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Workforce education in Denmark

Bryce Erdman

Denmark is known for its well-funded, tertiary education system that allows students to obtain most degree levels without much debt. However, due to a variety of factors, there is a shortage of students who pursue long-term degrees. This article presents an overview of the workforce education system in Denmark, analyzes the strengths and weaknesses of the system, and proposes recommendations to address these issues.

Introduction

The Danish education system is viewed throughout the world as a well-developed model of secondary and tertiary education where students worry less about paying tuition and more about making the most of the experience. Yet, what many do not realize is that Denmark has an expansive system of vocational schooling that occurs both during and after what would be the US equivalent of high school. This system leads to high employment in traditional blue-collar and certain lower-level white-collar jobs. However, the Danish workforce is also in need of higher-level professional workers, including engineers, health-care experts, and lawyers (European Commission, 2023). Due to a combination of the tax structure and a resulting lack of incentive for seeking out higher salaries, as well as the job security provided by the vocational system, Denmark has a shortage of these skilled workers. To expand the number of students pursuing longer-term tertiary education in technical professional fields, Denmark must promote the personal and societal values of such positions, at the same time making the transition from current vocational training more readily attainable.

Danish education system

Danes have a strong sense of responsibility when it comes to education. Known as *ansvar for egen læring* (responsibility for own learning), this philosophy has been prominent in policies throughout the late twentieth and early twenty-first centuries (Cort, 2010). Danes live up to this responsibility, with 80% of students continuing into upper secondary education once they complete their compulsory schooling. In Denmark, compulsory schooling ends with the ninth grade when students are 16 years old. They then have the option to attend tenth grade, and most do in order to boost their grades or to help them

decide on a future career path (InterNations, 2022). Following the tenth grade, upper secondary education takes place between the ages of 16 and 19 and prepares students for additional vocational or tertiary education. Danish citizens remain dedicated to education throughout life, with many returning to either vocational or tertiary education after the age of 25 (Organisation for Economic Co-operation and Development [OECD], 2023).

Secondary education

Upper secondary education has two distinct tracks, the first of which is meant to enhance students' in-class education, while also preparing them for a specific job or further vocational training upon completing the program. In this track, students can choose between four different curricular subsets that align with their interests. At the conclusion of each, students must pass an exam to qualify for moving on to university education. Table 1 outlines the scope and duration of each of these paths.

The objective of the Higher Preparatory Examination curriculum is to prepare students to pass the qualifying exams at selective vocational schools or university colleges for tertiary education, whereas the Higher General Examination curriculum allows students to specialize in subjects such as humanities, social science, and natural science (Ministry of Children and Education, 2022). In contrast, both the Higher Commercial Examination and the Higher Technical Examination are more focused programs. Students interested in business and socioeconomic topics may choose the former; students interested in science and technology may choose the latter (Adams et al., 2017). The goal of the Higher Commercial Examination and the Higher Technical Examination programs is to give students a greater chance of admittance into business and technical colleges than

Table 1
Higher secondary education academic programs

Name	Duration (years)	Scope
Higher Preparatory Examination	2	Preparation for university entrance examination (must have completed tenth grade)
Higher General Examination	3	Preparation for broad background of majors
Higher Commercial Examination	3	Business and economics
Higher Technical Examination	3	Science and technology

Source: Ministry of Children and Education, 2019.

those students who complete the Higher General Examination or Higher Preparatory Examination programs (Ministry of Children and Education, 2022).

The other upper secondary track is vocational. Approximately 26% of Danish students choose from the three available vocational programs, which emphasize an approximately 50/50 split between classroom learning and hands-on work. Table 2 outlines these three programs, along with a fourth, Vocational Education and Training for Adults that is specifically for people over the age of 25.

The Basic Vocational Education and Training program is focused on giving students the skills they need to move directly into the workforce or to further vocational training. Alternatively, Vocational Education and Training emphasizes the importance of students taking part in apprenticeships and internships and often leads to students moving into the labor force after completing the program. Finally, the Vocational Education and Training including

General Upper Secondary examination curriculum provides students with the best opportunity to complete a vocational education while not sacrificing the option to go to college (Ministry of Children and Education, 2019).

