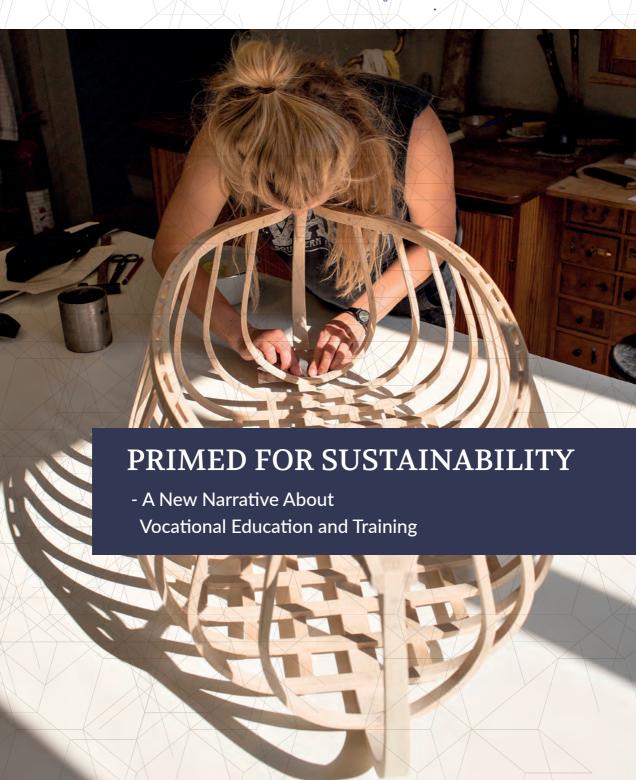


Danish National Commission for UNESCO



### PRIMED FOR SUSTAINABILITY

- A New Narrative About Vocational Education and Training

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#### Text:

Dorthe Chakravarty, on the basis of a report written by Flemming

Olsen.

The Danish TVET Association has contributed with data.

## Graphic design:

Press and communications secretariat, Ministry of Children and Education

### Illustrations:

Henriette Mørk www.henriettemork.dk

#### Photos:

Front page: Lars Just / Ritzau Scanpix

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Complete list of recommendations and the report at: www.unesco.dk

#### Contact:

Permanent Delegation of Denmark to UNESCO

1, rue Miollis

75732 Paris Cedex 15

Tel.: +33 1 45682929

Email: dl.denmark@unesco-delegations.org

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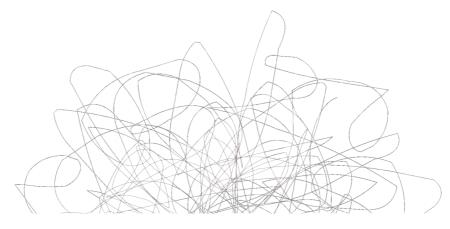
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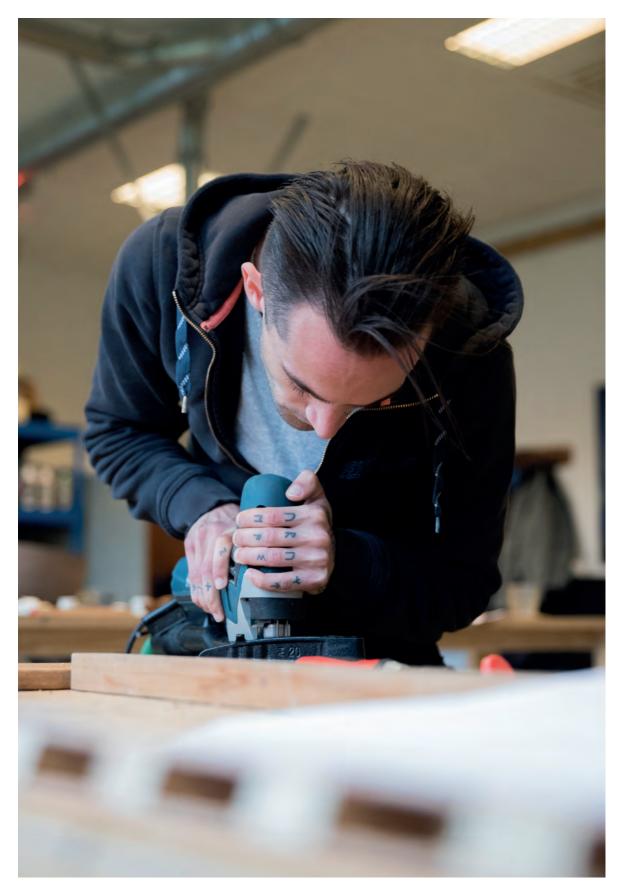
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## **Preface**



limate change is one of the greatest threats of our time. How we deal with it will be a defining issue for the future of mankind. Accelerating appropriate action across the world will be a social, environmental, and economic imperative.

