

How Denmark try to solve the problem of dropout in vocational education?

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Dropout among young adults (18-24 years old) is high; a report from CEDFOP shows that in the EU dropout has had priority since the Lisbon strategy, the current aim being to reduce drop out for this group to below 10% in 2020. ¹

In Denmark we are far from reaching this aim. At the present 20% of a youth cohort has not completed a youth education qualification seven years after finishing lower secondary. A youth education is either an upper secondary education or a vocational education (VET). Upper secondary education gives access to continuing education (universities, etc.) and VET education gives direct access to skilled work at the labour market (for instance as a craftsman or office clerks) and under certain conditions to continuing education. There are a few job opportunities in Denmark for unskilled workers². Viewed more generally, the Western labor market will probably be in need of people with a sound vocational and/or further education in the future (Jørgensen 2011) Therefore, it is of great importance that 90% of a youth cohort gets a youth education

There are 106 vocational education programmes in Denmark with more than 300 specialities. In total less than 20% of a youth cohort join one of these programmes³. A little less than every second student drops out. Therefore, it is foreseen that Denmark will have a lack of craftsmen in the near future. For instance, the Trade Committee for Skilled Industry Workers mention that they will need 30,000 skilled industry workers in 2025⁴ as a supplement to the approximately 150,000 existing industry workers in Denmark.

Many initiatives have been taken to solve the problem of attracting more students to VET, and persuade those who have entered VET to finish their education. Considerable effort is made to understand the motives behind the dropout phenomena and to reduce the numbers of young adults with no further education after primary school.

The main focus in this article is to:

- Present the problem of dropout in a Danish perspective and with a special focus on vocational education (VET)
- Present the initiatives taken in VET to make the education more attracting to young people and to focus on retention on legislative level and on VET school level
- A short review of some of the recent research projects in Denmark on dropout and retention

Dropout in VET – a Danish perspective

The discussion on who gets an education in Denmark is not new (Jørgensen; 2011). In the 1930'ies we discussed how the many unskilled workers could get a vocational education. In the 1970'ies we started to talk about "the rest group" and social

inequality. In the 2000'ies the attention is drawn to the advantages of education with regard to economical growth in a globalized economy. Historically, there is a shift in educational policy from a strategy of equality to a strategy of economical growth.

After the Second World War in the 1950'ies The Danish Government was very concerned with preventing economical barriers for access to education. This was followed up in the 1970'ies when the Education Grant and Loan System was introduced in Denmark to make it possible for unprivileged citizens to get an education. In the 1980'ies great youth employment projects were established to prevent youth unemployment. Unemployment was also considered a symptom of lack of education. During the 1990'ies a strategy of "Education for everyone" was established. 95% of a youth cohort should have a youth education. Especially, during the 90'ies it looked as the strategy was working. Nevertheless, the social background of the students was still of importance with regard to the choice of education and the chance of completing the education.

During the first years of the new millennium the openness of national economies grew and the international competition grew as well. This resulted in an massive need for skilled workers. The trend is reinforced by the aging population in Denmark as well as in many West European countries. The shift from "Education for everyone" to the strategy of growth was clearly expressed by the Government when they established a "Globalization Council", consisting of experts from private and public sectors in Denmark. There was still a wish for equality, but now with the primary focus on competition and growth. Young people without education had a risk of being left outside influence of the future labor market. Today in the second decade of the new millennium the vast majority of young people in Denmark are living well and complete a youth education. But in every school class there are young people who never or very late complete an education and therefor never establish a stable foothold on the labour market. Every fifth young person in Denmark - 20% - has not completed a youth education (VET or general upper secondary) seven years after they finish primary school. They neither have study nor working life competence. Many of the students who drop out changes pathway to another youth education and finish another education (Jørgensen, 2011).

The parents' education is an important marker with regard to the young person's choice of youth education. Generally speaking, unstable upbringing has a negative influence on the young persons' educational results (Piilegaard, 2011). Thus, growing up with a single provider increases the risk of dropping out by 16 percentage points. It also means something whether the family is ethnic Danish or not. Students living in socially disadvantaged area, and students with physical or psychological problems are also in the risk of dropping out.

For the individual young person motivation is crucial. Students with low motivation with regard to competence, autonomy, and/or social inclusion will more often drop out of a VET education (Piilegaard, 2011).

Within the area of vocational education it is still the fact that approximately half of the students starting an education drop out. That in spite of the fact that the vocation schools have cooperated systematically with retention since the Ministry of Education in 2008 introduced a requirement for annual action plans for retention. In the latest

reform of vocational educational programs the goal is that by 2020 60% of students starting on a vocational education complete their education, and by 2025 this number must be increased to 67%.