During their time in each of these programs, students have no tuition costs and are often compensated financially for their work. These vocational programs emphasize the autonomy of local vocational institutes and allow them to adapt curriculum to what is most needed in their municipalities (Vujkov & Andevski, 2021). As a result, vocational institutions are often connected with at least one local training committee responsible for preparing curriculum and connecting the institution with the labor market. These committees are populated with local employers and employees who understand the job market. In this system, the trade committees, which have the best understanding of what the market needs, present recommendations to the education ministry based

Table 2
Higher secondary vocational programs

Name	Duration (years)	Scope
Basic VET	1.5–3	Combination of classroom and hands-on preparation for industry with priority for work-based learning (approximately 75% work-based learning)
VET	3.5	More focus on hands-on preparation through internships (approximately 66% work-based learning)
VET including General Upper Secondary examination	4–4.5	Combination of upper secondary curriculum and VET, providing opportunity for tertiary education (50% work-based learning)
VET for Adults	3–5	VET specifically for people above 25 years of age

VET, Vocational Education and Training.

Source: Ministry of Children and Education, 2019.

Table 3
Tertiary education programs

Program	Duration (years)	Scope
University	5	Three-year bachelor's degree followed by two-year master's degree. Qualifies student for a doctoral program. Fields include engineering, health care, law, etc.
University College	3–4	Bachelor's degrees in subjects such as social work, engineering, and business.
Academy Profession degree	1.5–2.5	Focus is on practical skills and immediate entry into the workplace. Fields include business, technology, design, and certain levels of health care.

Source: European Education Directory, 2014.

on employment forecasts, skills assessment, and training requirements (European Centre for the Development of Vocational Training [Cedefop], 2012). The ministry then makes changes to the vocational curricula based on these recommendations (European Commission, 2022c). Table 2 summarizes these vocational programs.

Tertiary education

Tertiary education is defined as any level of education completed after secondary or high school and may be referred to as higher education or university. Currently in Denmark, approximately 38% of students complete some level of tertiary education, placing them at the average percentage among the 38 members of the OECD (2019). Denmark's goal is for at least 50% of students to receive some form of tertiary education (Vujkov & Andevski, 2021).

Tertiary education consists of three paths for students to follow: University, University College, and Academy Profession. University programs are the longest and most academically rigorous of the three; they include both undergraduate and graduate work. University College programs emphasize theoretical knowledge along with hands-on training. Completion of one of these programs awards students a bachelor's degree and prepares them for positions traditionally held by college-educated workers. Finally, Academy Profession degree programs use in-class learning as well as in-office internships to best prepare students to enter the workforce. Academy Profession programs also allow students the option of returning to complete a full-length bachelor's degree at a later time (Danish Agency for Higher Education and Science, 2022). All tertiary education programs are available to citizens of Denmark, the European Union (EU), and Switzerland for no cost. Table 3 outlines the types of tertiary education.

The Danish job market

In general, the Danish job market is strong, with an unemployment rate of 4.5% in 2022 as opposed to the EU average of 6% (European Commission, 2023). With its well-developed vocational education system, Denmark has strong employment for skilled trade workers. Although these jobs will always be in demand, they do not top the shortage lists published by the government. Participation in trade unions is high (approximately 66% of the population), with the largest union representing some 1.15 million employees (European Trade Union Institute, 2022). These unions help workers negotiate better salaries and supplement the social safety net in Denmark, further incentivizing Danish workers to complete shorter terms of education and take mid-level positions.

Table 4 provides a summary of the shortage list in 2019 (before the COVID-19 pandemic) and at the beginning of 2023. It shows that fields like health care and engineering have continued to see a shortage of positions. In fact, doctor shortages have long been reported, and Denmark has gone about solving this shortage by appealing to the EU and the European Employment Services to fill up to 200 openings with non-Danish doctors. Despite the program's success, it serves as an example of Denmark's inability to provide enough quality candidates for these positions. On a similar note, the Danish Society of Engineers (2018) recently reported that unemployment for engineers is extremely low. The same can be seen in the information technology and education fields. Meanwhile, the number of job openings in corporate and management positions has fallen since the beginning of the pandemic.

