

Early leaving from vocational education and training in Austria

Vocational education and training (VET) is extremely important in Austria. After completing their compulsory schooling period, some 80% of pupils take up a VET pathway, with half of them entering full-time school-based VET programmes at VET schools (*berufsbildende mittlere Schule, BMS*) and VET colleges (*berufsbildende höhere Schule, BHS*), and the other half starting an apprenticeship (dual VET). The following table provides an overview of the three cornerstones of the initial vocational education and training (IVET) system.

Fig. 1: Overview of the IVET system

Upper secondary level	Upper secondary certificate and diploma (<i>Reife- und Diplomprüfung</i>) BHS VET college	Final examination BMS VET school	Apprenticeship-leave examination (<i>Lehrabschlussprüfung</i>) Apprenticeship training	
	- 5 years - in-depth general education in addition to professional qualifications - senior professional activities	- 1 to 4 (as a rule 3) years - professional activities	- 2 to 4 (as a rule 3) years - dual training: 80% at a company, 20% at part-time vocational school - acquisition of a VET qualification ISCED 3B	
	ISCED 4A	ISCED 3B or 3B-short (1 year)	Prevocational school ISCED 3C	9th year

This overview demonstrates the differentiation of the Austrian VET system. As well as these three pillars in the formal VET system, a number of labour market-influenced measures have been created since the mid-1990s as a response to the lack of training places. These measures aim to complement this system. More details are given in section B of this publication.

The complexity of the system can also be seen by looking briefly at the actors involved in it. Responsibility for the apprenticeship system rests with the Ministry of Economy and the Ministry of Education (the latter for the school-based part of the training), for the BMS and BHS (BMHS) sector responsibility rests with the Ministry of Education. Relevant responsibilities are divided in each case between national and regional bodies, with social partners also playing a major role. They can submit their opinions and deliver expert statements on school legislation, ordinances and curricula (for detailed information about the VET system and actors involved, see Tritscher-Archan et al. 2012, Tritscher-Archan/Nowak 2010).

Prevocational school (PTS) is a separate school form which enables young people to complete the final year of compulsory schooling before apprenticeship training starts in year 10. In the school year 2011/12, in fact, only slightly more than one third of vocational school pupils in their first year had completed PTS, whereas 27.5% of them had attended a BMHS. Recently there has been the tendency to complete the final year of compulsory schooling in another school form. As a result, some pupils leave a BMHS after the first grade to take up apprenticeship training (Statistics Austria, school statistics).

When analysing the development of educational participation at the upper secondary level over the past 50 years, pronounced growth rates can be observed. The share of 15-19-year-olds at the upper secondary level has increased from 44% (in 1953) to 85% (in 2008). In this period, participation in apprenticeship training has remained relatively unchanged or has dropped slightly (1953: 31%, 2008: 28%), whereas attendance of BMHS has increased strongly.

A. Early leaving from education and training in Austria: definitions and statistics

Early school leaving (ESL) used to be a topic of a small circle of researchers up until about ten years ago. Since that time it has moved increasingly into the educational policy discourse in the international and therefore also in the national context. In 2005 the first major study about this topic was commissioned by the Ministry of Economy (Steiner/Steiner 2006). Austria uses the same definition as Eurostat to determine the ESL rate. According to this definition, this is the share of 18-24-year-olds who have no upper secondary qualification (at least 3 A/B) and did not take part in training or continuing training in the four weeks before the time of the survey. Young people who have completed lower secondary school, PTS or a one-year BMS (ISCED 3B-short) as their highest qualification are also covered by this definition. The heterogeneous group comprises young people without a positive compulsory school qualification but also young people who left their educational pathway shortly before their final examination or upper secondary school-leaving examination (Reifeprüfung). The definition implies a qualification-oriented approach to the problem. Alternatively, however, it would also be possible to put the competences acquired by young people at the centre. To define "educational disadvantage" in this sense, based on competences, the share of students at risk according to the PISA study (with a performance in the respective basic competence at or below Level 1) can be used (Steiner 2012). According to the 2009 PISA survey 34% of students belong to the risk group in at least one of the three basic competences, 15% in all three basic competences (Vogtenhuber et al. 2012). This shows clearly that educational disadvantage is also a quantitative problem in Austria whereas the ESL rate is rela-

tively low in the international comparison (Steiner 2012). It remained relatively unchanged between 2000 and 2008 and is below the EU average and since 2009 below the benchmark value of 9.5% (see Table 1).