Even if dropout may be an expression of a conscious and rational choice, dropout will often be closely related to the marginalization and retention in a socially disadvantaged position. Dropout is particularly widespread among vulnerable and psychologically vulnerable adolescents and young adults, and among young people and young adults who comes from socio-economically disadvantaged homes. "The young people with low parents' income have a probability of dropping out on 51%, whereas the young people with high parents' income have a probability of dropping out on 'only' 26% (Piilegaard, 2011).

A study from 2016 by the social partners in Denmark⁵ shows that drop-out rates among young people is still high, and that one drop-out often leads to several drop-outs. Many of the young dropouts have earlier dropped out of one or several programs. 44% of the adolescents who have not completed a youth education have dropped out of at least one vocational education program.

Several studies have documented that the completion of a vocational program is crucial for reducing the risk of marginalization on the labor market, with regard to further education, and for partaking in the society (Jørgensen, 2011). The reduction of the share of young people without an education is a central part of reducing the negative social heritage. It is obvious, though, that the problem is complex, and that there is not one solution.

Jørgensen (2011; p.24ff) points suggests several explanation to this unsolved problem. When fewer and fewer young people go the direct pathway through the educational system it is due to the fact that the society undergoes several and fast cultural and structural changes.

1. The young people cannot use their parents' experience when it comes to handling the many choices and possibilities after the primary school. Therefore, many young people have to examine the possibilities of the educational system on their own and make their own decisions.
2. In the youth culture and among many parents there is an increased expectation that the young person chooses his/her education out of an individual interest. It is expected to give meaning for the individual – and not only an income.
3. Earlier social norms with regard to adaptation, stability and loyalty are replaced by demands on development, mobility, and flexibility. Earlier it was a moral obligation to finish what you have started. Today it is important not to stick in ... and to stay flexible and adaptable.
4. There is no signs in the political or cultural patterns that the social ballast or the lack of internship will be solved.
5. In the year 2000 a VET reform was introduced, based on the principles of New Public Management. The focal point of this reform was individualization. The classes were more or less abolished. Every student must have his/her individual educational plan. The VET school competed to attract the students by

advertising and by making spectacular learning activities. This made the schools change towards a market oriented approach. Seen from the students' point of view they became consumers "users" the products of the school.

Having learned from the problems which this reform rose, a new VET reform was introduced in 2015. Now with focus on pedagogical quality and with the overall purpose of making every student as skilled as possible. No longer with the an underlying wish of equality, but now with focus on attracting more and more capable students and offer them high level education.

The VET system in Denmark with the focus on attracting more students and prevent dropout

Denmark has had a dual VET system for many years. The Danish VET system is part of the overall youth education system and aims at developing the general, personal, and vocational skills of young people. The system is based on three main principles:

- The dual training principle, i.e. periods in school alternating with periods of training in an enterprise (practice placement). This principle ensures that the apprentice acquire theoretical, practical, general and personal skills demanded by the labor market; every VET education consists of a basic course⁶ at VET school, and a Main Course, alternating between periods in school and periods of training in an enterprise⁷.
- The principle of social partner involvement, whereby the social partners take part directly in the overall decision making and daily running of the VET system;
- The principle of lifelong learning, i.e. the system is highly flexible, offering learners the possibility of taking part in a qualification now and returning to the VET system at a later point in time and add to their VET qualifications in order to access further and higher education. Furthermore, VET and continuing VET (CVET) are integrated to ensure coherence between different qualifications and competence levels.

The VET programs in Denmark are described on level 3-5 of the EQF Framework⁸. The VET programs are carried out at technical colleges, social and healthcare colleges, business colleges, agricultural colleges, and at adult VET Centers. The system is well functioning with general acceptance and economical involvement from the labour market. During the crisis in Europe, for instance, Denmark has managed to have very low rate of youth unemployment (13%, - while for instance Finland had 22%).

Nevertheless, Denmark faces some general problems regarding VET, as mentioned before, especially with a low reputation and with a large dropout rate. Therefore, a new VET reform was introduced in 2015.