Denmark also has well-developed white-collar unions to provide a support structure for employees. The second largest organization of unions in

Table 4
Labor shortages for jobs requiring tertiary education

Job field/ type of position	Positions with shortages 2019	Positions with shortages 2023
Corporate/ management	Finance manager, head of division, sales manager, etc.	Head of product
STEM	Statistician; actuary; mechanical, electrical, and civil engineers, etc.	Chemist; biologist; environmental, civil, and mechanical engineers; town planner, etc.
Health care	Doctor, consultant, nurse, dentist, chiropractor, etc.	Doctor, nurse, veterinarian, dentist, occupational therapist
Education	Primary and secondary teachers, social worker, etc.	Ph.D., professor, primary and secondary teachers, etc.
Information technology	Architect, engineer, project manager, consultant, etc.	Architect, engineer, project manager, consultant, etc.
Law and societal needs	Attorney, judge, legal officer, assistant prosecutor, counselor, etc.	Legal officer, psychologist, social worker, etc.

Source: Danish Agency for International Recruitment and Integration, 2023.

Denmark is known as the *Akademikerne* (Danish Confederation of Professional Associations). It includes almost 400,000 workers, all of whom have completed a level of higher education. This cohort of unions includes the Society of Engineers and the Association of Lawyers and Economists, among others. The members of the *Akademikerne* perform tasks like those of the labor unions, such as helping their members negotiate fair pay and find suitable positions. The *Akademikerne* is also part of the trade committees, mentioned previously, which create and submit reports to the Danish government on how to best approach the most current workforce trends. The members of the union are well supported and represented, leaving no reason for the union structure to be an inhibitor to seeking an upper-level job (European Trade Union Institute, 2022).

Key issues

As noted previously, the Danish education system has the necessary facilities to prepare students for tertiary education. At the same time, all Danish and EU citizens have access to tertiary education at no cost. Once they have completed this education, there is demand for workers, and unions are in place to help workers receive adequate wages and navigate the Danish “flexicurity” economic model. The flexicurity model emphasizes employment security over job security, allowing employers to hire and fire freely while also reducing the average duration of unemployment. However, Denmark continues to see a shortage of individuals pursuing bachelor’s and master’s degrees, instead seeking short-term, two-

three-year degrees, equivalent to an associate’s degree in the United States. Reasons include lack of economic incentives due to the Danish job market and tax structure, societal norms such as work-life balance and gap years, the success of the vocational education system, and lack of a clear path from vocational education to college education. Finally, the presence of non-tuition-paying international students adds to the financial impact education has on the Danish economy.

Job and financial security incentive

An important reason many people pursue tertiary education throughout the world is the common belief that completing this level of education increases job security. Among the OECD countries, the pre-COVID-19 employment rate for tertiary-educated employees was 9% higher than those with less education (OECD, 2019). In Denmark, however, there was a much lower difference, 5%, due to benefits, such as the flexicurity model and employment security, provided for people with all levels of education. Combined with Denmark’s well-developed social safety net, which includes unemployment benefits lasting two years and up to approximately 20,500kr (\$2780) a month, the incentive to pursue a longer education or higher-level job is not nearly as strong (European Commission, 2022a).

Another important inhibiting factor that Danish students and workers face when deciding to pursue upper-level jobs, for instance, health care, engineering, and law, is that the pay incentive to take these positions is underwhelming versus the rest of the

EU. Throughout the EU, tertiary graduates make 57% more on average than those with upper secondary education. However, in Denmark, graduates with a tertiary degree earn just 28% more, as of 2019 (OECD, 2019), while graduates of short-term tertiary programs make 5% more on average than those with bachelor's degrees. These comparatively low percentages are due in part to Denmark's average personal income tax rate of 56% compared to the OECD average, 42.6% (OECD, 2019). As a result, many Danish students chose to pursue short-term tertiary education, with 26% of students choosing short-term programs versus the OECD average of 17% (OECD, 2019).

Societal norms

Another reason Denmark has problems recruiting workers into the upper levels of education and the job market is the amount of time and the dedication required to gain access to and maintain these roles. According to experts on the Danish labor market, Danes take pride in their work but are not as attached to their job as are workers in other countries, leading to higher levels of turnover from position to position and slower vertical movement (T.B. Hougaard & M.M. Auken, remarks to Martindale Center, August 12, 2022). According to the OECD, a mere 1.1% of Danish employees work "long hours," defined as greater than 50 hours each week, as opposed to the average of 10%. Moreover, Danish workers spend 15.7 hours a day on average sleeping, eating, socializing, exercising, and recreating in contrast to the OECD average of 15 hours a day, ranking them fourth of 41 countries. For reference, the average worker in the United States dedicates 14.6 hours to these activities, and 10.4% of employees' working weeks are greater than 50 hours (OECD Better Life Index, 2023). Based on these statistics, Danish employees spend on average an extra hour per day on themselves and less time in the office in general, which means that average Danish workers are not using an elongated schedule to prove they are worthy of a new position nor do they necessarily seek out positions that require working longer hours if the financial incentive, as mentioned previously, is not substantive.

