## **Growing in a Niche** Dual Study Programs Contribute to Change in Germany's Higher Education

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Germany is internationally known for its comprehensive system of dual vocational training, which combines apprenticeships with formal schooling. However, the strong presence of that system has brought on a strong institutional divide between vocational education and higher education — a divide that educational sociologist Michel Baethge has described as an "education schism." The co-existence of these separate worlds is deeply rooted in Germany's social structure and the model of economic production. The two education sectors have traditionally been characterized by different curricular goals, teaching principles, governance mechanisms, and funding structures.

In the past two decades, the education schism has increasingly come under attack as a barrier to social and institutional mobility. The service and knowledge-based economy has ever-rising expectations of employees' skills and qualifications, and more and more young people now want to earn a higher-level degree. That is why calls for improving mobility between vocational training and higher education have been growing louder.

Although some opportunities for transitioning between the vocational training and higher education sectors do exist (e.g., programs known in Germany as the second or third pathway to education), the educational institutions involved are usually clearly associated with one or the other sector. This rigid division is very unlikely to be fundamentally abolished any time soon; the particular interests of the various stakeholder groups are too strong for that to happen. In the vocational training system, for example, there are a number of actors who are strongly opposed to increasing the share of general education courses at the expense of the experiential workplace-learning component. This is especially true of those employers primarily interested in taking advantage of trainees as cheap labor. In the higher education system, it is mainly the elite thinking of the university-educated middle classes that stands in the way of making post-secondary opportunities more suitable to the needs of non-traditional students, such as individuals with relevant work experience but without the *Abitur*, Germany's main university entrance diploma.

Nevertheless, there are a few recent trends that indicate change. Although that change does not challenge the existence of the two systems as such, it does help shake up a situation that has been static for so long. One key element of this bottom-up change is the emergence of university cooperative education programs, known in Germany as "dual study programs" (duale Studiengänge) – that is, programs integrating academic studies and work experience. In April 2011, the Federal Institute for Vocational Education and Training (BiBB) counted 929 of these dual study programs, enrolling a total of more than 61,000 students. Compared to the previous year, this represents a 21-percent increase in available seats. Dual study programs are especially widespread in the fields of business administration, economics, engineering, and computer science. For the most part, they are offered by universities of applied sciences (Fachhochschulen), colleges of cooperative education (Berufsakademien), some research universities, and the Baden-Württemberg Cooperative State University (Duale Hochschule Baden-Württemberg).

Given the long-term stability of the education schism, how was it possible for such dual study programs to come about and grow in the first place and what

Summary: The German educational model is characterized by a historically evolved strong institutional divide between the vocational education and training system and the higher education system. Yet, the contemporary development of dual study programs implies the systematic combination of institutional elements from both subsystems. The rapid expansion of these programs is based on the hybridization of organizational structures - outside of traditional structures - at the nexus of the traditional organizational fields of vocational training and higher education.

does their emergence mean for the divided education system as a whole? The first precursors of dual study programs were offered by *Berufsakademien*, or colleges of cooperative education. Such colleges were introduced beginning in the 1970s in the state of Baden-Württemberg, and subsequently in other German states as well. Initially, they were established based on the initiative of major industrial companies in Baden-Württemberg. In later years, the idea was gradually adopted by many universities of applied sciences as well as some research universities. In addition, a number of *Berufsakademien* recently became part of larger higher education institutions or were transformed into so-called "dual universities" (such as Duale Hochschule Baden-Württemberg). Today, dual study programs are offered in all 16 German states.

## A bottom-up development for innovation

Dual study programs did not emerge after years of careful planning and preparation; rather, they entered the scene somewhat accidentally during a time of sweeping education policy reforms. As a consequence, their ongoing expansion is not so much a top-down development driven by education policy but rather a result of bottom-up cooperation between large and medium-sized enterprises and colleges/universities interested in innovative degree programs. Given the feared shortage of skilled workers and engineers, companies view dual study programs as an attractive opportunity to recruit high-achieving *Abitur* graduates. Moreover, dual study programs match the expectations of a growing group of individuals with a university entrance diploma looking for challenging, fast-paced, real world-oriented – and paid – academic training programs that also offer excellent chances of eventually being hired by the company providing the practical training parts. What is more, the introduction of bachelor's degrees as part of the Bologna Process has led to improved international recognition as far as dual study programs are concerned.

