

Educational expansion, occupational upgrading, and changes in education-occupation linkage in Sweden

The past few decades have seen dramatic educational expansion accompanied by a shift in occupational structure, which raises important questions regarding whether and how the association between education and occupation has changed over time. Extensive research suggests that there is an increasing vertical mismatch between education and occupation in developed countries because occupational upgrading has often been found to lag behind educational expansion. However, less is known about changes in the horizontal association between educational fields of study and detailed occupational categories.

This study investigates changes in education-occupation linkage in Sweden in recent decades. Using Swedish register data between 2001 and 2021, the results show that the overall linkage between education and occupational systems has remained stable, but the trends for different educational levels and fields of study were fundamentally different. Both educational and occupational compositions have shifted towards stronger education-occupation linkage, but this was counteracted by weakening structural associations at the short tertiary and upper secondary vocational levels. Surprisingly, despite dramatic expansion, the structural association of college education with occupational destinations remained stable. Since college graduates usually work in relatively high-skilled occupations, this means that the occupational structure has been simultaneously upgraded to absorb college graduates. However, with the exceptional expansion of college education, short tertiary education has simultaneously lost its advantages in securing high-status occupations. Taken together, the expansion of upper tertiary education has contributed to a strengthening linkage between the educational system and occupational destinations, but this was offset by a weakening linkage at lower educational levels and resulted in stable overall linkage. These patterns are similar between genders and more pronounced among young workers than among all workers.

This study enhances our understanding of how the relationship between education and labor markets has evolved under the significant expansion of upper tertiary education. In comparison to other European countries, the Swedish educational system is often characterized by low vocational specificity and a loose connection to labor markets. However, recent research indicates that the overall linkage strength is relatively stronger in Sweden due to a higher proportion of workers having educational credentials or occupations that link together relatively strongly. Taking a cross-time perspective, this study illuminates the impact of educational expansion and occupational upgrading on this association. Despite the overall stability in the proportion of managerial and professional occupations, there has been occupational upgrading evidenced by the increased requirements and proportions of college-educated individuals within these occupations. Conversely, short tertiary vocational education has become less connected to occupations over time. These findings also contribute to a better understanding of the employment gap between college graduates and non-college graduates in labor markets.