

### Improving Vocational Education and Training – overview of reform of the Danish vocational education system.

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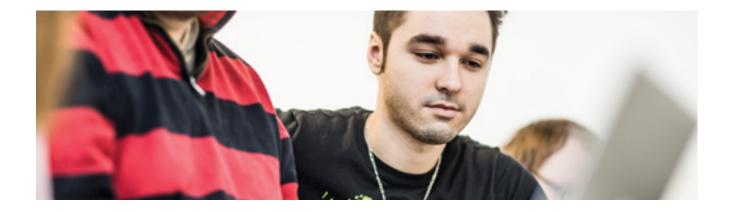
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#### DANISH MINISTRY OF EDUCATION



### Vocational education and training for the future

Denmark is a modern knowledge and production society that places great emphasis on development, innovation, sustainability and welfare. This is not least reflected in our many targeted vocational education and training programmes, which hold a key position in our society.

It is important that even more young people choose this path and that the quality of the programmes is improved. Therefore, we are implementing a reform of the Danish vocational education and training programmes with effect from 1 August 2015. The reform will give the vocational education and training programmes a lift, making future skilled workers even more competent.

Within the vocational education and training programmes, future electronics operators will get an education that provides them with a robust foundation for conceiving ideas for future safety and hospital equipment. Construction managers will learn how to build long-life low energy houses. Creative minds will draw lines that can maintain Denmark's position on the global map of design. And social and health care workers will be trained to care for the elderly.

With the reform we strengthen the connection between schooling and work experience in companies

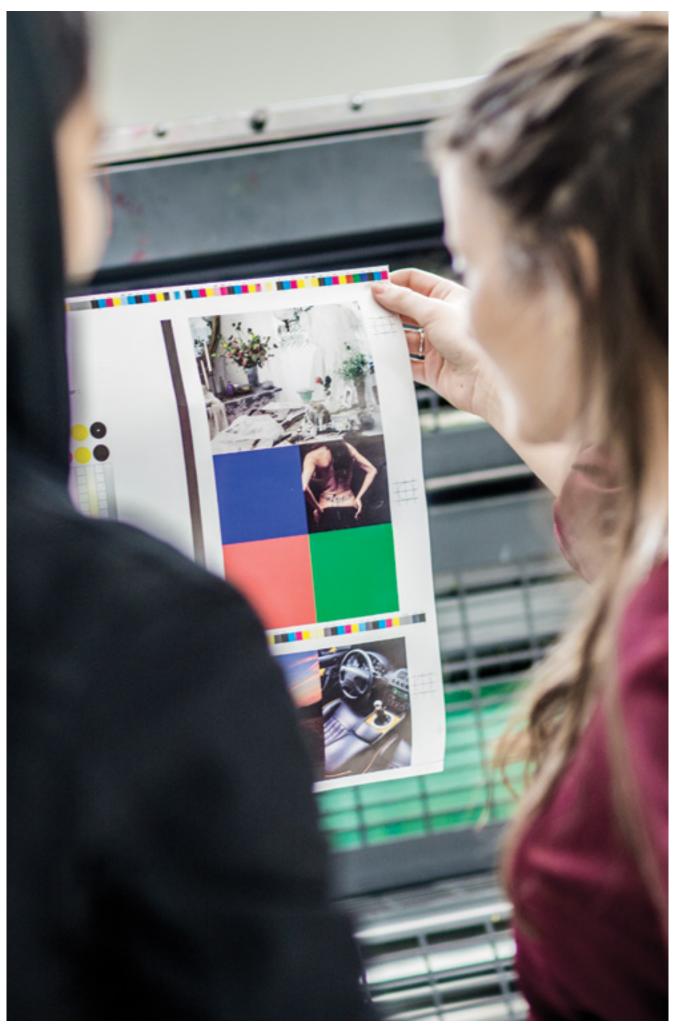
or internship centres. We improve the quality of the different subject fields and create education streams for the highly gifted.

