 장소의 창출 혹은 실업 청년층의 노동시장 통합으로부터, 청년층에 대한 개선된 직업지향성(vocational orientation) 제공과 훈련 시장에서의 수급 일치도 개선이라는 점을 강조
- 또한 발표자는 현재 독일에서 이뤄지고 있는 다양한 미래 숙련 수요에 대한 예측 노력들도 소개, 예를 들어 미래 숙련 수요 연구를 위해 다양한 연구기관들과 BIBB, 독일 노사단체가 참여하고 있는 ‘조기 미래 숙련 수요 확인 네트워크’ (www.frequenz.net)를 소개, 또한 그 외에 다양한 숙련 수요 예측관련 조사 분석 연구 사례들을 소개하고 있음.

- 전체적으로 요약하면, 발표자는 청년고용에서 독일이 보여주고 있는 양호한 성적이 듀얼 원리가 독일의 직업교육 시스템에 체계적으로 제도화 되어 있기 때문임을 다시 한번 강조
 - 그러한 직업교육 시스템의 실제 작동과정에서 다양한 이해관계자들이 사회적 파트너로서 커리큘럼의 설계, 숙련의 확인, 표준의 설계 등에 적극적으로 참여하고 있으며,
 - 특히 듀얼 시스템의 운영에서 독일 기업들이 전체 훈련비용의 약 80% 이상을 부담하는 등 대단히 적극적으로 참여하고 있다는 점을 지적

□ 스위스: 일자리를 위한 준비-스위스 듀얼 트랙 직업교육훈련 시스템은 어떻게 숙련 개발과 노동시장 수요를 매치시키고 있는가?

- 스위스의 사례에 대해 발표자는 듀얼시스템을 갖고 있는 유럽 국가들이 OECD나라들 중에서 상당히 낮은 청년실업률을 보이고 있다는 지적으로부터 출발함.
 - 스위스 직업교육시스템과 관련하여 스위스 직업교육은 후기 중등(upper-secondary) 단계에서 2년~4년간 제공되며 후기 중등 직업교육을 마친 학생들은 중등 이후(post-secondary) 직업교육으로 진학하거나 diploma 자격증을 취득한 경우 고등교육(Tertiary) 레벨 A로 진학할 수도 있음.
 - 스위스에서 직업교육은 상당히 선호되는 경로 중 하나로 약 70%의 초기 중등(lower-secondary) 수료자들이 후기 중등 단계에서 직업교육 프로그램을 선택, 이는 95년 이후부터 상당히 안정적으로 유지
 - 또한 중등 이후 단계에서는 2009년 현재 전체 노동력 중 약 20%가 중등 이후 직업교육 Degree를 보유함. 이는 고등교육(Tertiary) 레벨 A Degree 소지자 비중과 유사한 수준임.
 - 또한 약 90%의 직업교육 학생들이 도제 훈련을 선택하여 도제 훈련에 대한 선호가 높음

○ 스위스 직업교육의 특징들

- 스위스에서 직업교육은 세 가지 공급 체계, 즉 학교, 일터, 훈련센터를 통해 제공됨.
- 첫째, 학교에서의 직업교육은 언어/사회 등 이외에 직업교육과목의 이론 부분을 제공함. 둘째, 일터에서의 일 기반 훈련을 통해 실제 작업장 강사 혹은 유자격 근로자들로부터 실제 직업에 필요한 숙련을 습득함. 셋째, 산업 과정(industry courses)으로 이는 각 산업이 운영하고 있는 특별 훈련 센터를 통해 제공, 바로 이 산업 과정의 존재로 인해 스위스 시스템이 '삼각 시스템' (triadic system)으로도 불림
- 특히 industry코스는 직업교육학교에서의 이론교실교육과 작업장에서의 일 기반 훈련을 보완하는 역할을 하고 있음.
- 기업에서의 훈련은 주당 3~4일 이루어지며 학교에서의 훈련은 주당 1~2일, 그리고 industry코스는 연간 3~8주 정도 제공됨. 이를 통해 이러한 훈련이 2년 이루어지면 연방 직업교육 자격증을 취득하며 3년 혹은 4년 동안 직업훈련에 참여하면 연방 직업교육 diploma를 취득함.