The Government and the Social Partners in Denmark introduced the reform on the basis of an analysis⁹:

- The young people find it difficult to grasp the VET system with 106 VET educations and more than 300 specialities. This fact challenges the motivation

- Many young people are not enough clarified after primary school and deselect a vocational education or choose to take an upper secondary education in stead. In this way, they postpone the difficult decision on a future profession. The vocational education system demands that young people at the age of 15-17 are able to choose their future profession, for instance brick layer or media graphic designer, after just few week's education.
- There is an unbalance in the field of practice placements. In some programs, there are too few practice placements, and in other programs, there are too few students. It is a continuing challenge for many students to get an educational contract and get practice placement. The young people have an educational guarantee, though, guaranteed in the state budget to finish the practical part of their education in school in a so called school practice placement.
- Every fourth young person who starts in a vocational education lack basic knowledge in Danish and mathematics. It is a problem for the individual not being able to follow the teaching instructions and for the good education. The quality of the education must be improved, and every student must meet suitable challenges. It has been a challenge that every teacher has not got satisfying pedagogical competences.
- The young people ask for a strong youth education environment. The youth environment at vocational schools are too weak and sometimes completely absent. This factor attracts many young people to the upper secondary education. It has led to the situation that the reputation of the vocational education programs is low. Today, the many weaknesses of the programs shadow for the many strengths of the system.

The VET reform in 2015

The reform of 2015 emphasizes four clear goals for the vocational education programs with measurable performance targets. The goals make a clear framework and direction for the future work at the VET schools. The goals will secure a well-defined follow-up for both government and the school. The goals are operationalized in measurable performance targets. The VET schools must live up to these goals and targets and their grants are dependent on their ability to do so.

Goal 1

More students must choose a vocational education directly from 9th or 10th grade.

Measurable performance target 1: At least 25% must choose a vocational education directly from 9th or 10th grade in 2020. The part of VET students must raise to 30% in 2025.

Goal 2

More students must complete a vocational education

Measurable performance target 2: The completion rate must raise from 52% in 2012 to at least 60% in 2020 and at least 67% in 2025.

Goal 3

The vocational educations must challenge every student in order for him/her to become as skilled as possible.

Measurable performance target 3: the part of skilled students carrying out subjects on higher level than the mandatory minimum level must be increased year by year.

Goal 4

The trust in and the well-being at the VET schools must be increased

Measurable performance target 4: The well-being of the students must be increased and the satisfaction of the prospective employers must be improved in 2020

The main focus in the reform concerns improving pathways from VET to continuous education, attracting high performing students, transparency and flexibility with regard to entrance into VET education, and – last but not least - a quality improvement of the teachers' teaching skills and a focus on development of pedagogical leadership and implementation of a pedagogical strategy at each VET school. Therefore, development projects will focus on these 10 focus areas:

- An attractive youth environment; a basic course I (20 weeks) for young students coming directly from primary school) and a basic course II (for students coming from other educational programs and for students coming from Basic Course I)
- A more simple and straightforward structure; four “entrances” to the 106 vocational education programs; 1) the entrance of food, farming and event making, 2) the entrance of office, trade and business, 3) the entrance of care, health and pedagogy, 4) the entrance of technology, building, construction, and transportation
- Improved possibilities for continuing education; each entrance has special courses with general subjects on the level of upper secondary education. In this way a VET education can lead to educational programs at ECTS level 5 and 6
- Focus at counselling; individual counselling and counselling with the purpose of bridging the gap between school and enterprise
- Clear admission requirements; only students with a minimum grade from primary school are accepted in the VET education in order to send the signal that VET education is not for “the rest group”, not being able to join an upper secondary education, but for skilled young people
- New vocational 10th grade in the basic school; a 10th grade with a special focus on preparing the students for VET education
- More and better teaching; fixed minimum lesson per week
- Continued efforts for practice placement; the Trade Committees are involved in several initiatives together with the Employers' organization
- New preparatory basic education, for the specially vulnerable young people a new preparatory education is developed
- New vocational education for adults; separate classes for young students under 25 years of age, and separate classes for adults

In this way you can say that VET education according to the intentions of Reform 2015 tries to attract professionally strong young people. The vulnerable young people will be enrolled in the new preparatory basic education.

The Government has established an expert group to analyze this problem and suggest solutions on the problem¹⁰. The expert group focusses in its recommendations on helping these challenged young people. Their recommendations take a starting point in the fact that there is no coordinated effort with regard to dropout or change of education for these vulnerable young people. These young people represent a heterogeneous group with completely different personal histories. It might be dyslexia, it might be school fatigue or family or personnel problems. A basic principle in the recommendations is that “there must be goals and relevant pathways for everyone” (The Expert Group 2017:7) within one new preparatory vocational education¹¹, called Preparatory Basic Education (in Danish shortened FGU). The new education was politically agreed among a great number of political parties in autumn 2017. FGU will prepare young people under 25 years of age vocationally, personally, and socially to be able to complete a youth education or make them able to get a steady foothold at the labor market.