The reform will give academically strong students a better opportunity to achieve an upper secondary level education in connection with their vocational education and training (EUX), as we expand the offer to many more vocational education and training programmes. This means that more students can take a further education on the same terms as young people with an upper secondary level education.

The reform will also improve the opportunities of unskilled adult workers who wish to upgrade their skills and become skilled workers, as we expand the opportunities to transfer credit for vocational experience and competences. This means that it will take unskilled adult workers less time to become skilled workers, but resulting in the same high quality level.

Students in Danish vocational education and training programmes will acquire better vocational competences in the future. And vocational competences go hand in hand with creativity, innovation, precision and analytical thinking, enabling future skilled workers to strengthen Denmark's position as a knowledge and production society.

Christine Antorini Minister of Education



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## Facts about Danish vocational education and training programmes

A vocational education is an education that emphasises practical experience, and most of it is completed in a practical training company such as a larger industrial enterprise, a workshop, a kitchen or a shop.

Students can enrol in the programmes immediately after primary and lower secondary school. A vocational education can provide direct access to employment or be a step on the way to a higher education.

The first part of the programme is a basic course that finishes with an exam, and then follows the main course which alternates between education at school and practical training. The theoretical part of the programme takes place in a vocational college, which can be a commercial college, a technical college, an adult vocational training centre, an agricultural college or a basic health care college.

#### Many job opportunities

In Denmark 106 vocational education and training programmes are offered, specialising in areas such as:

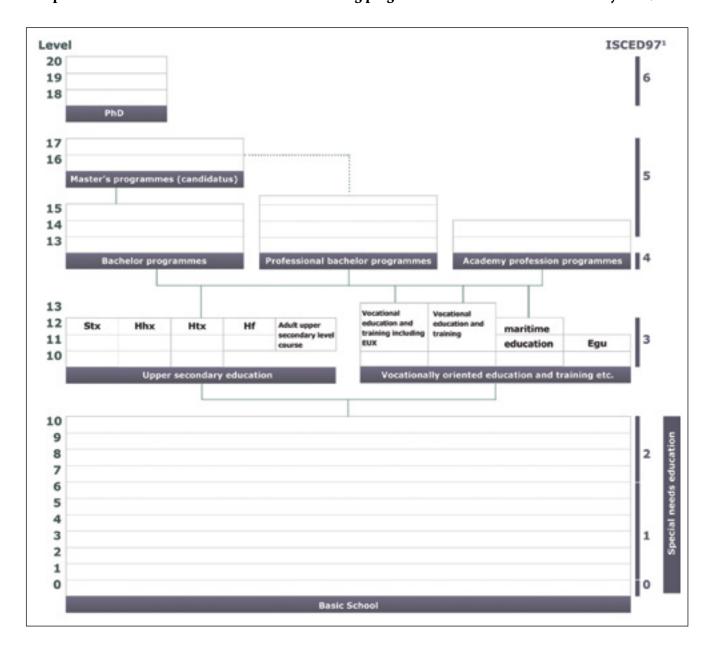
- Car, airplane and other means of transportation
- Building and construction
- · Body and style
- Media production
- Mercantile

- Production and development
- Power, management and IT
- Health, care and pedagogy
- Transport and logistics

As of February 2014 a total of 82,689 students are taking a main course. 74,456 of them have a training agreement with a company, while 6,681 are doing school-based practical training.

The vocational education and training programmes are offered in independent state institutions (vocational colleges), which receive taximeter funding.

#### The position of the vocational education and training programmes in the Danish education system:



#### Reform of the vocational education and training programmes – get an overview

In February 2014 a broad political agreement was signed focusing on better and more attractive

vocational education and training. On the following pages you can get an overview of the reform.

### 1. Clear Objectives

The reform agreement establishes four overall objectives for vocational education and training (VET). The four objectives will be translated into measurable result targets for monitoring the development of VETs at central level and at school level.

#### Objective 1. More students must choose to start a VET immediately following form level 9 or 10.

Result target 1.1: At least 25 per cent must choose a VET immediately following form level 9 or 10. This share must increase to at least 30 per cent by 2025.