○ 스위스 도제 훈련의 성공적 운영 요건들

- 발표자가 스위스 직업교육훈련 시스템과 관련하여 또한 강조하는 것은 다른 나라들에 비해 professional organization(직업별 단체)들의 영향력이 높다는 점
- 이러한 직업별 단체의 적극적 참여를 통해 학습내용과 실제 숙련 수요 사이의 높은 일치도가 보장되고 또한 훈련 참여자의 노동시장에서의 높은 이동성이 보장됨.
- 이 경우 강조되는 것은 사용자들의 영향력이 개별 기업 차원에서의 참여가 아니라 체계화된 참여 경로를 통해 발휘된다는 점, 특히 이러한 체계적 참여가 직업별 단체를 통해 이뤄지면서 이들을 통해 각 직업에 대한 역량의 정의 및 실제 훈련 프로그램 반영에 주도적 역할을 수행함.
- 스위스에서 도제 훈련이 사용자들이 이러한 훈련에 참여함으로써 얻을 수 있는 편익과 관련하여, 한 연구에서는 2009년 현재 사용자들이 부

담하는 전체 비용을 약 53억(스위스 프랑)으로 추정. 그러나 학습자들의 생산적 기여로 인해 사용자들이 받는 혜택은 약 58억(스위스 프랑). 따라서 기업이 도제 훈련생으로부터 얻을 수 있는 기여가 도제 훈련 운영에 따르는 비용을 상회하고 있음.

- 요약하면 현재 스위스의 직업교육 시스템은 기업들로 하여금 도제 훈련에 투자하고 그를 통해 순편익을 거둘 수 있도록 보장하고 있음을 강조.
- 또한 발표자는 스위스 도제 훈련의 유연성, 특히 임금설정에서의 유연성과 정부의 제한적 규제를 들고 있음.
- 각 기업은 도제의 임금결정에서 상당한 자율성을 가지고 있으며 정부의 규제는 없음. 또한 정부가 훈련생에 대한 수당, 혹은 고용 의무 등에 대한 규제를 적용하고 있지도 않음.
- 도제 훈련에 대한 품질 보증과 관련하여 상세히 설명, 발표자에 따르면 교육연구혁신사무국(SERI)이 중요한 역할을 담당. 특히 모든 직업교육프로그램에 대해서는 SERI가 연방조례들을 제정. 연방조례들은 사용자 단체, 칸톤, 직업별 단체에 의해 공동으로 개발됨.
- 이들 조례들은 2004년 새로운 직업 및 전문교육 법령 제정 이후 재조정 되게 되었는데 하나의 조례가 준비되고 제정되기까지는 2년에서 3년이 소요됨. 각 조례가 실제로 직업에서 요구하는 바를 구체화하는데 있어 직업별 단체가 주도적 역할을 함. 이들에 대해 연방정부가 약간의 재정 지원과 전문적 지원도 실시하고 있음.
- 특정 직업에 대한 직업교육 조례가 제정되면 해당 직업에 대한 품질 및 개발 위원회가 직업교육 관계 대표자들로 구성되어 운영됨. 또한 스위스 연방 직업교육훈련연구소가 스위스 전역에서 훈련교사들이 최고의 역량을 갖추도록 하기 위해 설립/운영 되고 있음.
- 스위스 직업교육의 관리는 연방정부, 26개 칸톤, 직업별 단체가 협력하여 실시함. 연방정부는 직업교육 전체에 대한 전략적 관리 및 법령 제정 등의 역할, 칸톤은 연방직업교육의 실행, 직업별 단체들은 직업교육프로그램의 내용을 개발 역할을 주로 담당