Dual study programs combine organizational and curricular elements of the vocational training and higher education systems, creating links between two distinct learning sites: companies on the one hand, and colleges/universities on the other. Students enrolled in dual study programs that integrate a full-fledged apprenticeship program, in some cases involving a local vocational school, typically earn a recognized occupational certificate from the vocational training sector and a bachelor's degree (ausbildungsintegrierende duale Studiengänge). In addition to this original type, there are dual study programs featuring extended periods of practical training with a company and those allowing working individuals to combine their part-time work with academic studies at a college or university. These two latter options are known as praxisintegrierende duale Studiengänge and berufsintegrierende or berufsbegleitende duale Studiengänge, respectively. Like the original model, they are designed according to the basic principle of organizational and curricular links between theoretical and practical phases; however, graduates only earn one degree (the bachelor's) instead of two. Whereas the first two options are primarily designed as entry-level training programs for recent Abitur graduates, programs of the third type are chiefly meant as career training opportunities for those who are already in the work force.

Dual study programs combine essential rules, norms, and missions from the otherwise separate worlds of vocational training and higher education, for instance with regard to curricula, faculty, or funding. In other words, they are hybrid forms of organization. Their hybrid character also represents a new form of institutional mobility between vocational training and higher education.

Up until this point, dual study programs of the kind described above are primarily a German phenomenon. They are little known even in Austria and Switzerland – countries with education systems similar to the German one. Because dual study programs emerged in a niche between traditional vocational training and higher education, these two education sectors, which have been separate for so long, remain unchanged at the core of their respective institutional order – at least for the time being. Whereas attempts at reforming the two established

fields of vocational training and higher education are frequently met with resistance from one or more interest groups, dual study programs currently offer a field of experimentation for organizational innovation.

At this point, it is difficult to predict which long-term effects the expansion of dual study programs will have on the traditional education tracks and the extent of social mobility within the German education system. On the one hand, dual study programs have helped improve institutional mobility between the vocational training and higher education systems. Their hybrid character provides evidence of the fact that the differences between these two systems can be bridged. In addition, dual degree programs make it easier for actors in the vocational training and higher education worlds to get to know each other. On the other hand, it is less evident at this point to what extent dual study programs may help increase upward social mobility in the system as a whole. After all, the two by far most popular types of dual study programs – that is, those integrating a full apprenticeship program (ausbildungsintegrierend) and those integrating extended periods of practical training with a company (praxisintegrierend) – are usually geared towards especially high-achieving high school graduates with a university entrance diploma.

The emergence of hybrid forms of education is likely to affect vocational training programs as well, which in Germany have traditionally been organized largely on a partnership model involving federal and state governments, companies, chambers of commerce, business associations and trade unions. As a result, the influence of both employers and employees is thoroughly institutionalized in all dual apprenticeship programs. By contrast, trade unions hardly have a say in the creation and development of dual study programs; that's because historically, union influence has never been very strong in the German higher education system. So when it comes to governance in dual study programs, the employer side enjoys a structural advantage.

## Dual study programs - a matter of negotiation

Aside from the predefined general criteria for the accreditation of bachelor's degrees in Germany, the specific design of a dual study program is primarily determined through a process of negotiation between the post-secondary education institution and the associated companies. This is reflected, among other things, in a much lower degree of standardization regarding the learning processes in dual study programs compared to traditional apprenticeship training. For example, programs vary with respect to the way learning is organized inside each company, as well as the level of payment each student receives. It is only in those dual study programs in which students earn an additional vocational training degree in a recognized skilled trade (ausbildungsintegrierend) that more consistent standards are applied regarding that degree inside and outside the company.

Comprehensive research regarding the effects of this lower level of standardization in dual degree programs is not yet available. It seems likely that the higher degree of flexibility makes it easier to some extent for graduates to successfully transition into a rapidly changing labor market. On the other hand, the strong influence of the participating companies on the individual design of dual study programs may endanger the overall balance of academic and vocational training if too much emphasis is put on company-specific content. Likewise, depending on local practice, more or less desirable study conditions are possible with regard to payment, work and study environment, and worker representation in the company. Moreover, dual study programs challenge the education policy tradition of large, medium-sized, and small companies working together in the organization of vocational training – a tradition that has become fragile anyway. Especially for smaller firms, taking up a dual study program is often too much of a challenge.

In multiple ways, therefore, the emergence of dual study programs represents a remarkable development in the German model of education. Dual study pro-



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grams illustrate the growing need for improved institutional mobility at the nexus of vocational training and higher education, even though they still fall short of realizing their potential of improving upward social mobility as well. At the same time, the regulatory framework regarding the transparency of education standards in dual degree programs remains largely underdeveloped at this point. The rapid growth of dual study programs and the strong degree of corporate influence on their curricular and organizational design will require a larger societal debate about the social educational mission of this new type of training.

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