#### Objective 2. More people must complete a VET.

Result target 2.1: The completion rate must be improved from 52 per cent in 2012 to at least 60 percent by 2020 and at least 67 per cent by 2025.

### Objective 3. The VETs must challenge all students so they may reach their fullest potential.

Result target 3.1: The share of the most gifted students – measured as the share of students who complete a total number of subjects at a level which exceeds the compulsory minimum level set by the

vocational committees - must increase year by year. A baseline will be established using the school year 2013/14 as a benchmark.

Result target 3.2: The high employment rate for newly graduated students must be maintained.

### Objective 4. The trust and well-being in the VETs must be strengthened.

Result target 4.1: The well-being of the students and the satisfaction of the businesses which hire the students must be gradually increased up until 2020.

The objectives provide a clear frame and direction the vocational institutions during the coming years. Also, the objectives will provide a well-defined foundation for follow-up in order that both the government and the individual vocational institutions may be measured based on achieved results.

### 2. An Attractive Youth Education Environment

The youth education environment at vocational education and training institutions must be academically and socially inspiring.

The structure must, especially in the beginning, allow young people to spend time with other young people and allow them to be part of a process that makes them qualified, motivated and ready to choose a VET and continue in a main programme. Besides – as in the primary and secondary schools – education must be based on team communities.

A basic one-year programme will be established for students coming from form levels 9 and 10, where young people will remain together for a longer time and be part of a class community.

At the same time, physical exercise and activity will be an integrated part of the school day. The vocational colleges must thus organise the teaching in the basic programme in such a way that students participate in physical exercise and activity each day within the overall teaching time to an extent corresponding to an average of 45 minutes per day. This may be accomplished as part of other subjects or as separate activities.

Besides, the establishment of campus environments will be strengthened, allowing a collection of several educations to join forces and create a common youth environment across educations.

A national campaign directed at young people and their parents must emphasise that it is attractive to complete a VET. Finally, the Danish National Championship (DM) in Skills must be strengthened to ensure more Folkeskole<sup>1)</sup> pupils experience the very best of the VETs.

<sup>&</sup>lt;sup>1)</sup> Common Danish term for the state-funded primary and lower secondary school.

### 3. A Simpler Structure and Greater Clarity

It must be easier and more predictable for young people to choose a VET. Therefore, new basic programmes of uniform duration and structure will be established across main subject areas.

The present 12 basic access channels to the VETs will be eliminated and four new vocational main subject areas established.

This means that pupils from form levels 9 and 10 only need to consider these four main subject areas upon admission to the VETs – rather than the present 12 basic access channels. Besides, students' choice among the 107 different VETs will be postponed to a later date. Thus, the students will no longer have to make this choice within the first two weeks.

#### The four new main subject areas are:

- Care, health and pedagogy
- · Office, trade and business service
- Food, agriculture and experiences
- Technology, construction and transportation

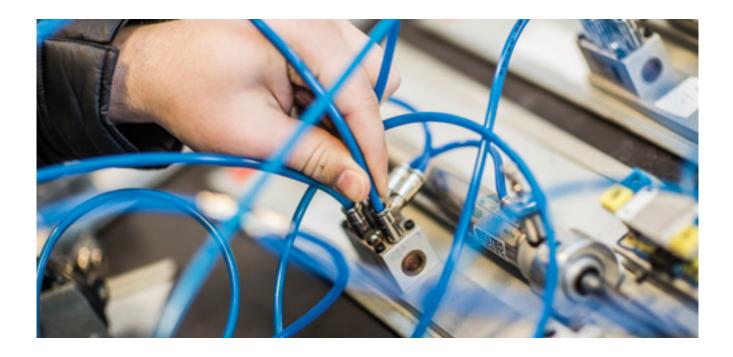
The basic programme will consist of two parts, each of which will last for 20 weeks (half a year). The first part must provide general and broad vocational skills. It must also give them more time and a better foundation for making their final choice of education. The second part of the basic programme will be

targeted at the main course of a specific VET. Young people who start a VET more than one year after they have completed form level 9 or 10 can go straight to the second part.