Table 1: Early school leavers 2000-2012

Year	2000	2001	2002	2003	2004*)	2005	2006*)	2007	2008	2009	2010	2011	2012
% ESL	10.2	10.2	9.5	9.0	9.5	9.1	9.8	10.7	10.1	8.7	8.3	8.3	7.6

Source: Statistics Austria, *) break in the time series.

These data are collected on a quarterly basis by Statistics Austria as part of the microcensus labour force survey, in which some 22,500 households are selected at random and interviewed. Drop-out by contrast is defined as a rate of loss of a specific educational institution, which means that drop-outs are those who already leave their pathway before obtaining a qualification. As they can take up another education or training programme afterwards, this is not yet ESL *per se* (Steiner 2009). Data about drop-outs are included in school statistics where rates of loss are calculated for the school types.

Some national experts use slightly different definitions to determine the extent of the problem. In contrast to Eurostat they do not count people as “undergoing training” who take part in an educational activity in their free time four weeks before the survey. Furthermore they alternatively extend the age group to cover 15-24-year-olds in order to include in their calculations also those below the age of 18 years who have left the educational pathway (Steiner 2009, 2012).

Another indicator is the share of young people who are not in education, employment or training (NEETs). This share is also calculated on the basis of the microcensus labour force survey. According to this, in 2011, 5.3% of 15-19-year-olds and 8.5% of 20-24-year-olds are NEETs (BMUKK 2012).

In school statistics, additional indicators regarding early school leaving have been available for some years in the form of data about flows of pupils between the individual school forms. They cover pupils who are not undergoing training after completing compulsory schooling, which means they have left the education system. In the school year 2009/10 this was 7.2%, in the school year 2010/11 6.8%; people without a positive completion of lower secondary level accounted for some 1.5% in each case (school statistics).

B. Different aspects that may influence the decision to remain in or drop out from VET

The reasons for ESL can be individual or structural. Calculations of ESL and the analysis of the young people's socioeconomic background do not imply *per se* that the situation is individualised because differences in the individuals' ESL risk can be interpreted as the consequence of a socially selective education system and therefore understood as a structural phenomenon.