Besides seeking the proper work-life balance, Danish students frequently take gap years after high school. These breaks are not necessarily a troublesome social phenomenon, because they help create more well-rounded citizens, but they deprive the labor market of qualified candidates for one or more years while these students finish their education (S.H. Knudsen, remarks to Martindale Center, August 16,

2022). Additionally, spending time outside of the country leads to students choosing to not return to study and work in Denmark (European Commission, 2023). Although these choices may be beneficial to students, they reduce the number of candidates to fill much-needed roles in Denmark.

Vocational education systems

Although many Danish students believe the education system is successful at reducing the pressure they face when choosing their educational and career path, this system is also creating problems for students and for the economy (S.H. Knudsen, remarks to Martindale Center, August 16, 2022). Specifically, critics emphasize how the intense structure of the vocational educational system, especially at a relatively early age, makes it difficult for students to transition back to school even if they wish (Ibsen & Thelen, 2020). Of those who enter a vocational track, as of 2017, just 3% pursued the Academic Preparation Program, which is best suited to prepare students for tertiary education (Cedefop, 2019). Such high participation in vocational programs and short-term tertiary programs below a bachelor's degree, as mentioned previously, reduces the pool of candidates for long-term bachelor's, master's, and doctoral degrees. Furthermore, the average age of Danish students enrolling in these short-term programs is 30 versus the OECD average of 25, which is a concerning trend.

International students

In recent years, Denmark has been working to place limits on the number of international students it accepts into university programs, as 11% of students in Danish tertiary education are international compared to 6% on average across OECD countries. Studies have found that only a third of these students have a positive net contribution on the economy since they leave the country after graduating (International Consultants for Education and Fairs [ICEF], 2018). Furthermore, 83% of those international students are from European countries; thus, they enjoy the same access to free education in Denmark as Danish students. Across the rest of the EU, the percentage of international students from other European countries is only 42% (OECD, 2019). There are varied explanations, including ethnic and racial differences. Denmark struggles to attract international students from low-income, non-European countries as the cost of living and tuition is too expensive. In fact, 7% of international students in Denmark are from lower-income countries as opposed to 29% in the rest of the OECD countries (OECD, 2021). Consequently, Denmark is missing out on the wealth of knowledge

that comes along with students from different cultural backgrounds as well as the tuition they would be contributing.

Specifically, these international students tend to take advantage of the reduced tuition to attain higher levels of tertiary education: 36% of doctoral students in Denmark are international students versus the OECD average, 25% (OECD, 2019). This means that Danish universities are not counteracting the shortage of Danish students pursuing master's and doctoral degrees as fully as they might. Furthermore, once international students finish their programs, 26% of them leave within three months and 38% leave within 21 months (ICEF, 2018). Accepting more international students was intended to help remedy some of the country's economic shortfalls; however, it seems to have resulted in more of a burden on the Danish economy, while not really resolving the employment shortages in certain professional fields.

By way of summarizing the issues, OECD indicators show a definite discrepancy between how much Denmark is investing in tertiary education and the number of Danish students who are completing any level of tertiary education, let alone master's and doctoral programs. At an equivalent of \$18,370 per tertiary student, Denmark spends the seventh highest of the 34 OECD countries. Overall, this equates to Denmark spending 1.55% of its GDP on tertiary education, placing them third out of OECD countries, which spend on average 0.93% of their GDP. Although these large expenditures have yielded results (between 2000 and 2021, there was a 20% increase of people ages 24 to 34 with degrees in tertiary education in Denmark), the rest of the OECD saw a 21% increase with a much lower expenditure (OECD, 2023). These numbers are the consequence of societal norms that do not enforce a strict college timeline as do other countries as well as the presence of a vocational education system that was the chief developmental focus of the later part of the twentieth century and beginning of the twenty-first century within the EU. The resulting strains on the economy are exacerbated by the over-representation of non-Danish students taking advantage of free schooling. All the while, the Danish labor force still experiences a lack of educated workers in health care, engineering, and education.