The new structure means students may only start the first part of the basic programme once. It also means that students who have completed the first part of the basic programme, but change their mind with respect to desired education, can go directly to the second part of the basic programme oriented towards their newly chosen VET.

The one-year basic programme for young people means that the basic programme for many educations will be extended compared to today.

More young people must be given an opportunity to pass an upper secondary education at the same time as a VET (EUX). In the future, EUX will thus be offered in connection with all relevant educations and within all four main subject areas. Besides, after a dialogue with schools, interested parties and trade committees, the Ministry of Education will develop common frames for the EUX course in order to strengthen the schools' possibilities to arrange common studies.



#### Specifically about the commercial programmes

For two of the commercial programmes, the financial programme and office with specialised subjects, the students will in the future be able to complete their education via a special EUX-based course. This model will also be an option for the retail and trade programmes, at the same time introducing a new advanced level programme for the main programme (level 3), which is intended for young people who have the capability of becoming store or sales managers.

Standard credits will be introduced for students who have completed an upper secondary education so that the students will follow a basic programme for up to 10 weeks and a one-year main programme, i.e. a total education programme of just over four years, including the upper secondary education.

### Specifically about the social and health care programmes

For the social and health care programmes (the social and health care programme and the pedagogical assistant programme) the new basic programme structure will mean that many more students need basic programme teaching. The special agreement that the basic programme is only compulsory for students who have an education of less than one year

or work experience following primary and lower secondary school will thus be eliminated. To avoid double education, the teaching within the basic subjects of the main programmes for social and health care assistants and pedagogical assistants will thus be shortened by seven weeks.

Besides, a qualifying course will be introduced for the social and health care programme and the pedagogical assistant programme for students who do not fulfil the requirement of a grade average of o2 in Danish and maths, respectively, and who have not passed the entrance examination for the VETs.

Finally, a qualifying course will be offered at the social and health care schools for adult students above 25 years of age who do not need basic programme teaching as part of the new VET for adults (EUV).

### 4. Better Opportunities for Continued Education

VETs must first and foremost be oriented towards the job market, but young people who complete a VET must have better opportunities for continued education if they want this.

The agreement will strengthen the opportunities for continued education following the VETs.

Opportunities are strengthened by offering more programmes with EUX, as mentioned above under focal area 2.

Besides, VETs with a prescribed duration of at least three years will in the future give access to all academy profession programmes provided that specific admission requirements, if any, have been met. Also, it must be possible to rank subjects which have been completed at a high level at a VET alongside upper secondary education subjects in relation to fulfilment of the specific admission requirements for a higher education.

Finally, there must be a better transition from VETs to university and professional bachelor education programmes.



### 5. New VET for Adults 25 Years or Older

In parallel to the efforts at making VETs a more attractive choice for young people, adults 25 years or older must be offered a more attractive, predictable and goal-oriented path from low skilled to skilled worker. This will be accomplished by the establishment of a VET for adults (EUV), which will be the future path to a VET for adults 25 years or older.

VET for adults (EUV) takes as its starting point the education and the experience which the adult already possesses. Essentially this means adults with at least two years of relevant work experience will receive a standardised education without a basic programme and without internship.

Adults who do not fulfil the requirement of two years of relevant work experience will essentially receive a standardised education with a shorter internship of a maximum of two years. These adults may also follow the second part of the basic programme.

Adults who have neither work experience nor a previous education will receive an education corresponding to a VET for young people. However,

this includes only the second part of the basic programme. The individual educational programmes will be established based upon an evaluation of actual prior learning.

VET for adults will result in the same skills as VETs for young people. For instance, an industrial operator will be an industrial operator irrespective of when the education was completed. Adults should have the experience of building on top of something rather than starting over.

Today, the social partners in the job market play an important role in the shaping of the VETs, and they must continue to fill this role also in the future in connection with VET for adults.