- 스위스 직업교육이 일반교육과 갖는 상호교류 가능성에 대해 발표자는 UBS와 유명 패션 가방 제조회사 대표가 모두 스위스 듀얼 프로그램 이수자임을 강조함. 즉, 스위스에서 듀얼 프로그램 이수자들은 일반 교육으로 쉽게 이전해 갈 수 있으며 이에 따라 스위스 교육 시스템은 직업교육이 중급교육이 아니도록 운영되고 있음.
 - 연방 직업교육 바칼로리아를 통과하면 스위스 응용과학 대학에 별도의 입학시험 없이 등록할 수 있으며 또한 university aptitude test를 통과할 경우에는 전통적 대학의 학사학위 과정에도 등록할 수 있음.
- 마지막으로 스위스의 전체적인 직업교육 및 도제훈련 상황과 관련하여 전반적으로는 도제훈련의 공급이 안정적인 상태를 유지하고 있음.
- 예를 들어 2012년 현재 도제 훈련 공급은 9만 2천명이며 도제 훈련 수요는 약 9만 6천 5백명 수준임. 또한 최근 연방정부, 칸톤, 그리고 전문기관들이 다양한 수단들을 통해 청년층의 직업교육 및 도제 훈련 참여를 유도하고 있음.
 - 우선, 직업교육경력개발 스위스 서비스 센터(SDBB)가 다양한 미디어 혹은 자료집 등을 통해 청년들에게 직업에 대한 정보를 제공하고 있으며 이에 대한 웹사이트도 운영 중임.
 - 각 직업에 대한 홍보활동은 각 직업별 협회가 담당함. 또한 연례 도제 컨퍼런스도 연방 경제성 주도로 개최됨. 그 외에 다양한 조치들이 운영 중임. 예를 들어 직업정보 및 자문서비스, Apprenticeship posting, 코칭 및 멘토링, VET case management 등.
 - 또한 기업을 대상으로 하는 서비스도 제공 중임. VET promotion agent가 기업의 도제훈련 참여를 촉진함. 훈련기업 네트워크를 통해 특히 중소기업의 사내 훈련 제공에 필요한 정보 공유 등이 이루어지도록 하고 있음.
- 한국에 대한 시사점과 관련하여 스위스 제도가 수십 년 동안 발전해 왔다는 점에서 그것을 짧은 기간 안에 다른 나라로 이식할 수 있을 것으로

는 판단되지 않음.

- 그러나 학교 기반 직업교육시스템이 보다 비용이 많이 드는 과정일 수 있으며, 생산적 측면에서 제한적인 혹은 큰 생산적 기여를 못 할 수 있다는 점, 실제로 활용되지 않는 지식을 창출하는데 그칠 수 있다는 점, 노동시장에서 필요로 하지 않는 자격을 갖춘 근로자를 배출 할 가능성이 있다는 점을 고려할 필요가 있음.
- 이를 전제로 다음과 같은 점들을 고려할 것을 제안함.
 - 첫째, 기업의 적극적인 참여. 특히 기업이 훈련에 대한 가치를 명확히 인식하고 기업이 참여토록 유도하는 것.
 - 둘째, 일부 업종의 소수 기업으로부터 출발하여 성공사례를 만들고 그로부터 확산해 나가는 것.
 - 셋째, 듀얼 직업교육시스템의 발전에 오랜 기간이 걸리는 점을 감안하여 충분한 인내가 필요함. 예를 들어 하나의 조례가 제정되기 까지 약 2년에서 3년이 걸린다는 점을 유념해야 함. 마지막으로 직업교육훈련에 대한 긍정적 이미지가 형성되도록 노력해야 함.