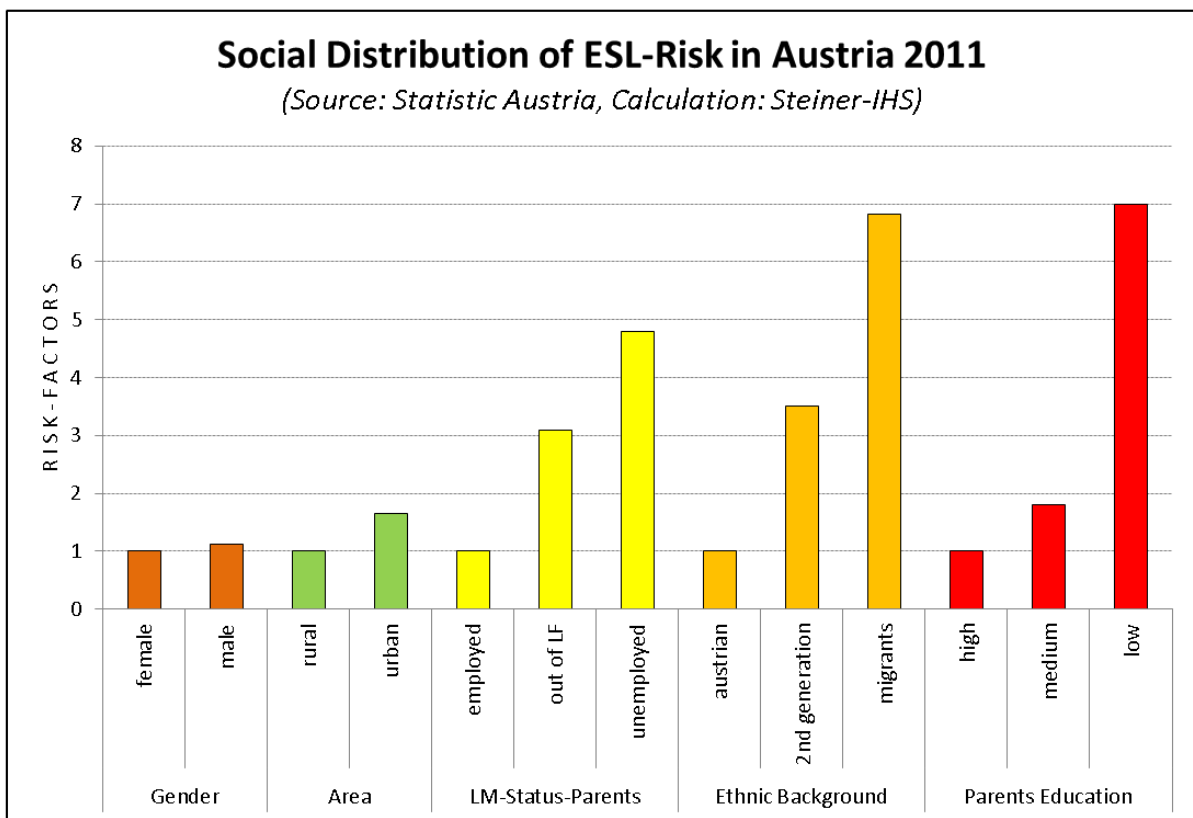


Fig. 1: Social distribution of ESL risk by socio-demographic characteristics in Austria in 2011

Source: Statistics Austria, calculations: Steiner 2012.

The ESL risk is distributed very unevenly depending on the labour market status and educational attainment of the parents as well as their origin, as shown in Fig. 2. There exists a certain dependency between these characteristics but all variables by themselves significantly influence the ESL risk (Steiner/Steiner 2006).

1. Structural characteristics of the education and training/VET system

The following sections analyse key structural aspects of the VET system.

Compulsory schooling in Austria lasts for nine years and is completed at the age of 15. A statistical analysis based on an international comparison of the duration of compulsory schooling and the ESL rate reveals a significant but not very close correlation ($r = 0.156$). Whereas the time of **differentiation** in the school system – which in Austria is after the fourth year and thus very early in the international comparison – does not have any statistically significant impact on the extent of ESL, the hypothesis can be raised that the composition of the ESL group is more socially unequal the earlier a selection takes place. This hypothesis is backed by the fact that it has been proven in international performance comparisons that an early time of selection boosts differences in competence levels by socio-economic background (Steiner 2009).

As well as the full-time school-based form, BHSs can also be attended as **evening schools** for employees (Tritscher-Archan et al. 2012). Outside the formal education system there exists the possibility to acquire the **apprenticeship diploma in second-chance education** and therefore one way to reduce ESL. Because the final apprenticeship examination (LAP) can also be taken by those who do not meet the formal requirements (such as that they have not completed the entire apprenticeship period) but who can prove professional experiences or have completed non-formal educational measures. An increasing number of people choose this option: Between 2003 and 2011, the share of the exceptional admission to the final apprenticeship examination doubled. In 2011, 6,883 examinations were successfully completed in this way, which equals 15% of all successfully completed LAPs in that year (Dornmayr/Nowak 2012). The 2011 amendment to the Vocational Training Act has made access to the extraordinary final apprenticeship exam easier by taking informally acquired competences more into account.

Since the mid-1990s alternative ways of attaining an apprenticeship diploma have been created and extended as part of labour market policy measures. These can be seen both as alternative ways of acquiring a vocational qualification and as measures to reduce ESL (section C). In 1998 the “safety net” was implemented for young people who fail to find an apprenticeship place: These are courses which aim to ensure that young people switch to a “regular” apprenticeship programme in a training company afterwards. In 2008 this programme underwent a reform and the new type called **supra-company IVET programmes** (*Überbetriebliche Berufsausbildung, ÜBA*) was created. Supra-company means that the