### 6. Clear Admission Requirements and Offers for All Young People

An admission requirement of o2 will be introduced for Danish and maths to clarify which fundamental qualifications are necessary in order to follow the education and complete a VET. Besides, the trade committees will get more opportunities to demand specific skills prior to admission to the main programme.

Today, many students who start a VET give up because they do not have the necessary fundamental skills within reading, writing and maths. This may give some people an experience of failing. Insufficient skills of some students also make it difficult to create a uniform and common foundation for the teaching, and the quality of the teaching will thus be weakened for the remaining students.

In the future, students will essentially only be admitted to a VET if they obtain a grade average of at least 02 in Danish and maths, respectively, in the leaving examinations in form level 9 or 10. The admission requirement will apply to both youth and adults. Besides, for students coming from form level 9/10 it will be evaluated whether they have the educational readiness necessary for a VET.

The danish marking scale is a 7-point grading scale. It was introduced in 2007 to make Danish grades more con parable in an international context.			
Danish mark	Explanation of the mark	Equivalent ECTS mark	
12	For an excellent performance	А	
10	For a very good performance	В	
7	For a good performance	C	
4	For a fair performance	D	
02	For an adequate performance	Е	
00	For an inadequate performance	Fx	
-3	For an unacceptable performance	F	



Students who have entered a training agreement with a business (i.e. have an internship) have direct access. Students who already have a post-compulsory education may also start directly at the second part of the basic programme provided that they have a grade average of at least 02 in Danish and maths at form level 9 or higher in connection with their post-compulsory education. It will be possible to make an overall evaluation based upon a test and/or an interview. A two-year trial arrangement will be established in 15 specially selected municipalities featuring conditional admission in the form of admission contracts and vocational courses.

For young people who do not fulfil the admission requirements following form level 9 of the Folkeskole a new vocationally oriented stream will be established in form level 10, 'eud10' – as a supplement to the present offers in form level 10. Eud 10 must help young people obtain the necessary qualifications to begin a VET.

Also, young people who do not meet the admission requirements following form level 9 or 10 in the Folkeskole must – if they receive the necessary referral – have an opportunity to be admitted to the new combined post-compulsory education.

In addition to the two new offers, eud10 and the combined post-compulsory education, there are a number of other offers aimed at preparation for educations and occupations, e.g. general adult education (avu), production schools, basic vocational education and training etc.

The role of the production schools will be strengthened by improving their opportunities to target production school courses at young people who are motivated for a vocationally oriented education, but who – due to lack of schooling – need upgrading of skills in order to be admitted to a VET while simultaneously participating in vocational combination courses that give credits.

### 7. New Vocationally Oriented Form Level 10 (eud10)

A new stream will be established in the Folkeskole's form level 10 (eud10) which must prepare the pupils for the VETs and ensure that they meet admission requirements. This is aimed at pupils who are motivated for a VET, but who do not meet admission requirements or are uncertain whether the education is the right choice for them.

Eud10 must be organised in such a way that it mends the pupils' lack of educational readiness, including poor skills in Danish and maths, and it must introduce young people to the four new main subject areas of the VETs.

At least 30 per cent of the education must take place in cooperation with a vocational college.

The compulsory part will essentially correspond to the contents of the normal form level 10, but be oriented towards the VETs. This is the case for the compulsory bridging courses which will be added to the vocationally oriented post-compulsory education, and also for the self-elected project. The entire elective part must specifically introduce pupils to the VETs with subjects and elements that lead up to the four new main subject areas. Also included will be a

six-week compulsory bridging course in the vocationally oriented post-compulsory education.

An agreement will specify a general requirement for cooperation with a VET during at least 30 per cent of the teaching time, including six weeks of bridging.

All municipalities will be obliged to offer eud10. The organisation of the various form level 10 offers will be up to the individual municipality, within the framework provided by law. The municipality will decide the capacity, but it must be a goal to ensure admission for everyone belonging to the primary target group.

The municipality must enter into an agreement with an institution that offers a VET concerning the cooperation in eud10.



