

Training & Employment

What becomes of students joining a Higher Technician's Section (STS) or a University Institute of Technology (IUT)?

French youths with an Advanced Vocational Training Certificate (BTS) or a Technological University Diploma (DUT) enjoy favourable conditions of transition to work. The prospects of those who continue to pursue further studies are even better on the whole. However, more than one quarter of those enrolled in BTS courses after obtaining the baccalauréat give up their studies without obtaining a diploma. Public policy-makers should pay greater attention to this issue.

Current debates about reforming short higher vocational training in France are focusing on improving the courses run by Higher Technicians' Sections (STSs) and Technological University Institutes (IUTs). The stakes involved at public action level are of some importance, since these two vocational training streams account for more than two thirds of the higher vocational training supply in France. Both of these educational tracks give young people good prospects of obtaining jobs once they have completed their studies: in both cases, enrolment is based on a selection process and the programme focuses on alternance training. However, STSs and IUTs do not cater for the same population, the courses are quite different, and so are the subsequent prospects of joining the labour market. The qualifications delivered in both cases were not in fact intended for the same purposes. The BTS is more of a final diploma giving direct access to the labour market: it therefore continues to play the role for which it was initially intended, i.e., providing a means of acquiring higher qualifications, occupational skills and experience; whereas the DUT is being increasingly regarded as a diploma giving access to further studies. What patterns of transition to work can be detected among those who have taken the various paths in question? Where do the youths who obtain a BTS or a DUT come from, and what is likely to become of them afterwards?

Enrolling at either an STS or an IUT depends on the baccalauréat obtained

The type of baccalauréat and the grade obtained determine which of these two rather selective vocational training paths is chosen by students. The patterns of recruitment at STSs and IUTs differ in terms of the relative proportions of students with general, technological and vocational baccalauréats who enrol. Those with technological baccalauréats, and especially those with vocational baccalauréats tend to opt for STSs, whereas IUTs mainly recruit general baccalauréat holders, followed by technological baccalauréat holders.

This pattern is in line with the scale of diplomas. Youths with a general baccalauréat tend to continue their studies, taking the most highly regarded general and vocational higher educational tracks, whereas those with vocational baccalauréats rarely seem to ●●●

BTS and DUT diplomas

The aim of the Technological University Diploma (DUT), which is a two-year University degree course, is to train students with the baccalauréat to work as technical supervisors and executives in the manufacturing, services and applied research sectors.

The Advanced Vocational Training Certificate (BTS) courses run at secondary schools and apprenticeship training centres in France were designed to train students with the baccalauréat to work under the leadership of engineers or heads of department.

••• pursue their studies beyond the BTS, which is sometimes thought of as “the lowest higher educational level”.

However, enrolling at an STS or an IUT is only the first stage in a higher educational journey which can have outcomes of four different kinds. It can either be ended prematurely by dropping out, or it can lead to obtaining a BTS or a DUT diploma (possibly as well as another diploma at the same level); or else students can either take various side-tracks during the first two years or go on to obtain the equivalent of the bachelor's degree, or even higher qualifications.

Giving up or going straight into employment in the case of STSs, versus further studies in that of DUTs

The four trajectories described above – giving up, going straight into employment, making a change of direction, and pursuing further studies – feature in different proportions among those who enrolled at an STS or an IUT after obtaining the baccalauréat (see the table on p.2).

Based on the results of Céreq's “Generation 2004” survey, as many as 22% of the students enrolled at STSs gave up without obtaining the diploma, as compared with only 12% of those enrolled at IUTs. These early leavers tended to be males, holders of technological or vocational baccalauréats, and youths who had previously been backward at school. These findings raise questions about the guidance of youths who do not have a sufficiently solid educational background in the first place. This is particularly true of students with an underprivileged family background attending STSs, who have to cope with social hurdles in addition to the educational ones.