The VET school perspective: How to prevent and follow up on dropout at the VET school

The Danish VET schools are independent institutions governed by an overall management board, consisting of representatives from the social partners, with a managing Director as the daily leader and with a rather high amount of middle managers (20-40 at an average VET school). There is tradition for a large amount of liberty with regard to the overall management as well as with regard to the teachers’ planning of school based learning activities at the individual school.

<i>Status 3 months after basic course</i>		2012		2013		2014	
		<i>ZB C</i>	<i>The whole country</i>	<i>ZB C</i>	<i>The whole country</i>	<i>ZB C</i>	<i>The whole country</i>
<i>In the Main Course</i>	<i>Training Agreement</i>	28,8 %	30,3 %	30,7%	30,1 %	20,3 %	29,1 %
	<i>School Practice Placement</i>	4,9 %	8,0 %	7,3 %	8,2 %	6,0 %	8,7 %
	<i>Totally</i>	33,8 %	38,3 %	38,0 %	38,3 %	26,3 %	37,9 %
<i>Not in the Main Course</i>	<i>Dropout during the Basic Course</i>	28,8 %	30,3 %	21,3 %	30,0 %	29,8 %	29,5 %
	<i>Dropout after the Basic Course</i>	33,2 %	26,3 %	36,3 %	26,9 %	38,0 %	27,2 %
	<i>Earlier agreement, No present agreement</i>	1,6 %	2,5 %	1,8 %	2,5 %	3,5 %	2,6 %
	<i>Status unknown</i>	2,5 %	2,7 %	2,6 %	2,4 %	2,4 %	2,8 %
	<i>Totally</i>	66,2 %	61,8 %	62,0 %	61,8 %	73,7 %	62,1 %

Table 2.1 Status with regard to dropout 3 months after the start of education of the year in question

Every VET school must establish and implement a *Common Didactical and Pedagogical Strategy (CDPS)*. In the CDPS there is a special focus on retention. The VET school must follow up on the four goals of the 2015 Reform. One of the goals being

Dropout, the VET school must make an ongoing follow-up and formulate initiatives to prevent dropout.

The following is a shortened example on the documentation made by one of the larger VET schools in Denmark^{1 2}. The documentation is made public on the web side of the school, Zealand Business College (ZBC)^{1 3}:

Assessment of the development in results

When we look at the development in dropout over time at ZBC we see an increase in the proportion of students who drop out before the start of the Main Course. Of the students starting Basic Course at ZBC in 2013, 38 % started at the main Course within 3 months after finishing the Basic Course. In 2014 only 26,3% did that. With regard to those who drop out during the Basic Course we can also see an increase at ZBC from 2013 (21,3 %) to 2014 (29,8 %). This means that students from ZBC are on the same level as the rest of the country. When we look deeper into the numbers we find local explanations....

Initiatives at ZBC

We have not yet seen the results of our initiatives from 2016. Therefore, we continue to implement and optimize the effort on following the three initiatives next year:

- *Closest to the labor market*
- *Practice oriented and holistic pedagogical approach*
- *Individual counselling and help for finding internships*

Closer to the labor market

Companies wanting a student for practice placement are invited to the school for in-house training fairs. The company representatives meet the classes within their relevant professional area. This arrangement promotes the awareness of the companies on the skills of our VET students and the awareness of our VET students on the demands of the companies. This initiative increases the good relation between the school and the companies, and it encourages the students with regard to looking on their own for practice placements. This year we will supplement this initiative with a new arrangement. We will make an open school concept where representatives from the companies are invited to follow the education and “speed date” with the students.

A practice oriented and holistic pedagogical approach

Within certain VET programs the theory content is very comprehensive. This may demotivate some students. ZBC work generally to make theoretical subjects more practice oriented in order to create understanding of the theory through interdisciplinary project based teaching processes with possibility for hands-on and simulation. These methods also support differentiation according to the students' learning style and level. The feedback from the students is that these methods make the teaching much more relevant and easier to understand. We continue to develop these methods. At the time being (2016) 50% of all teaching in the basic courses is interdisciplinary and project based.

Individual counselling and help for finding internships

In the everyday school life we help the students overcoming barriers related to study and practice placement. We have student coaches with the main task of helping with the transition between the school and practice placement. Every employed person at ZBC must help the students in this transition phase. It is also emphasized in the new counselling setup of ZBC. Here focus is on the cooperation between counsellors and teachers.

Dropout – on the way to a solution

Dropout is a very well researched issue. Nevertheless, the problem is not yet solved. Therefore a number of research projects take place these days. Some of them

quantitative (Piilegaard, 2011), searching patterns in the numbers of dropouts. Most of the research projects are qualitative, searching for reasons for dropping out (Jørgensen, 2011) or for a better understanding of the motives behind the dropout.