### 8. New Combined Post-Compulsory Education

A new combined post-compulsory education will be established as an occupation-oriented, qualifying post-compulsory education offer for people aged 15-24 who do not possess the necessary vocational, social or personal skills to complete a VET or an upper secondary education. Students may also obtain a foundation for further qualifying education.

The combined post-compulsory education is an offer to young people who are motivated for education but today begin a VET without a realistic chance of completing the education, who make use of non-qualifying offers, or who are not enrolled in an education.

The combined post-compulsory education will last for a maximum of two years and lead to a title of occupation assistant within a specified job area. At the same time, students will have an opportunity to transfer to another post-compulsory education if they obtain the necessary skills, and they may leave the programme for an occupation after one and a half and two years, respectively.

The education will be offered within approximately 10 centrally decided occupational themes. It is the intention that an institutional cooperation will offer

the education within a specific geographical area.

It is necessary to be referred by the municipality in order to gain admission to the combined post-compulsory education. A maximum of 2,500 students may be admitted to the education each year.

The combined post-compulsory education will be evaluated after three and five years with respect to possible adjustments in the organisation, provision etc. of the education. Unless otherwise decided, the combined post-compulsory education will be terminated by August 2021. The agreement parties concur that the target group must also receive an offer of a post-compulsory education in the longer term. Financial funds, which have been set aside for the combined post-compulsory education, must also be reserved for education offers to the target group in the future.



### 9. More and Improved Education Must Result in More Competent Skilled Workers

The quality of the VETs must be significantly improved through more and better teaching. This will be ensured through multi-pronged efforts such as more teaching time, a significant boost of teachers' skills, a clearer link between schooling and internships and more varied and differentiated lessons.

All students must have a certain amount of teacher-supervised lessons, no matter where they complete their VET. A minimum number of teacher-supervised lessons amounting to 25 hours per week will thus be introduced into the basic programme starting from August 2015, increasing to 26 hours from August 2016 onwards.

Besides, there will be a significant boost of the skills of the teachers. Prior to 2020 all teachers must thus acquire occupational-pedagogical skills corresponding to 10 ECTS points, e.g. based on a pedagogical diploma programme. The evaluation of the teachers' need for skills improvement will be based on the school's existing continuing education efforts and on a mapping of the present pedagogical and vocational competency level etc. of the teachers.

In addition, the requirement from the 2013 Finance Act – that teachers permanently employed by 2010 or later within four years from the date of employment must acquire skills which as a minimum correspond to a completed pedagogical diploma programme – will be made permanent. Also, financial funds will be set aside to enable teachers to join short occupational courses where their knowledge of the most recent vocational development within the subject and the line of business may be updated.

The education differentiation will be strengthened so lessons to a higher extent may be adjusted to fit students' vocational qualifications and ways of learning. Further, the use of stream distribution and talent streams will be expanded. The schools will be obliged to offer differentiated education which is adjusted in accordance with the qualifications of the individual students and their ways of learning. Also, young people will receive an offer of education at several vocational levels, so that all young people will be challenged and have their potential fully developed, e.g. in connection with special talent streams.



The link between schooling and business internships will be improved and schools will to a greater extent be obliged to provide practice-oriented education and link the learning processes during schooling and internship periods.

The use of IT at vocational colleges will be strengthened through an overall strategy for the 'digital VET', which will form the basis for a better utilisation of digital learning.

In order to support the pedagogical management at schools, a management development programme will be established, and continued education within pedagogical management will become a requirement for VET managements. At the same time, a national initiative for teachers and managers featuring school development in practice (SIP) will be established to add focus to quality and provide teachers with specific tools. Also, the requirement that the vocational colleges implement and use a common didac-

tic and pedagogical foundation for the development of the teaching will be made permanent from 2013, and financial funds will be set aside to establish attractive youth education environments at the vocational colleges.

Finally, the national school quality supervisory board must target the schools' quality development and the new clear objectives for the vocational colleges. The quality supervisory board will be aided by learning consultants who will provide counselling to schools during the initiation phase of the school reform.