practical part is completed at a training institution, the school-based part at part-time vocational school. By now ÜBA has become an equally important element of the apprenticeship training system and formally leads to the same qualification as an apprenticeship completed at a company. ÜBAs are funded through Public Employment Service Austria (AMS). They are very important in quantitative terms: By late 2012 apprentices in an ÜBA accounted for 7.6% of all apprentices (apprenticeship statistics 2012). Even though these training pathways formally lead to equivalent qualifications, the objective is still that learners are placed in a training place at a company. This is achieved by one third of apprentices. At the same time, however, there is a high drop-out rate: The drop-out rate (measured by all participants 2008-2011 who have already left) is an average of 30% in Austria, for example. The share of successfully completed final apprenticeship exams in the ÜBA is lowest with 73.9% (compared to 82.5% in an average of all final exams). It is striking that the share of young women and young people with a migration background is significantly higher in ÜBAs than in company-based apprenticeships where women with a share of 34.2% and apprentices with a migration background with only 7.7% are clearly underrepresented (Dornmayr/Nowak 2012).

Permeability between the lower and upper secondary level: From a purely formal perspective it is true that young people without a positive compulsory school certificate can take up apprenticeship training after completing compulsory schooling. In actual fact, however, their opportunities to find an apprenticeship post are greatly reduced. These young people have the chance of acquiring an upper secondary qualification via ÜBA even if they have no (positive) compulsory school certificate. This applies to 11% of young people who were in an ÜBA between 2008 and 2011 (Bergmann et al. 2011).

Permeability between VET pathways at the upper secondary level: Austria is characterised by a wide range of VET programmes at the upper secondary level, therefore it is a major objective of Austrian educational policy-makers to extend **permeability between the individual education pathways** (Tritscher-Archan/Nowak 2010). The new education statistics enable rough calculations of mobility movements within the VET sector (Lassnigg 2011a). From 2005/06 to 2006/07, a share of 12% of pupils at part-time vocational schools and BMHS did not continue their educational career as foreseen. The largest part (7%) were those who repeated the year at the same school form. A total of 3% of the age cohort switched between the individual school forms, with two thirds of them to a “lower” level of the VET hierarchy, however (that is, from BHS to BMS, from BMS to apprenticeship training/part-time vocational school). 2% left the education system (“net loss”).

Graduates of a BHS are also entitled to **access higher education** (HE). Graduates of BMS and apprenticeships can acquire this qualification by taking external exams (*Berufsaufsichtsprüfung, Studienberechtigungsprüfung*). In 2008 the “apprenticeship with *Matura*” scheme was introduced, which offers very favourable conditions for apprentices. In 2008 some 2,000 apprentices took the upper secondary school-leaving examination (*Matura*) while they were still in an apprenticeship relationship, by 2011 their number had risen to as many as 9,500 (Dornmayr/Nowak). This represents yet another incentive for apprentices to complete their training.

Responsibility for the search for an apprenticeship post rests with the young people themselves or their parents. They receive support from AMS and from the apprenticeship offices, which are located in the economic chambers; in addition, there are a wide range of information platforms at their disposal. It is not possible here to provide sufficiently founded answers about the difficulties involved in this search as more research about this topic needs to be conducted.

The **number of apprentices** overall has declined since 1980, with growth recorded from 2004 but yet another drop in 2010 and 2011 (in 2011: 128,000 apprentices). Between 2009 and 2011 the **number of training companies** also decreased by 1,000 each year, most recently (in 2011) to roughly 35,000 (Dornmayr/Nowak 2012). Two indicators used for the relation between supply and demand for apprenticeship posts are the number of apprenticeship post seekers who are registered with AMS and reported vacant apprenticeship posts. This needs to be interpreted with caution, however, as both apprenticeship post seekers and vacant apprenticeship posts that are not registered with AMS are not included (and therefore both sides can be underestimated). ÜBAs are included here, which leads to a certain overestimation of supply and the picture is also distorted to some extent. Since 1996 demand has exceeded the supply of vacant apprenticeship posts. This gap decreased between 2006 and 2008, but has been widening again since 2009.

