

ILO Working Paper 137
April / 2025

The untapped potential of disadvantaged young people for apprenticeships in skilled trades

Author / Patrizia Hasler



© International Labour Organization 2025



Attribution 4.0 International (CC BY 4.0)

This work is licensed under the Creative Commons Attribution 4.0 International. See: https:// creativecommons.org/licenses/by/4.0/. The user is allowed to reuse, share (copy and redistribute), adapt (remix, transform and build upon the original work) as detailed in the licence. The user must clearly credit the ILO as the source of the material and indicate if changes were made to the original content. Use of the emblem, name and logo of the ILO is not permitted in connection with translations, adaptations or other derivative works.

Attribution – The user must indicate if changes were made and must cite the work as follows: Hasler, P. *The untapped potential of disadvantaged young people for apprenticeships in skilled trades*. ILO Working Paper 137. Geneva: International Labour Office, 2025.© ILO.

Translations – In case of a translation of this work, the following disclaimer must be added along with the attribution: *This is a translation of a copyrighted work of the International Labour Organization (ILO). This translation has not been prepared, reviewed or endorsed by the ILO and should not be considered an official ILO translation. The ILO disclaims all responsibility for its content and accuracy. Responsibility rests solely with the author(s) of the translation.*

Adaptations – In case of an adaptation of this work, the following disclaimer must be added along with the attribution: *This is an adaptation of a copyrighted work of the International Labour Organization (ILO). This adaptation has not been prepared, reviewed or endorsed by the ILO and should not be considered an official ILO adaptation. The ILO disclaims all responsibility for its content and accuracy. Responsibility rests solely with the author(s) of the adaptation.*

Third-party materials – This Creative Commons licence does not apply to non-ILO copyright materials included in this publication. If the material is attributed to a third party, the user of such material is solely responsible for clearing the rights with the rights holder and for any claims of infringement.

Any dispute arising under this licence that cannot be settled amicably shall be referred to arbitration in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL). The parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of such a dispute.

For details on rights and licensing, contact: rights@ilo.org. For details on ILO publications and digital products, visit: www.ilo.org/publns.

ISBN 9789220419007 (print), ISBN 9789220419014 (web PDF), ISBN 9789220419021 (epub), ISBN 9789220419038 (html). ISSN 2708-3438 (print), ISSN 2708-3446 (digital)

https://doi.org/10.54394/PQRO8797

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the ILO concerning the legal status of any country, area or territory

or of its authorities, or concerning the delimitation of its frontiers or boundaries. See: www.ilo. org/disclaimer.

The opinions and views expressed in this publication are those of the author(s) and do not necessarily reflect the opinions, views or policies of the ILO.

Reference to names of firms and commercial products and processes does not imply their endorsement by the ILO, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Information on ILO publications and digital products can be found at: www.ilo.org/researchand-publications

ILO Working Papers summarize the results of ILO research in progress, and seek to stimulate discussion of a range of issues related to the world of work. Comments on this ILO Working Paper are welcome and can be sent to rskills@ilo.org.

Authorization for publication: Akiko Sakamoto, Senior Skills and Employability Specialist

ILO Working Papers can be found at: www.ilo.org/global/publications/working-papers

Suggested citation:

Hasler, P. 2025. *The untapped potential of disadvantaged young people for apprenticeships in skilled trades*, ILO Working Paper 137 (Geneva, ILO). https://doi.org/10.54394/PQR08797

Abstract

Skills development through quality apprenticeships can help young people make a successful transition from school to adulthood with sustainable, satisfying and rewarding employment. But even in Switzerland, which has a very strong standardized apprenticeship system with a good reputation, there is still an average dropout rate of about 20 per cent over the last two decades. This paper seeks to identify the influencing factors of quality apprenticeships and elaborates possible reasons why young people in low-reputation apprenticeships drop out more often than those in popular professions.

Two studies conducted by the author with apprentices in the vocational fields of construction and media design serve as the scientific basis. The first study – in the field of media design, a popular field for vocational training – found that the pedagogical and didactic skills of the trainer, in particular the positive handling of errors, trust, honest and direct feedback, as well as the variability of tasks and the relationship with work colleagues, have a significant influence on training satisfaction. It was also found that the important influencing factors of competence growth in the workplace are not the same as those that significantly influence the grades at school

The second study – in the field of construction, a vocational training track with low reputation – compared apprentices who terminated their apprenticeship contract with a control group of non-terminators in order to determine the factors influencing the probability of apprenticeship contract termination. Wrong career choice and unfavourable working and training conditions significantly increase the probability of aborting the apprenticeship.