The 2015 Sustainable Development Goals and the Paris Agreement serve as our common point of departure. These decisions prove that the international communi-

ty is able to deliver both ambitions and plans to address the challenges ahead. The transformations needed will require the creation of new green industries and the greening of existing ones. We need multiple actions to reduce the environmental impact of industrial processes and products. All such actions rely on new green skills being available in key economic sectors.

Millions of young people have taken to the streets more recently to protest in favour of climate action. The youth want to be part of the solution, and they will deliver, if they are given access to the quality education, we promised them. They will need education to develop new skills – green skills. Young people should see Technical and Vocational Education and Training (TVET) as a gateway to the furthering of green industries that actively demonstrate Corporate Social Responsibility. Greening TVET is the way forward. Advancing green human capital will contribute to a new generation of skilled people being proud of their ability to act in favor of a more sustainable future. Their feeling of well-being in itself is important, and will contribute to making TVET more attractive. It is a journey and UNESCO provides a toolbox to assists key stakeholders – both TVET institutions and private companies – to take joint climate action across the world.

CARSTEN STAUR

Ambassador of Denmark to UNESCO



"Vocational education connects smart hands with smart minds. I am delighted to be receiving vocational training because it equips me with the concrete knowledge, skills and perspectives I need to help create the sustainable solutions of the future."

Student media and graphics

When VET institutions work with a clear profile concerning sustainability, they are able to attract more students. Such clarity also strengthens businesses that employ them, first as trainees and then as employees equipped with concrete solutions and working methods attuned to sustainable approaches.

And this provides VET institutions, businesses and students with exclusive opportunities to collaborate at both local and international level, to acquire new knowledge and to strengthen their brands. These are among the conclusions of the report "Primed for Sustainability – A New Narrative About Vocational Education and Training", published by the Youth Town for the Danish National Commission for UNE-SCO. Interviews with students, tea-

chers and heads of Danish vocational institutions confirm the view of the National Commission that the 17 Sustainable Development Goals can contribute to the development of a new narrative about the role of VET institutions as a means of accessing industrial sectors that actively participate in the shift towards a more sustainable society.

This is a summary of the main conclusions of the report, along with a number of concrete proposals and recommendations about ways in which the education sector, UNESCO and other parties associated with vocational training might work together to produce a fresh and important narrative about the role of vocational institutions in both attracting more students and contributing to a sustainable future.

# Findings of the report ...

The Danish National Commission for UNESCO is keen to contribute to an ongoing dialogue and to enter into partnership; that are able to assist in the development of this new narrative.

- ... almost a fourth of Denmark's vocational inst trations have a strategic focus on the Sustainable Development Goals, both in terms of their teaching programmes and in their day-to-day activities.
- in teaching students about sustainability makes them agents of change who are able to help create sustainable solutions within businesses and their local communities roles that they continue to fulfil when they enter the labour market as newly qualified employees.
- ... VET institutions find that sustainability motivates students, particularly when the focus is on concrete action that can overcome a sense of powerlessness with regard to environmental and climate problems. Developing an approach to sustainability centred on inventive teaching methods engenders innovation and creative thinking.

- .. teaching sustainability also helps to produce insightful students with their own convictions, furnishing them with a sense of identity.
- .. there is considerable potential in colleges having an integrated.
- ... a fourth of vocational colleges include the Sustainable Development Goals and sustainability in their programmes in order to meet the demands of the labour market for skills in precisely these areas.
- ... UNESCO's global network can reinforce the efforts of colleges by sharing new knowledge and through international recognition.