Proposed solutions

Denmark has a variety of challenges pertaining to tertiary education, which it must address to maintain

the integrity of its workforce. One of these issues includes improving the economic incentive for Danish students to seek white-collar jobs that require bachelor's and higher degrees. A second is that Denmark must find a way to make white-collar jobs more appealing to a population that prioritizes a positive work-life balance. More substantially, educational leaders must adapt vocational education to ease the transition from vocational to tertiary education. Finally, tertiary institutions must implement systems to dissuade international students from taking advantage of the education system.

Since 2000, Denmark and the OECD have focused on bolstering their educational attainment rates, especially when it comes to tertiary education. However, the COVID-19 pandemic provided some invaluable lessons. For instance, it emphasized the increased job security that comes with an upper-level education and career, with unemployment increasing by 1.3% for people who had only an upper secondary education but decreasing by 0.2% for people with tertiary education during the pandemic (OECD, 2022). The Ministry of Employment and the labor unions should emphasize these statistics to the Danish public through advertisements to remind them that the job market has moved into a new age and that tertiary education provides workers with skill sets and flexibility to adapt to the changing needs of the job market. Furthermore, this information should be directly disseminated through the Ministry of Children and Education and the Ministry of Higher Education and Science to secondary educators so they can properly tailor their curriculum and guide students. This is an especially important message to convey since Denmark's current COVID-19 economic recovery plan emphasizes investment in green energy and digital development (European Commission, 2022b). This movement will require hundreds of new STEM graduates working in support of Denmark's plan to remain on the cutting edge of development, while continuing to bolster its economy and relieve the pressure on its social safety net.

The pandemic has also helped show that most white-collar jobs can be completed remotely or in a hybrid fashion. By allowing employees to work from home and investing money in equipment to foster remote work, Danish companies can attract more candidates who value work-life balance. In addition, graduates may still choose to spend time abroad while also completing remote on-boarding and training so that they may seamlessly reintegrate to the Danish labor force upon return to the country.

One of the most important changes, one that could be readily implemented, would be to enhance and

¹For more on diversity in Denmark, see Ayambem's article in this volume.

update vocational training for white-collar jobs. A report by Cedefop (2009) outlined the importance of keeping vocational education programs up to date with the current demands of the global economy. An important part of this process is expanding the Initial Vocational Education and Training programs to make the transition from vocational education to tertiary education easier for students. One of the best ways Denmark could go about doing this is creating more connections between vocational programs and universities, much as it does with local businesses and labor organizations.

Furthermore, Denmark could learn from other Nordic countries like Norway and Sweden, which both rank above Denmark in their levels of tertiary attainment (ninth and fifteenth, respectively). Both countries have developed vocational programs in which classroom learning and government curriculum play a more central role than in Denmark. Moving in this direction would help ensure that students who wish to make the transition from vocational to tertiary education are prepared academically. The Cedefop report also recommends vocational institutions continue to develop relationships with white-collar employers to create tertiary-level apprenticeships, which Denmark has begun and continues to do. During the past two decades, Danish businesses have also increased focus on university recruiting. For the Danish education system to produce a greater number of tertiary graduates, college recruitment for jobs must be expanded, and vocational institutions need to build stronger relationships with college recruiters to help ease the transition between vocational and academic education. Vocational training, like the Academic Preparation Program, which prepares students for both the workforce and further education upon completion, also needs to be better advertised to students. Finally, Denmark must encourage unions to foster tertiary white-collar apprenticeships, promote a more academically based curriculum for vocational institutions, and provide increased motivation to pursue these opportunities.

A second major change would involve how Denmark deals with international students. Currently there are a disproportionate number of international students from other EU countries compared to those from non-EU countries in Danish higher education programs, hurting both the economy and the cultural diversity of the student experience. Denmark is working on reducing the number of international students allowed in programs where postgraduate retention rates are low, with an overall goal of decreasing international enrollment by 28% (ICEF, 2018). Yet studies show that accepting students from varying

ethnic backgrounds helps boost extracurricular activities and out-of-major coursework (Luo & Jamieson-Drake, 2013). In order to maintain this balance, Denmark must consider a solution that increases the number of tuition-paying, non-EU international students it takes in, including requiring them to remain in the country and contribute to the economy after graduation. This could be done by requiring international students to sign a contract in which they agree to work in Denmark after graduation for as many years as their degree took them to complete. For each year they work, a year's worth of tuition would be removed from their balance until they no longer have a balance, and they could then leave the country without financial penalty. However, it is more than likely that once they have established themselves in their career in Denmark, they would choose to continue their employment. This system would help reduce the cost of international education on Danish citizens by charging foreign students tuition if they chose to leave or through revenue and taxes they generate by deciding to stay.