The second trajectory is that of youths entering the labour market with their level III diploma. They have obtained a BTS or DUT diploma and some of them have also obtained other qualifications at the same level or attempted without success to obtain a bachelor's degree. Half of the youths in the present cohort fitted this picture: they accounted for 61% of those enrolled in BTS courses and 35% of those enrolled in DUT courses. This confirms that the BTS often serves as a direct stepping-stone to the world of work. When BTS holders were asked why they had not pursued their studies farther, most of them answered that they felt they had reached the level of training targeted.

The third group consisted of youths who did not obtain the qualifications for which they had enrolled because they made a change of direction during their studies. This did not occur very frequently among those enrolled at STSs, whereas 11% of those attending IUTs made a change of this kind, and half of them ended up by graduating at bachelor's degree level.

Lastly, some of those who entered the labour market in 2004 after undergoing short vocational studies had pursued their studies up to bachelor's level or beyond. This trajectory was taken by 22% of the cohort: 14% of those enrolled at STSs and 42% of those enrolled at IUTs after obtaining the baccalauréat. In both groups, those who continued to pursue further studies tended to be males, most of whom had opted for the general track at school and obtained excellent grades in the baccalauréat.

These various trajectories have decisive effects on young people's subsequent conditions of transition to work. The findings obtained in this respect provide the best possible proof of the advantages to be gained by those who pursue further studies.

■ The four main trajectories taken by French students enrolled at STSs and IUTs

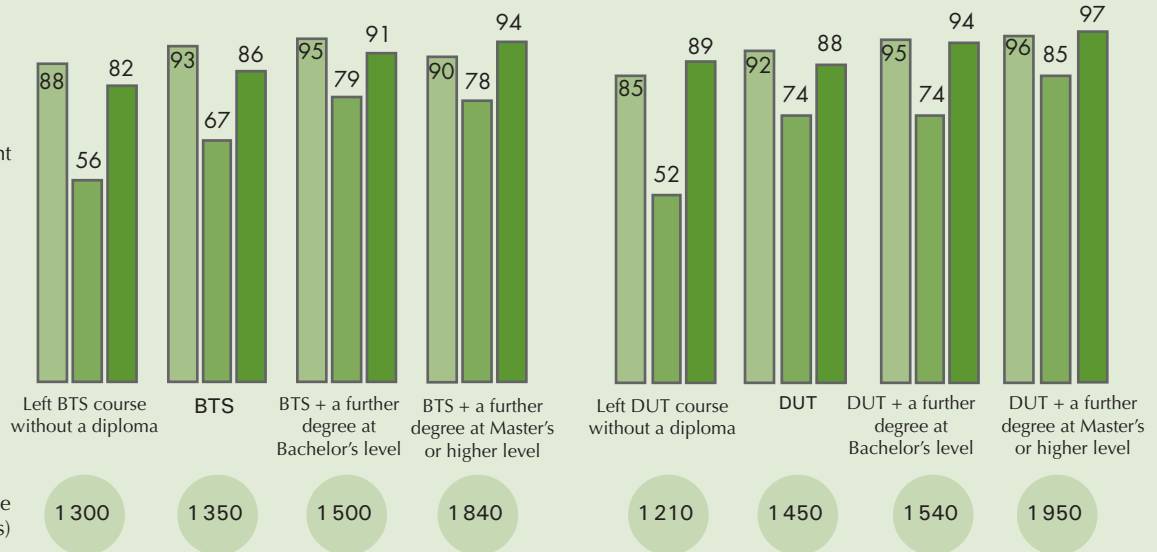
Types of trajectory	Definitions	Enrolled at STSs	Enrolled at DUTs
1 • Giving up	Youths enrolled at STSs or IUTs after the baccalauréat who left without obtaining a diploma, possibly after making a change of course but still not succeeding.	22 %	12 %
2 • Joining the labour market once the diploma has been obtained	Youths enrolled at STSs or IUTs after the baccalauréat who obtained their diploma (possibly as well as another level III diploma), but did not pursue their studies the following year.	61 %	36 %
3 • Making a change of trajectory	Youths enrolled at STSs or IUTs after the baccalauréat who did not obtain the diploma initially targeted but opted for other courses and eventually obtained another level III or higher diploma.	3 %	10 %
4 • Pursuing further studies to obtain higher qualifications	Youths enrolled at STSs or IUTs after the baccalauréat who obtained their diploma and then pursued further studies and obtained one or more higher qualifications.	14 %	42 %

Data source: Céreq's "Génération 2004" survey.