The report's recommendations and conclusions draw upon data from, firstly, qualitative interviews with governing bodies, teachers and students from four colleges representing the four main disciplines taught as foundation courses by vocational colleges, and, secondly, questionnaires completed by principals of vocational institutions offering trade, technical and social work courses, as well as heads of adult education colleges.

## Sustainable Development Goals and vocational institutions

The UN has adopted 17 ambitious Sustainable Development Goals (SDGs) to sustainable development". towards a sustainable future. The transition to sustainability requires major changes in the way we think about skills, knowledge and competencies. For this reason, the education sector is a critical part of the process, as stated in target 4.7.

"IBy 2030 [we must] ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural

diversity and of culture's contribution

The SDGs establish a new framework for education, such that technical knowledge is no longer the only objective, but the complete individual and their values are also afforded an important role. Students regard sustainable activities as part of their identity, and it is therefore also important to develop their ideals and perspectives with regard to their specialisation and to the wider world. In this, vocational institutions can play a part in breaking down, for example, gender stereotypes and prejudices by offering a powerful narrative about how they work with sustainability.



# Sustainability is more than just the environment

Sustainability should be understood multidimensionally in relation to environmental, economic and social and cultural sustainability. This means that it is not enough to focus only on the environment.

In order to bring all three elements into play, colleges must, for example, sort their waste or make use of sustainable materials; through theoretical and practical learning, students should learn to develop products that create both environmental and economic value; and to achieve social and cultural sustainability, educators must create the necessary space for diversity among new students and future employees in the business world, including women, men, the LGBT+ community, people with disabilities and people with a different ethnic background.

## The SDGs motivate students

Almost a fourth of Denmark's vocational institutions work with the Sustainable Development Goals in their teaching and day-to-day activities. At these colleges, teachers and management have found that students are motivated by working both practically and theoretically with the SDGs. It is therefore evident that many more vocational institutions should include these ambitious goals on their agendas, particularly as the report also evidently shows that, when vocational students are asked, they feel like they are making a difference by working with sustainability, regardless of wheth-er they are training to be chefs, graphic designers, carpenters or data technicians.

What is decisive for students is that the concept of "sustainability" takes a concrete form in their specific courses and that they acquire the knowledge and skills necessary for practical work. This was the case, for example, with gastronomy students who made muesli bars from grasshoppers, or for data and communication students who were involved in the proposals for a sustainable ferry service to Bornholm. When students are creative and productive, developing biodegradable bottles, seasonal menus or computer programmes to measure CO2 emissions, they are motivated and primed with a sense of worth and identity.

# Sustainability issues provides educators with valuable learning opportunities

Statements by teachers and students support the view of the Danish National Commission for UNESCO that sustainability motivates the students, not least when the focus is on concrete activities. The teachers' experience has shown that practical solutions help students to overcome a sense of powerlessness with regard to environmental and climate problems. From the students' perspective, developing an approach to sustainability centred on inventive teaching methods engenders innovation and creative thinking. For example, a teacher of Creativity, Activity and Services and the visual arts at an international vocational institution asked students to create posters themed on gender equality (SDG 5). The posters were subsequently displayed at an exhibition; as such, the importance of equality in relation to the achievement of the SDGs was widely disseminated and placed on the agenda. A carpentry lecturer, teaching students about CO2 emissions in the building industry, taught about the significance of grass roofs in the face of heavy rainfall, and how the water is collected, thereby minimising pressure on the sewerage system.

"We need to educate our students so that they have the skills necessary for a future labour market, the nature of which and whose requirements we simply do not know yet. Our first-year students will be on the labour market for up to 50 years, so we must teach them how to take charge of their own lives and to be open to lifelong learning and social mobility." (Chief of Education).

Sustainability as a theme makes vocational institutions more attractive, students take more pride in them and the prestige of the colleges grow

Interviews with management representatives also show that there is considerable potential in focusing on sustainability in teaching and day-to-day operations. A fourth of the leaders interviewed include the SDGs and sustainability in the college programme in order to meet the demands of the labour market for skills in these areas. The 17 Goals consistently provide new teaching materials within areas such as social science, technology and economics. Sustainability as a theme makes colleges more attractive for existing and future students, who take a greater sense of pride in their education, while the prestige of the vocational institution themselves grows, particularly when their message about sustainability is communicated more broadly to the outside community.

