

LIFETRACK POLICY BRIEF
DENMARK

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Findings from the project

In Denmark, children are tracked after 10 years of compulsory, comprehensive schooling. Upon completing lower secondary school after grade nine, children have to choose between two overall tracks: academic or vocational. The academic track (*Gymnasium*) consists of multiple streams but all of them are preparatory for higher education. The vocational track consists of a mixture between schooling and apprenticeship-based training. However, over the last three decades, this two-track system in upper secondary education has come under pressure as the share of students enrolling in the vocational track has declined from 42% in 1986 to 18% in 2016. While the academic track has become the norm among Danish youth, the vocational track today constitutes a less attractive, residual option. The findings of the Danish LIFETRACK cast light on three critical features of the choice-based two-track system that policymakers and other stakeholders should be aware of.

First, increased enrollment in the academic track has created an increasingly ability-diverse student population, leading to higher dropout rates. As Birkelund (2020) shows, ethnic minority students in particular are very likely to choose the academic track, even those with very low levels of academic performance. In the bottom fifth of the performance distribution, every second child of immigrant origin enrolls in the academic track compared to one in four among children of Danish origin. Birkelund's study demonstrates that high-aspiring choices among children of immigrants operate as a double-edged sword as they reduce the ethnic gap in educational attainment, while simultaneously widening ethnic gaps in dropout rates and achievement. From an integration perspective, it is positive that many ethnic minority students wish to pursue an academic degree; however, many drop out as they realize that their skills do not match their aspirations. Providing an attractive vocational alternative for low-performing yet high-aspiring students could be a solution to ensure that these students do not leave the educational system entirely. To achieve this goal, policymakers need to address the difficulties that many minority students face when they attempt to obtain an apprenticeship.

Second, while academic education may develop the academic and cognitive skills of students, vocational education and training furthers the development of personality traits,

which are increasingly rewarded in the labor market. Birkelund (2021) shows that students enrolling in the vocational track experience a large increase in conscientiousness—that is, in industriousness and thoroughness—which is the Big Five personality trait that other studies find to have the largest influence on labor market success. Birkelund also finds that the effect of vocational education and training on conscientiousness is greater among students learning a skilled trade in an apprenticeship position, suggesting that such training fosters conscientiousness through the formation of a skilled worker identity. The study thus suggests that policymakers should pay attention to these hidden benefits of the vocational track: vocational education and training may provide students with a new sense of purpose to boost their work ethic and willingness to learn, all of which likely has a return on the labor market.

Third, Birkelund and van de Werfhorst (2020) show that concerns over vocational education being a diversion away from high-paying jobs may be exaggerated. Their study provides causal evidence on the value of a vocational degree at different choice margins using an instrumental variable approach. The analysis shows that earnings returns do not differ significantly between the academic and vocational track for students placed at the margin between these two choices (i.e., for students considering whether to enroll in the academic or in the vocational track). In contrast, the vocational track provides a strong protection from non-employment and unskilled work compared to early school leaving. These findings are similar to those from another study of the Danish LIFETRACK team (Birkelund, Karlson, and Reimer 2021). Policymakers should consequently pay attention to the different types of vocational students when considering the benefits of vocational education: Vocational education and training presents a particularly advantageous choice alternative for students who would otherwise leave the educational system were they merely presented with the option of continuing in an academic track.

Publications

Birkelund, J. F. (2020). “Aiming High and Missing the Mark? Educational Choice, Dropout Risk, and Achievement in Upper Secondary Education among Children of Immigrants in Denmark.” *European Sociological Review*, 36(3), 395-412.

Birkelund, J. F. (2021). "Educational Tracking and Personality Formation: Evidence from a Dual System." *Social Forces* (Forthcoming).

Birkelund, J. F., Karlson, K. B., and Reimer, D. (2021). Upper secondary school tracking, labour market outcomes and intergenerational inequality in Denmark. *Longitudinal and Life Course Studies*. <https://doi.org/10.1332/175795921X16124376408552>

Birkelund, J. F., and van de Werfhorst, H. G. (2020). "Long-term labor market returns to upper secondary school track choice: Leveraging idiosyncratic variation in peers' choices." Unpublished manuscript. <https://doi.org/10.31235/osf.io/tujz7>

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Further information

LIFETRACK project

 www.lifetrack.eu

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NORFACE DIAL programme

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