This paper goes one step further and combines the results of the two studies with two sociological theoretical concepts, the concept of "social reproduction" and the concept of different "life worlds" taken from SINUS Institute studies; these sociological concepts explain why young people from families with a low socio-economic background belong to the target group of disadvantaged young people but match very well with skilled trades when their specific needs are addressed.

For this reason, the author concludes by providing concrete recommendations for policymakers, employers' associations and trade unions to leverage the untapped potential of disadvantaged young people in order to address the shortage of skilled workers in skilled trades. Social justice demands long-term investment in this disadvantaged group of young people as they deserve not to be left behind. Their human capital is valuable for economic growth as well as for societal and individual prosperity.

About the authors

Patrizia Hasler is an independent international senior consultant specialising in the field of vocational education and training. Until 2024, she held the position of Director at the Zurich Technical College. Previously she was National Head of Continuing Education and was a member of the Executive Board of the Swiss Federal University for Vocational Education and Training (SFUVET). From 2013 to 2016, she was engaged in the field of Education Policy at the Swiss Association of Master Builders. Furthermore, she holds multiple qualifications in teaching and has been a teacher for over two decades at various academic levels and in a variety of roles, including one teaching assignment in Harare, Zimbabwe. Additionally, she has considerable experience in research within the fields of vocational education, inclusion, work-based learning, action competence orientation, vocational socialisation and employability. She has published in these areas and has delivered numerous presentations at international conferences on a variety of topics. Throughout her diverse roles in VET, including director, policymaker, researcher, senior advisor, career developer and teacher, Patrizia Hasler has demonstrated a unique ability to integrate policy, research and practice in the development of VET. She is particularly committed to harnessing the untapped potential of young people. She holds a PhD and an MSC in TVET.

Table of contents

	Abstract About the authors	01 01
	Introduction	06
1	Quality apprenticeships	07
	Individual characteristics	08
	Task: Job design	08
	Trainer	08
	Team	09
	Curriculum	09
	Findings	09
	Training satisfaction	09
	Self-assessment of own overall performance at work	10
	Assessment of domain-specific skills	10
	Work-related attitudes	11
	School grades	11
2	Habitus as an expression of cultural and social capital	14
	Cultural capital	14
	Social capital	15
3	SINUS Meta Milieus model	17
4	Matching of milieus and skilled trades:	21
	Untapped potential of human capita	21
	5. Conclusions and recommendations	23
	Recommendations	23
 	References	26

List of Figures

Figure 1. Determinants of quality of work-based learning	07
Figure 2. SINUS Meta Milieus model for established markets	17
Figure 3. SINUS Meta Milieus model for emerging markets	19

List of Tables

Table 1. Regression analysis: Dependent-variable training satisfaction	10
Table 2. Regression analysis: Dependent-variable overall performance at work	10
Table 3. Regression analysis: Dependent-variable domain-specific skills	11
Table 4. Regression analysis: Dependent-variable attitudes	11
Table 5. Regression analysis: Dependent-variable school grades	11
Table 6: Optimized model for the prediction of apprenticeship contract terminations	12
Table 7. Re-entry into a certifying apprenticeship after dropout, in months	13
Table 8. Descriptions of SINUS Meta Milieus of established markets	18
Table 9. Descriptions of SINUS Meta Milieus of emerging markets	19

Introduction

Switzerland has had an average apprenticeship contract termination rate of 20 per cent for decades, especially in apprenticeships that attract young people from families with a low socio-economic background. Apprenticeships in the fields of hairdressing and beauty care, hospitality, electricity and construction have the highest dropout rates.

This paper seeks to identify the reasons why this vulnerable and socially disadvantaged group of young people needs long-term career guidance or coaching in order not to drop out without any re-entrance. They risk being left behind as they often lack self-efficacy, self-esteem and a positive attitude towards life. Society must make an effort to help them by providing quality apprenticeships in order for them to be integrated into the workforce and keep them from being trapped in poverty.