□ 호주: 청년 일자리와 숙련의 연계-호주의 사례

- 호주의 경우 최근 청년들의 전일제 교육 참여율이 증가하는 가운데, 풀타임 취업의 감소와 파트타임 취업의 증가가 나타나고 있음.
 - 청년실업상황과 관련하여 청년실업은 92년, 93년 정점을 찍은 이후 2008년까지 꾸준히 감소하였으나 세계 금융위기를 맞아 2008년 이후 다시 증가함.
 - 호주 발표에서 특징적인 점은 청년들 중, 취업, 교육, 훈련 어디에도 충분히 참여하지 않은 집단의 규모에 대한 언급임.
 - 특히 93년 이후 이들 집단의 규모가 20~24세의 경우에도 꾸준히 감소하였지만 2008년 금융위기 이후에는 이들 집단의 규모가 20~24세

청년층에서 증가함.

- 또한 OECD통계를 기준으로 니트 그룹의 규모는 15~19세의 경우, OECD평균 8.2%인데 비해, 호주는 7.8%임. 20~24세 그룹의 경우, OECD 18.5%, 호주 11.7%로 상대적으로 양호함.
 - 따라서 전반적으로는 호주의 노동시장 상황이 OECD 평균에 비하면 양호한 편이라 할 수 있으나 발표자는 특정 지역, 예를 들어 농촌, 혹은 원격지일 경우 실업상황이 상당히 심각함을 환기
 - 학업 및 노동시장 상황의 변화와 함께 호주 청년들의 생활 양식에서도 변화가 나타나고 있는 것으로 평가.
 - 특히 15~24세 청년들이 결혼이나 취업 대신 학업을 계속하는 경우가 많아지면서 이 시기동안 독립하지 않고 부모 가정에 계속 머무르는 경향이 높아짐.
- 호주에서 최근 이루어지는 교육 훈련과 관련하여 주목하여야 할 것이 2011년 발표된 Gonskil report임.
- 동 리포트에서는 호주에서 심각한 수준의 교육격차가 존재함을 지적, 특히 낮은 교육 역량을 가진 학생들이 사회적으로 낮은 사회경제적 지위에 속하는 집단이거나 원주민 집단임을 지적함.
- 이에 따라 호주정부가 전국적 협약(National Partnership)의 추진을 발표함.
- 이는 연방 정부와 주 및 지방정부 그리고 다양한 이해관계자들 사이의 협력에 관한 합의문으로, 그 가장 중요한 특징은 다양한 프로그램들이 정교하게 상호 연관되어 있다는 점, 즉 숙련의 습득 - 취업 - 기타 사회 및 건강 관련 프로그램들이 상호 연관되도록 상당히 포괄적으로 되어 있다는 점임.
 - 동 파트너십의 전체 명칭은 National Partnership Agreement on Youth Attainment and Transitions. 이는 15~24세 청년층, 특히 학업 중단 위기를 맞고 있는 청년들을 대상으로 하고 있는 프로그램들

로, 숙련개발, 경력관리, 지자체 파트너십, 그리고 취업프로그램들을 포함. 또한 Smart school national partnership을 통해 저소득층 청소년의 기초 역량 향상과 교사 자질 함양을 위한 프로그램을 운영.