Tanggaard (2013) has made an exploration of students' own explanations about dropout in vocational education in a Danish context. Her empirical findings indicate that dropout is considered in terms of two very different, but intersecting broad explanations voiced by students themselves: (1) as something created in educational institutions, such as when teachers spend more time and resources on the more affluent, quick-witted and clever students or when there is a lack of trainee places and (2) an act resulting from individual initiative and or a lack of perseverance.

Vibe Aarkrog, Bjarne Wahlgren (Wahlgren 2016), Kristina Mariager-Anderson and Susanne Gottlieb represent an on-going research project on processes leading to dropout¹⁴. The aim of the research project is to improve strategies for preventing dropout by gaining knowledge about the students' thoughts and actions related to decisions about staying in or dropping out of an educational program. The study combines two sets of data, weekly surveys to the students and interviews with these students. The surveys show the students' weekly perceptions of their probability of continuing in the program as well as their satisfaction with the educational program, the classes, and the atmosphere at the school. Based on the students' answers during an eight-week period graphs four types of graphs are deduced: the positive, the steady, the unsteady and the negative graphs and a further differentiation of the negative graph into the steady downward development, the oscillating downward development, and the sudden downward development.

Summing up, this article has shown how we in Denmark work with dropout in VET. We have not yet solved the problem, but hopefully, this article has shown the complexity and the efforts made to understand and diminish dropout in VET. The historical view has hopefully put the concept of dropout into a larger societal context and given perspectives for understanding the reforms of VET in Denmark. The relatively thorough review of the Danish VET system, especially with focus on Reform 2015, has shown the intention of emphasizing and trying to solve the problems for the society and the labor market occurred by the fact that too few young people choose VET educations – and even drop out in a large scale. The practical example of a VET school's strategy to prevent dropout showed the efforts made on the concrete level, and finally, the very short hints on research projects were meant to be an appetizer with regard to research on dropout in Denmark.

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¹ Cedefop (2016). *Leaving education early: putting vocational education and training centre stage. Volume II: evaluating policy impact*. Luxembourg: Publications Office. Cedefop research paper; No 58. <http://dx.doi.org/10.2801/967263>

² In 1990, about one million Danish people (37% of the workforce) had only lower secondary school as their highest level of education. In 2010, this share amounted to 625,000 people, 370,000 fewer than in 1990. In other words, the number of unskilled employees has fallen quite dramatically. This is the result of unskilled work being outsourced to third-world countries.

³ Earlier this percentage was higher. For instance in 2000 approximately 30% joined a vocational education.

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https://www.danskmatal.dk/Nyheder/analyser/Documents/Behov_for_30000_flerejernogmetalarbejdere_i_2025.pdf

⁵ http://di.dk/SiteCollectionDocuments/DI%20Business/AE_UU_DI_unges-uddannelsesveje.pdf

⁶ In The reform of 2015 the young students coming directly from primary school start in the Basic Course I, and continue – together with students with experience from other programs – in the Basic Course II

⁷ If you cannot get an agreement with a company it is possible in many VET education programs to finish the practical part in the VET school, in a so called School Practice Placement.

⁸ https://ec.europa.eu/ploteus/search/site?f%5B0%5D=im_field_entity_type%3A97

⁹ <http://uvm.dk/I-fokus/~media/UVM/Filer/I%20fokus/Tema/Faglaert%20til%20fremtiden/131002%20faglaert%20til%20fremtiden.aspx>

¹⁰ Bedre veje til en ungdomsuddannelse – anbefalinger til regeringen, Anbefalinger fra ekspertgruppen om bedre veje til en ungdomsuddannelse, 2017 <http://docplayer.dk/32207460-Ekspertgruppen-om-bedre-veje-til-en-ungdomsuddannelse.html> .

¹¹ [http://www.g1.org/uddannelse/udd.politik/Sider/Forlig-om-Forberedende-Grunduddannelse-\(FGU\).aspx](http://www.g1.org/uddannelse/udd.politik/Sider/Forlig-om-Forberedende-Grunduddannelse-(FGU).aspx) The new education was politically agreed upon October 2017, but is not yet implemented.

¹² Zealand Business College, a merged VET school consisting of 8 schools with 10 different geographical addresses and with VET programs from all four “VET entrances.”

¹³ <https://zbc.dk/media/5032/hp%C3%B8g-2017.pdf>

¹⁴ The project is still going on (2017-2019). The title of the project is “Staying on track: New perspectives and sustainable solutions on dropout among young adults.”