## 10. Continued Efforts Regarding Internships and a Stronger Education Guarantee

Efforts to establish internships must continue to be improved. At the same time, the education guarantee will become stronger so that students will receive a credible and effective education guarantee. The guarantee must cover the entire spectrum of educations, and the access to school-based practical training must be increased by the establishment of additional openings and by offering more educations featuring school-based practical training.

The internship initiatives in the reform build on the 12 initiatives for improvement of the internship situation, including the establishment of 50 internship centres all over the country, from the agreement concerning Better VETs and a stronger education guarantee from November 2012.

The reform will generally strengthen the opportunities for students to obtain an internship, as the students will be more qualified, clarified and motivated and thus attractive for businesses which consider accepting a student. This is due to, among other things, the introduction of admission requirements, the increased significance of the basic programme examination, the trade committees' access to establishing requirements for admission to the main programme as well as a strengthening of student skills and clarification through the new basic programmes.

The efforts by the vocational colleges to establish internships must be strengthened by an allocation of more financial funds. At the same time, the taximeter subsidy must be shifted to school-based practical training. This will ensure that students do not remain in school-based practical training programmes longer than necessary, but that they complete their internship education with businesses to the greatest extent possible.

The education guarantee must be strengthened in such a way that students who complete the second part of the basic programme in an education, which is offered with school-based practical training, may be certain that they will be able to complete the entire education, provided that students are qualified and apply for internships. The restricted admission to school-based practical training is eliminated so that students will not meet this barrier in the



transition from the second part of the basic programme to the main programme.

Students, who complete the second part of the basic programme in connection with an education which does not offer school-based practical training, will receive an offer of admission to the second part of a basic programme within an education which offers school-based practical training or is without internship and with maximum award of credits for already completed and passed elements. This offer can be made a maximum of two times.

The education guarantee must further be strengthened by the establishment of more school internships already from 2015 within the construction and electrician educations. At the same time, financial funds will be set aside for further school-based practical training. In this connection the possibili-

ties for amending the regulation of the admission to school-based practical training – which is in force today for certain educations – will be analysed in order to reduce the number of educations without school-based practical training.

Finally, the government will invite the social partners in the job market to a discussion about the internship situation and invite municipalities and regions to a discussion about a more coordinated effort to establish internships.

### 11. Focusing of Guidance Activities

All students must receive guidance, but not everyone needs individual guidance. The agreement stipulates that guidance activities must be focused in order to secure earlier, better and more goal-oriented efforts for pupils in primary and lower secondary schools who are at risk of not proceeding to a post-compulsory education.

All students must be challenged with respect to their choice of education. This will ensure that more students – including gifted ones – choose a VET.

Specifically, the challenge will be realised in the form of more systematic work with the educational readiness of students during the transition from school to work. Educational readiness evaluation of the individual students will be moved up to form level 8, and the evaluation will be improved and based on clear, objective criteria.

The agreement will provide both schools and guidance counsellors with a systematic tool that will allow early identification of students with special needs. Special vocational and guidance efforts may thus be effected by both schools and guidance counsellors already from form level 8, including compulsory bridging in form level 9, in order to support the educational readiness of students as they complete primary and lower secondary school.

The focus will also mean that guidance activities for students without special guidance needs – in addi-

tion to the cross-disciplinary education and guidance efforts during the transition from school to work, the compulsory introduction courses and the collective guidance – to a higher extent will be based on better utilisation of digital media such as the Education Guide (ug.dk) and eGuidance.

As part of the Folkeskole reform there will also be a tightening of the educational, vocational and job market orientation in the older classes, and there will be better interaction between teaching and various guidance activities. The foundation for the individual student's educational readiness will thus be better supported through the daily lessons.

In order to give students a first impression of the vocational post-compulsory educations (VETs, EUX, HHX and HTX), compulsory introduction courses will be reintroduced at form level 8, and pupils must participate in introduction courses regarding vocationally oriented educations. This will ensure better knowledge about the many education opportunities.



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