The question of the extent and time of **drop-out in VET** cannot be answered easily. The rates of loss recorded in school statistics must be understood as “gross losses”. They also include pupils who change school (which means that they do not leave the system completely). These rates of loss are clearly elevated at the point of transition from the first to the second stage of full-time school-based programmes (BMS: 33.1%, BHS: 17.5%). As explained in the beginning, this is partly due to the pupils’ tendency to complete the last year of compulsory schooling at one of these school forms and then take up a dual VET programme. Overall, only about half of pupils complete a BMS or BHS in the normal way, with-

out repeating a grade, changing school or dropping out (BMS: 44.6%, BHS: 55.6%, Lassnigg 2013). Calculations of net rates of loss (drop-outs) in a notional analysis of cohorts reveal that these are 7.5% on average and are over-average for BMS and under-average for part-time vocational schools (*Berufsschule, BS*).

Table 2: Net rates of loss (of the entry cohort)

Total	BS	BMS	BHS
7.5%	4.8%	13.2%	8.2%

Lassnigg 2011a, calculations based on school statistics.

2. Labour market and social policy issues

The relation between educational participation and the labour market or employment is empirically unclear, with partly contradictory findings. It is empirically proven that higher qualifications improve income and employment opportunities and decrease the risk of unemployment. Thus, for example, the share of compulsory school graduates is always higher among unemployed people of all age groups than the shares of HE graduates (Lassnigg 2011a).

Labour market risks of ESL are clearly heightened: The risk of becoming unemployed is almost double, the risk of being out of labour force (that is, neither employed nor unemployed) more than 5.5 times as high as for people with a qualification. Finally, the risk of working in an unskilled profession is about 4.5 times higher (Steiner 2012). Worse **employment opportunities** in turn reduce the ESL rate. Accordingly, the correlation between employment opportunities and the ESL rate has been identified in an international comparison. The ESL rate correlates positively with the job opportunities for ESL (compared with graduates of upper secondary level) ($r=0.524$), whereas it correlates negatively with the risk of being out of labour force ($r=0.627$) (Steiner/ Lassnigg 2009).

The connections between the **VET system** and ESL are also complex. Also here it has been possible to prove, in an international comparison, a statistical correlation between VET participation (measured by the share of pupils at upper secondary level) and the ESL rate. The higher the share of VET, the lower the ESL rate ($r=0.404$). But the risk of unemployment for those who nevertheless leave the education system prematurely is higher where the VET rate is higher ($r=0.352$) (Steiner/Lassnigg 2009).

Since 2009 Statistics Austria has carried out the **job vacancies survey**. This aims to survey the companies' demand for employees on a quarterly basis. On an annual average in 2012,

for some 60% of vacancies companies demand more than a compulsory school qualification, slightly more than 8% of vacancies address unskilled workers.

In order to make quantitative statements about employment and differences in **income levels**, the education-related employment career monitoring has offered a sound data basis since 2012. These monitoring data are available from the training year 2008/09 onwards. According to its findings, the duration until the first employment is clearly longer for people who have completed compulsory schooling as their highest qualification. The share of compulsory school graduates who earn less than EUR 1,200 is 90% here, for graduates of BMS or an apprenticeship it is 34% (Dornmayr/Nowak 2012).

A comparison of Austrian provinces reveals that **youth unemployment** is lower where more young people complete an apprenticeship. A relatively strong correlation ($r=0.67$) is also shown here for the group of 20-24-year-olds who (as a rule) have already completed their apprenticeship training because apprentices are counted as economically active (Dornmayr/Nowak 2012).

To date there are no empirical data to reliably assess the question of the difference between the income of unskilled workers and social benefits for NEETs. The Austrian **system of grants** makes no difference based on the type of training that is completed.

C. Measures to reduce drop out from VET

The following statements only refer to central measures. For more information, please refer to the ReferNet Policy Report 2012 (Tritscher-Archan (ed.), 2012).

1. Measures in place to prevent drop out from school-based VET and apprenticeship-type training

The most important measure for which the prevention of ESL serves as the major impetus is the **youth coaching** scheme, which went through a pilot stage in two provinces in 2012 and was introduced in the whole of Austria in 2013. With youth coaching, the Ministry of Social Affairs in cooperation with the Education Ministry launched a strategy to keep young people as long as possible in the (initial) VET system and reintegrate NEETs into the system. It aims to advise, support and assist pupils who are at risk of dropping out and ensure that they are integrated on a lasting basis. Its target group are pupils in their respective ninth year of school attendance, irrespective of the school form they are attending. The measure's success rate of 85% (of young people who have left the coaching measure with a specific goal)

is impressive, without any socially selective effects being observed either in terms of access or regarding outcomes. The scheme is also unique because different systems (schools, Ministry of Social Affairs) are cooperating in it, which means that various sectors have set up a network that is appropriate for the complex ESL issue (Steiner et al. 2013, BMUKK 2012).