■ Patterns of employment of youths enrolled at some time in a BTS or DUT section, 3 years after they joined the labour market: the situation in 2007

Rate of employment = numbers in employment/ total numbers

- Rates of employment
- Proportion of those with permanent contracts
- Proportion of those with full-time jobs



Data source: Céreq's "Génération 2004" survey.

Pursuing further studies improves conditions of employment

The transition to work of youths whose highest qualifications are a BTS or DUT diploma is a fairly smooth process: three years after obtaining their diplomas, more than nine out of ten of them had obtained jobs, mostly under permanent contracts. The conditions of employment differed, however, between the two groups. The jobs held by BTS holders were less stable, and DUT holders achieved executive status more frequently (see the table and graph on page 3). All these youths' conditions of access to employment were more favourable on the whole than those of graduates with a DEUG (a 2-year general University diploma), and even some of those with a Bachelor's or Master's degree. Obtaining either a BTS or a DUT via apprenticeship training certainly speeds up the process of obtaining a job.

One out of every five youths in the "Generation 2004" survey sample who enrolled at the

start to obtain a BTS or DUT diploma ended up with higher qualifications. Pursuing even further studies generally improved access to employment, but differently between BTS and DUT holders, although both groups showed high rates of employment. The advantages to be gained from pursuing longer studies should therefore be measured using other criteria, except in the case of the DUT holders who carried on and graduated with a vocational bachelor's degree: their rate of employment was 98%, as compared with 91% in the case of those who obtained only a DUT.

However, the greatest differences observed here focused on the conditions of employment, especially among those with post-BTS qualifications. Three years after obtaining their diploma, only two thirds of the "BTS only" graduates in employment declared that they had permanent jobs, whereas 80% of those with post-BTS qualifications were in this situation. Those with post-DUT qualifications clearly

■ Distribution according to the socio-professional status achieved by youths who enrolled for a BTS or DUT diplomas and the highest qualifications obtained

The situation of those in employment in 2007, three years after ending their studies

	Enrolled for a BTS but left without a diploma	BTS	BTS + further qualifications:		Enrolled for a DUT but left without a diploma	DUT	DUT + further qualifications:	
			Bachelor's degree	Master's degree or beyond, Elite schools			Bachelor's degree	Master's degree or beyond, Elite schools
Executives	2	5	13	52	6	13	14	67
Intermediate occupations	34	51	63	38	44	52	69	25
White collar workers	33	26	15	8	29	23	12	5
Manual workers	28	16	6	2	18	10	4	1
Other (farm workers, self-employed, etc.)	3	2	3	-	3	2	1	2

Data source: Céreq's "Génération 2004" survey.

A retrospective survey on young people's school guidance, their training paths and their transition to work

Methodological details of Cereq's "Génération 2004" survey

The young people participating in Céreq's "Generation" surveys, all of whom have left the initial vocational training system the same year, are questioned about their occupational trajectories during their first few years on the labour market. In the case of the "Generation 2004" survey, a special module was designed to map the school guidance the respondents had received and their vocational training trajectories in order to collate them with their subsequent process of transition to work.

The results presented here were based on a statistical analysis of all the data obtained on these issues. The respondents had enrolled at higher educational establishments after obtaining the baccalauréat: they all left the education system in 2004 at various levels although they had joined it at different points in time, depending on their individual trajectories. These trajectories were mapped and analysed statistically.