- 여기에 더하여 연방정부 및 지방정부들이 훈련에 대한 정책도 추진함.
 - 특히 연방수준에서는 Skills for All Australian 이라는 프로그램이 운영.
 - 동 프로그램은 모든 호주 성인이 호주 국가자격체계 수준 3(Certificate level 3) 이상의 역량을 갖도록 하는 것으로, 학생 대상 대부 제도 도입, 직업교육훈련 과정관련 정보 강화, 직업교육훈련의 품질 제고, 그리고 직업자격성취 수준의 제고를 위한 재정지원 등을 포함함.
 - 또한 취약계층 및 저소득학생들을 대상으로 하는 특별조치로 소득연계형 대부제도를 도입함.
 - 마지막으로 노동시장 진입 촉진을 위해 임금보조금, 청년수당, 구직자 워크숍, skills EXPO 등을 개최함.
 - 이러한 정책들의 수행을 위해 호주 중앙정부, 지방정부 전체가 참여하도록 하고, 민간 전문 연구 기관 등의 참여도 강조하고 있음. 아울러 지역차원의 발전을 도모하기 위해 지역산업계와 지역산업기구 등이 참여하는 Regional Development Australia와 같은 파트너십도 운영.
- 호주에서 훈련개발이 생산성 향상과 소득 향상에 기여한다는 점은 잘 알려져 있는 것으로 평가됨.
 - 예를 들어 diploma를 가지고 있는 경우 그렇지 못한 경우에 비해 최소한 연간 1만달러이상의 추가 소득을 올릴 수 있으며 40년간의 직장 생활동안 약 40만달러이상을 더 얻을 수 있는 것으로 추정됨.
 - 특히 호주에서 호주 국가자격체계 수준 3(certificat level 3)이 그 이전 수준보다 더 높은 소득을 올리는데 큰 기여를 하는 것으로 알려짐.
 - 하지만 여전히 호주에서도 숙련의 저활용 문제가 지속적으로 지적되고 있음.

- 예를 들어 호주 고등교육 졸업생의 졸업 이후 3년 시점 현재, 약 15%가 이들의 숙련이 저활용되고 있는 것으로 평가함.
 - 이러한 숙련의 저활용은 직업자격을 가진 청년층의 경우 더욱 도드라짐.
 - 공공직업교육기관 졸업생 중 1/3만 자신의 훈련 분야와 부합하는 직업에 취업.
 - 하지만 직업자격수준이 높을수록 그러한 미스매치 현상은 줄어드는 것으로 평가됨.
- 발표자는 호주에서의 정책시도들과 관련하여 중요한 도전 과제로 문제 발생 가능성이 큰 청년집단을 조기에 찾아내고 또한 숙련개발과 다른 사회 프로그램들이 적절히 연계되도록 하는 것을 지적.
- 그러나 현재 호주 정부의 예산 제약으로 인해 그러한 다양한 프로그램들이 얼마나 효과적으로 운영될지는 미지수임.
 - 특히 발표자가 강조하는 점은 숙련개발정책과 사회정책사이의 연계, 즉 소득 보전, 재정지원, 노동시장 참여지원 등과 같은 사회정책들이 숙련정책과 적절하게 연계되어야 한다는 점임.

□ 중국: 중국에서 숙련개발과 청년 고용의 연계 강화를 위한 체계적 설계

- 중국의 직업교육훈련 개혁과 관련하여 우선 최근 중국에서 도시지역을 중심으로 등록실업자가 빠르게 늘어나고 있음을 지적.
- 예를 들어 2000년 등록실업자가 595만에서 2011년 922만, 2012년 917만까지 증가, 이 중 20~24세 그룹이 2012년 현재 19.4%를 차지하는 등 20~24세 실업자의 비중이 2003년 이후 계속 증가함.
- 교육의 발전과 관련하여 최근 중국에서 고등교육이 빠르게 성장하고 있으며, 고등교육 졸업자의 취업률도 전체적으로 높아지고 있음.
- 하지만 너무 빠른 고등교육의 증가로 인해 문제가 야기될 것으로 예측

되고 있음.

- 특히 2013년의 경우 석사학위 소지자의 취업률은 26%로 2011년에 비해 11% 낮고, 학사학위 소지자의 경우 35%로 2012년도 대비 12% 낮음.
- 또한 고등직업교육기관 졸업자의 경우 32%로 2012년 대비 13% 낮음.