Across Austria there exists a far-reaching **funding scheme** in the dual VET sector. This includes funds which generally aim to maintain or expand the number of apprenticeship posts on offer, funds which focus on qualitative aspects (such as continuing VET of trainers, good performance of apprentices), and finally funds related to the training of young people at a disadvantage (Tritscher-Archan/Nowak 2010). Apprenticeship subsidies are designed as a measure to enhance the companies' willingness to offer apprenticeship posts. This can make it possible for individuals to acquire a qualification at the upper secondary level, which in turn helps reduce the ESL rate. As far as their effectiveness is concerned, however, experts also see the problem of considerable knock-on effects (Lassnigg 2011a). Funds to enhance quality and subsidies for young people at a disadvantage can be viewed as a contribution towards preventing early apprenticeship leaving.

The improvement and intensification of **career guidance at all schools** (IBOBB) strengthens career management skills, which is the key concern of the Education Ministry. This aims to make a contribution towards taking individually suitable decisions about the educational career and, in this way, counter drop-out from VET at an early stage. However there is no specific empirical evidence on this matter.

2. Remedial measures in place within VET/related to VET

As positive completion of compulsory schooling, as mentioned above, considerably enhances the opportunities of finding an apprenticeship post, funds are in place in the whole of Austria for adults who take the lower secondary school qualification. To date, ESF funds have been available to finance this scheme, with the Education Ministry also contributing funds. Between 2007 and 2012 some 3,500 people took part in related courses. Since 2012/2013 these courses have been funded jointly by the federal and provincial governments as part of the adult learning initiative.

The scheme **coaching for apprentices** aims to assist apprentices during their training, support them so they can complete it and take the final apprenticeship exam with positive results. Launched by the Ministry of Economy in cooperation with the Ministry of Social Affairs, this initiative has been piloted in some provinces since 2012. Depending on needs, the coach holds an initial interview with the apprentice, if necessary other actors (such as train-

ers or vocational school teachers) join in, or a longer-term coaching process starts, which is complemented by suitable accompanying measures. Training companies can also apply for coaching if they encounter difficulties in their interaction with apprentices, which cannot be resolved in an advisory talk.

Since mid-2013 a new type of funding has been available for **apprenticeship training for adults**. Companies which train adults in an apprenticeship occupation are eligible for government funding provided certain prerequisites are met. Also since mid-2013 the **grant for skilled workers** has been in force; it is designated for training programmes of at least three months' duration below the tertiary level in occupational fields where there is a shortage of workers.

D. Conclusions

The conclusions drawn in this publication are limited to some central points. The reason is, on the one hand, that ESL has only been an educational policy topic for a short time, on the other hand, the extent of the problem is being underestimated and consequently it is being put into question that there is need for action. This is possibly due to the relatively low ESL rate in Austria, which is at 7.6% (2012). If, rather than this qualification-oriented approach, a competence-based approach were used to assess the extent of the problem, the initial situation of Austria would provide a completely different picture in view of one third of students being at risk according to the PISA survey. In this way it would also become clear at a quantitative level that there is need for action.

Youth coaching marked the first time that a comprehensive, cross-system preventive strategy has been adopted. Preventive approaches have (to date) been clearly in the minority compared to compensatory measures.

The restricted availability of data about ESL, drop-out (from the different forms of VET programmes), data about people who have not acquired a positive compulsory school qualification, as well as of event history data in the sense of graduate monitoring, proves to be yet another hurdle. In order to be able to plan policies appropriately, a sound data basis is the first prerequisite, which can be followed by additional research, for which there continues to be major demand in this area. However, developments in recent years should also be identified, which go in the direction of a broader data basis. Here reference is made to the education-related employment career monitoring, which enables a link between educational and labour market data for the first time.

Finally, the Austrian VET system is complex, the actors involved in it are manifold, and responsibilities are shared. This can be seen as yet another reason that reforms turn out to be long-term projects that are being tackled rather with caution by different sides due to different system logics.

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