Many of the vocational institutions that have contributed to the report are also attentive to the SDGs in relation to the college buildings and their day-to-day operations, for example through their optimal use of energy, waste sorting and in their use of plastics. In other words, it is important that institutions themselves operate in accordance with the principles that they teach their students.

# A new narrative with deep roots among actors within the VET sector

Vocational institutions are in close contact with businesses. This can occur during school hours, when students undertake work experience, and also following their education, when vocational institutions send their newly qualified students onto the labour market, where the sustainability profile of the colleges plays a role. Some students discover that they can function as agents of change within the workplace, challenging traditional ways of working and habitual patterns of thinking by, for example, drawing attention to something as simple as waste sorting and recycling. These skills and concrete actions can also play a part in the development and creation of value for the company's branding as a sustainable business.

"We hope that, equipped with our knowledge, we can play a part in encouraging sustainable practices in the workplace."

Gastronomy student

However, the report shows that students can encounter challenges when their college and the company, in which they are undertaking work Experience, take different approaches to sustainability. This underlines the need for a shared narrative that is consistent between the partners that are responsible for the students' training.

# Strengthening the educational culture of vocational training

"From pupil to skilled worker – Vocational Education and Training for the future" is a broad political agreement, one of the intentions of which is to improve all-round personal development as part of the educational process within vocational institutions, and to support the schools' collaboration with entrepreneurship. In this context, the report shows that there is great potential in incorporating an awareness of sustainability as a central component in the concept of vocational education.

The report shows that VET institutions, students, teachers and companies all

see themselves as part of the narrative around sustainability in education and all-round development, which suggests that students not only require knowledge, but also need personal development and to take a position with regard to sustainability.

As well as working with the concept "primed for sustainability", it is recommended that sustainability should also form one aspect of the relationship with entrepreneurship as part of the political agreement's goal of strengthening the work of vocational institutions with entrepreneurship.

## UNESCO: helping to create a new narrative

UNESCO's provides the latest knowledge and momentum and branding for vocational institutions, the municipalities in which they are based and the businesses they cooperate with and train students for. When the students quoted in the report refer to themselves as agents of change, it speaks to the global climate movement that is

mobilizing youth all over the world.

UNESCO's global networks of "Learning Cities" and "Creative Cities" can also be useful in the effort to strengthend a new narrative about VET and sustainability. These networks help create momentum in the cities' sustainable development, and they pro-

vide concrete tools to facilitate and set frameworks for local initiatives involving educational institutions, businesses and civil society.

The networks also provide opportunities to acquire and share new knowledge that can carry the work forward. (See below for more about the Learning City of Sønderborg and the Creative City of Kolding.)

UNESCO also heads the "UNEVOC Network", a global network for vocational colleges, whose objective is to strengthen the development of technical and vocational education and to transform key institutions into agents of change.

Based on its experience with this network, UNESCO has published a guide, "Greening Technical and Vo- cational Education and Training – A practical guide for institutions". The guide takes as its premise the idea that vocational training can be made more attractive by furnishing it with a sharper sustainability profile, and it offers advice to leaders and practitioners within the technical and vocational education sector in adapting courses for a sustainable future through a holistic approach to the

"A narrative about sustainability is also a narrative about being primed in the natural sciences and such knowledge and skills being incorporated into sustainable solutions"

creation of sustainable educational institutions.

The teaching of sustainability at vocational institutions provides students with the skills to contribute to the transformation towards a more sustainable society. This means that newly qualified workers with the knowledge and skills to create solutions will have a greater chance of obtaining employment, while at the same time becoming the driving forces within businesses in terms of developing the products that will be most sought after in the future.

You can read the whole guide in English here:

https://unevoc.unesco.org/up/gtg.pdf

#### The vocational college's interaction with the local community

"EUC South" is the largest educational institution in Southern Jutland, with locations in Sønderborg, Aabenraa, Haderslev and Tønder. The college offers a variety of vocational courses, as well as technical courses at upper secondary school level and the International Baccalaureate (IB). EUC South participates in the UNESCO Associated Schools Project and thus works with sustainability on a daily basis. Moreover, the municipality of Sønderborg is part of UNESCO's Learning Cities network, an international network of cities, municipalities and local communities working to secure sustainable development and growth through the inclusion and education of their citizens. EUC South plays a central role in the network's activities in Sønderborg municipality, including in relation to the city's target of being CO2 neutral by 2029. When a vocational college is such a dynamic player in the development of a sustainable local community, the collaborative efforts of the various sectors and civil society are reinforced. This is important for the college, too, because its employees work on the basis of a coherent institutional strategy that covers course content and the operation of the college itself - with the result that its own activities can be used as an example of sustainable solutions and the students can see that their college is run with an eye for the future.