Conclusion

The Danish education system promotes well-developed vocational and academic programs for students who have completed lower secondary education. However, due to a variety of factors, including the financial incentive, work-life balance, and societal norms, many Danish students do not complete long-term tertiary degrees. Moreover, most international students who study in Denmark do not pay tuition or remain in the country after completing their education, creating labor shortages in the fields of health care, engineering, information technology, and education. Although the COVID-19 pandemic has helped emphasize the job security that tertiary degrees provide, and recent policies are working to limit the number of international students, Denmark must continue to ease the transition from vocational to tertiary education by following the examples set by other Nordic countries. Finally, it must work to increase the diversity of the tertiary student body by including international students and also implementing a system to incentivize these students to live and work in Denmark after their graduation. If Denmark can enact these changes, its economy and labor force will be better suited to adapt to the changing world markets, while remaining on the cutting edge of science and technology.

References

Adams, C., Eicher, L. C., Kyhlberg, E., & Lofstad, R. (2017). *Secondary education in Scandinavia: Denmark*,

Norway, Sweden, plus the U.S. perspective. The Association for International Credential Evaluation Professionals.

Cort, P. (2010). Europeanisation and policy change in the Danish vocational education and training system. *Research in Comparative and International Education*, 5(3), 331–343.

Danish Agency for Higher Education and Science. (2022). *Academy Profession (AP) degree programme*. Ministry of Higher Education and Science, Kingdom of Denmark.

Danish Agency for International Recruitment and Integration. (2023). *The positive list for skilled work*.

Danish Society of Engineers. (2018). *Unemployment rate for engineers in Denmark at its lowest since the financial crisis*.

European Centre for the Development of Vocational Training (Cedefop). (2009). *Initial vocational education and training (IVET) in Europe: Review*.

European Centre for the Development of Vocational Training (Cedefop). (2012). *Vocational education and training in Denmark*.

European Centre for the Development of Vocational Training (Cedefop). (2019). *Cedefop European database on apprenticeship schemes: Understanding of apprenticeships in the national context*. www.cedefop.europa.eu/en/tools/apprenticeship-schemes/country-fiches/denmark.

European Commission. (2022a). *Denmark: Employment, social affairs & inclusion*.

European Commission. (2022b). *Denmark's recovery and resilience plan*.

European Commission. (2022c). *Eurydice: Denmark: Overview*.

European Commission. (2023). *Labour market information: Denmark*.

European Education Directory. (2014). *Denmark higher education system*.

European Trade Union Institute. (2022). *Denmark*. work-participation.eu.

Ibsen, C. L., & Thelen, K. (2020). *Growing apart: Efficiency and equality in the German and Danish VET systems*. Massachusetts Institute of Technology.

InterNations. (2022). *A guide to education & international schools in Denmark*.

International Consultants for Education and Fairs. (2018, September 8). *Denmark concerned about the high proportion of foreign students who leave after graduation*. ICEF Monitor.

Luo, J., & Jamieson-Drake, D. (2013). Examining the educational benefits of interacting with international students. *Journal of International Students*, 3(2), 85–101.

Ministry of Children and Education. (2019). *Vocational education and training in Denmark*. Kingdom of Denmark.

Ministry of Children and Education. (2022). *About the four upper secondary education programmes*. Kingdom of Denmark.

OECD Better Life Index. (2023). *Work-life balance*. Organisation for Economic Co-operation and Development.

OECD. (2019). *Denmark: Education at a glance 2019: OECD indicators*.

OECD. (2021). *Denmark: Education at a glance 2021: OECD indicators*.

OECD. (2023). *Denmark: Overview of the education system (EAG 2022)*.

Vujkov, A., & Andevski, M. (2022). Education system of the Kingdom of Denmark. [*Journal of Department of Pedagogy*], 30, 101–26.



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