○ 이러한 상황에 대해 두 가지 측면으로 문제점을 검토

- 정보시스템의 측면에서 비록 중국정부가 직업교육훈련의 수요와 공급 일치를 위해 다양한 정보를 제공하고 있지만 여전히 부족한 것으로 평가됨.
 - 예를 들어 중국정부가 최근 chinajob.gov.cn이라는 웹사이트를 통해 일자리에 대한 정보를 제공하고 있지만 여전히 미래에 대한 정보는 부족한 상황임.
 - 또한 대학생 대상 취업관련 정보를 제공하는 CSICC가 운영되고 있지만 대학 등의 교육과정 개편 등에 대한 정보는 여전히 불충분함.
- 두 번째, 직업교육시스템의 관리와 관련하여 현재 중국에서는 다원주의적인 직업교육훈련관리 시스템이 운영되고 있음.
 - 예를 들어 2004년부터 7개 정부부처 혹은 위원회가 참여하는 직업교육에 대한 장관급 회담이 운영, 그러나 교육부가 동 회담을 적절하게 관리할 수 있는 조직적 역량을 갖추지 못함에 따라 실제 정책 조정이 효과적으로 이루어지지 않음.
 - 또한 2012년에 교육부가 산업계 대표들을 중심으로 하여 59개의 산업별 지도 위원회를 구성키로 했음. 그러나 실제로는 여기에 교육기관 관계자들이 많이 참여하여 당초의 기대에 미치지 못하고 있음.
 - 학교 수준에서는 학교 안에 산학협력위원회를 산업계 관계자와 같이 구성하고 학교수준에서의 산학협력에 관한 구체적인 협의가 이루어지도록 하였음. 그러나 전체적으로 중국에서 이러한 협력에 대한 체계적인 설계, 그리고 적절한 인센티브 시스템의 부재로 인해 이러한 시스템이 원활히 작동되지는 않고 있음.

- 특히 산업계에 대한 인센티브와 관련하여, 여전히 대다수 중국기업이 저임금 노동에 의존하고 있어 산업계의 직업교육 참여에 대해 관심이 많지 않은 상황임. 비록 중국정부가 중국 직업교육 훈련 기본법에서 산업계가 직업교육을 직접 제공하도록 하고 그것을 이행하지 않을 경우 직업교육기금을 징수할 수 있도록 명시하고 있을 뿐임.
 - 또한 직업교육기관의 전공과목 개설이 직업지역별 산업수요에 따라 이루어지도록 규정하고 있지만 많은 학교들이 지역경제사정에 대한 정보가 충분치 않은 상태임.
- 최근 중국정부의 새로운 정책과 관련하여 2010년 국가 위원회는 직업교육관련 52개 프로젝트를 포함하는 교육시범개혁조치를 발표
- 또한 2014년 2월 국가위원회가 직업교육분야에서의 다양한 발전을 촉진하기 위한 조치들을 발표함.
 - 첫째, 지역 일반 대학들의 응용기술대학으로의 전환 추진. 둘째, 직업기술교육훈련에서 산업수요와 전공분야, 자격기준과 교육과정, 생산과정과 교육과정 등의 3개 분야에서의 상호 조응성 강화. 셋째, 현대 도제제도의 도입을 통해 학교와 기업에서의 동시 학습을 추진. 넷째, 청년 대상으로 직업훈련 프로그램의 공급을 확대하고 창업관련 훈련프로그램도 확대
- 전체적으로 발표자는 중국이 최근 경제 성장 과정에서 교육의 급팽창이 이뤄지고 있으나, 산업계의 역할이 여전히 미흡하다고 지적
- 이러한 상황의 개선 여하에 따라 향후 중국에서 직업교육훈련의 내실화 및 실제 일자리와의 연계 개선 정도가 달라질 것으로 예상됨

Enhancing the Link between Skills Development and Youth Employment Policies

Published on September 2014
Publisher Il-Gyu Kang
Published by Korea Research Institute for Vocational Education and Training
Address 46, Samseong-ro 147 gil, Gangnam-gu, Seoul, Korea, 135-949
Website <http://www.krivet.re.kr>
Telephone (02)3485-5000, 5100
Fax (02)3485-5048
Registration 16-1681(1998. 6. 11)
Printer Seounglim D&C (Tel. 02-2271-2581)

<Not for Sale>

Reproduction of this document or its content is not allowed without prior permission