### The expertise and products of a vocational college go a long way

Hansenberg occupies three separate sites in the municipality of Kolding. The college offers 25 different programmes, ranging from academic to technical courses and combinations of the two, as well as providing student accommodation. Like EUC South, Hansenberg has adopted a holistic institutional strategy towards sustainability, ensuring that it covers both day-to-day operations and teaching. Since 2017, Kolding municipality has been a member of UNESCO's "Creative Cities" Network, as what is known as a "Design City". Kolding is making use of a design-based approach in its sustainable urban development for the future as part of its implementation of the UN Sustainable Development Goals. In this context, students from the college have been active, producing park furniture and creating seedbeds out of windows discarded as part of an urban renewal project. The teachers instruct the students in energy-conserving production methods, climate security and the circular economy. The college has now purchased its first electric car; in the future, the students will utilise such cars. In 2017, some of the college students designed a green container as part of Kolding's annual Design Week. These kinds of activities make students local agents of change and, through the Creative Cities Network, their work attracts national and international attention. It is also important for the college that its advances in sustainability are acknowledged with the award of prizes for its contribution towards progress. These developments help brand the college and strengthen its narrative about sustainability in education -- in the widest sense of the term - such that students not only acquire knowledge, but can also develop on a personal level and shape their own perspectives on sustainability.

"We have opend our eyes to how voluntary work can support we have opend our eys developments towards a more sustainable future, both in terms of the environment and personal well-being, as well as in relation to international cooperation. It is truly exciting, and my artistic studies also help support my studies in other disciplines. My biology notes often take the form of sketches rather than words."

Student who has worked in the fields of art, charity and voluntary work

## **Recommendations:**

- collaboration between the education sector and private companies should lead to a new narrative about Vocational Education and Training providing qualifications within the creative, productive and sustainable sectors.
- sustainability should be understood as the interplay between social/cultural, economic and environmental sustainability.
- efforts should be made to attract students to the full range of vocational courses, cutting across gender, ethnic and social backgrounds.

- efforts towards sustainability must take place in collaboration with actors across the education sector at all levels incl. municipalities, trade union confederations, industries, vocational colleges, primary schools, businesses and not least UNESCO.
- collaboration between networks should be supported with regard to the sharing of experience about didactic and methodological approaches to teaching sustainability, relevant actors.
- the provision of training in sustainability requires a holistic approach towards all aspects of an educa-

tional institution, including not only the content and methodology of the teaching itself, but also the institution's management, its organisation, buildings and grounds, and the institution's relationships with the local community.

- a didactic and methodological approach should be applied to the development of teaching processes, ensuring that students acquire the skills they need to contribute to the creation of sustainable solutions.
- sustainability requires
   bridge-building from primary and
   secondary schooling to young
   and adult education, and students
   themselves must be empowered
   to participate as a resource in the
   institutions' sustainability work.
- sustainability should also be included as an integral part of the colleges' adult education courses.
- expertise and skills relating to sustainability are linked to the wide-ranging educational objectives described in government policies e.g. in Denmark, the po-

- litical agreement "From pupil to skilled worker – vocational training for the future".
- opportunity that UNESCO provides to help support a new narrative: This would imply to translate and disseminate the key messages from UNESCO's guide, "Greening Technical and Vocational Education and Training", and inspire more members of UNESCO's "Learning Cities" and "Creative Cities" Networks to disseminate the positive outcomes in relation to VET and sustainability in order to recruit more members.
- "best practices" and "next practices" should be disseminated, and networks should be set up among vocational institutions and between colleges and high schools to share experience and inspiration.
- more research into the ways in which the focus on a narrative about sustainability can impact upon educational choices should be conducted.