Among the young people who left the higher education system in 2004 at various levels, approximately 150 000 joined these fairly selective streams right after obtaining the baccalauréat: 105 000 enrolled at Higher Technicians' Sections (STSs) and 43 000 at Technological University Institutes (IUTs). Their higher educational trajectories were variably complex and long: two and a half years on average in the case of those who had studied at an STS, versus three and a half years in the case of those who had attended an IUT. It is worth noting that the studies pursued by these youths were carried out between the late 90s and 2003, at a time when students pursued shorter studies than they do nowadays.

had a similar advantage, although it was less pronounced: 82% had permanent contracts, as against 74% of those who had obtained only a DUT. Pursuing longer studies also results in a higher social status: access to executive functions was more frequent among those who had completed several extra years of study. In this respect, the Master's degree seems to be the threshold level beyond which holders of either a DUT or a BTS diploma have to continue their studies to be fairly sure of eventually achieving this socio-professional status.

A higher status was consistently found to be associated with higher wages. The median monthly wage of BTS holders increased with their qualifications from 1 350 euros among those with only a BTS to 1 840 euros among those with a Master's degree or a PhD. Similar differences were observed among those with DUT diplomas, where the median wage amounted to 1 450 euros among those with only a DUT to 1 950 euros among those with a Master's degree or a PhD.

A public action priority: reducing the drop-out rates at STSs

The European LMD (Bachelor's – Master's – Doctorate) University system is at odds with the present 2-year higher educational tracks set up for students who have passed the baccalauréat. The future of these higher technicians' sections is uncertain because of the pressures currently being exerted to align them with the other higher educational paths, which require three years of study. Despite the fact that the STSs are dispensing useful training which gives access to employment, a tendency is developing for students to continue their studies beyond this diploma. However, it is questionable whether the duration of these courses should be extended from two to three years. Will youths who opt for short

professionalizing studies be prepared to enrol for a whole year longer? Will they and their families be able to afford the cost of postponing their transition to work? Will this not affect employers' recruitment practices?

The present findings confirm that the transition to work of youths who have taken short higher vocational training courses is a fairly smooth process. The figures tend, however, to mask another equally important reality, which focuses on those who drop out of these courses, especially those attending STSs. Almost one quarter of the STS students in the cohort surveyed here gave up without completing the course. Early leavers also spoil their chances of finding a good job in terms of job quality (see the graph on page 3).

The problem of early leavers has become a priority, which needs to be solved even more urgently than encouraging the pursuit of longer studies. Youths who give up their studies at STSs should become one of the main targets of local and national public measures for reducing the drop-out rates from higher education. The principle of proximity training adopted for higher technicians' diplomas in France should be maintained so as to give youths with few social and educational advantages the best possible chances of having access to initial vocational training.

Specific guidance measures could be instituted to reduce the failure rates at STSs and redirect students whose initial trajectories were ill chosen or imposed on them. Another strategy might consist in increasing the range of training modes available to young people, especially those based on alternance training.

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Further reading

- *Les étudiants des STS et des IUT, comparaison des conditions d'orientation, des parcours de formation et d'insertion* (Students attending Higher Technicians' Sections (STSs) and Technological University Institutes (IUTs): comparisons between their conditions of guidance, training paths and transition to work), Y. Grelet, C. Romani, J. Timotéo, Net. doc no.65, Céreq, 2010.
- *Éléments de réflexion sur les formations technologiques supérieures courtes et tout particulièrement les sections de techniciens supérieurs* (Some thoughts about short higher technological training courses, especially those dispensed at Higher Technicians' sections), J. Sarrazin, a report submitted to the French Ministry of Higher Education and Research, January 2010.
- *Génération 2004 : des jeunes pénalisés par la conjoncture* (Generation 2004: Youths penalized by the economic situation), *Bref* no. 248, Céreq, 2008.
- *Le choix du BTS: entre construction et encadrement des aspirations des bacheliers d'origine populaire* (The choice of BTS diploma: setting up and channelling the aspirations of youths of humble origin after the baccalauréat), S. Orange, *Actes de la recherche en sciences sociales*, no.183, 2010.

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