The workplace has the potential to be a perfect learning environment for this target group. However, working and the continuous execution of specific tasks does not guarantee that learning and the development of competences will occur or that an apprentice will become an expert (Semmer, Barr and Steding 2000). The mere unreflected execution of a task can have some training effect but certainly has nothing in common with a constructive learning process.

This paper adopts a multilayer approach, combining different methodologies, in order to obtain a comprehensive understanding of the needs of disadvantaged young people. Two studies carried out by the author will serve as a basis for identifying the factors influencing quality apprenticeship; one study explored the training satisfaction of apprentices in the media design sector, in particular the crucial role of the in-company trainer (Hasler, unpublished; Nägele and Hasler2011). The second study was carried out in the construction field and examined the reasons for the high dropout rate of apprentices (Hasler 2016). This paper goes one step further and combines the results of the two studies with two sociological theoretical concepts in order to derive the needs of the specific target group of vulnerable young people.

In section 1, the meaning of quality apprenticeships is explained by the determinants of workbased learning. In section 2, the focus is on the concept of social reproduction developed by the French sociologist Pierre Bourdieu (Bourdieu 1983). This concept helps to understand inequity of performance at school and how this inequity gets bigger with each transition beginning with the first transition from school to apprenticeship or studies and continuing during the second transition into the labour market. In section 3, this concept is combined with the SINUS Meta Milieus model developed by the SINUS Institute in Germany (SINUS Institute 2024). This model applies the theory of Bourdieu that each human being has inherited values, attitudes and experiences derived from family members, which means that they do not think and act on the basis of inner freedom but rather on the basis of the social group to which they belong. These sociological findings can be applied to the world of work, especially to apprenticeships in the skilled trades. In section 4, sections 1–3 are synthesized to combine quality apprenticeships and social reproduction with the SINUS Meta Milieus model. This paper concludes by providing recommendations in section 5 to enable policymakers, employers' associations and trade unions to attract and retain disadvantaged young people in the rapidly changing labour market.

1 Quality apprenticeships

Before talking about quality apprenticeships, it is essential to define first of all the term "apprenticeship". The Quality Apprenticeships Recommendation, 2023 (No. 208) provides that "the term 'apprenticeship' should be understood as a form of education and training that is governed by an apprenticeship agreement, that enables an apprentice to acquire the competencies required to work in an occupation through structured and remunerated or otherwise financially compensated training consisting of both on-the-job and off-the-job learning and that leads to a recognized qualification". The term "dual apprenticeship" is often used to indicate that learning should take place at a training provider for the theoretical part and in the workplace for the transfer of theories to specific tasks.

However, participation at work is not sufficient for optimal learning and the development of vocational competences. Learning is seen as an active process, involving the individual, task-related characteristics, trainer competences, team constellation and the curriculum (see fig. 1). Central to work-based learning are also colleagues in the team. Formal, non-formal and informal learning at the workplace is fostered by feedback and knowledge acquisition, appropriate communication tools, coaching and information acquisition (Kyndt, Dochy and Nijs 2009).

Figure 1. Determinants of quality of work-based learning



Source: Author.

Based on a study of apprentices in the field of media design and media production (Hasler, unpublished), it can be seen that overall satisfaction and satisfaction with the trainer have a high significant correlation (r= .64). As measurements for quality apprenticeships, the author took training satisfaction, satisfaction with the training skills of the trainer, self-assessment of the acquired skills and school grades into account. Several regression analyses were run on the individual, task, trainer and team-related factors to predict the above-mentioned quality apprenticeships features.

The determinants of the concept of workplace learning (see fig. 1) are explained below, after which the results are reviewed.

Individual characteristics

Personality variables have an impact on learning and academic achievement (Bidjerano and Dai 2007). Individuals with an overall positive self-evaluation have better performance, better careers, are more satisfied and cope better in stressful situations (Judge 2009). Learning is an active process that depends on individual characteristics such as self-esteem, self-efficacy or persistence. Furthermore, the concept of competence in vocational and educational training has moved from a behaviour-oriented skills approach to a competence-based, output-oriented approach during the last decade. Knowledge, skills and attitudes are seen to be developed at the same time, by asking for integrated approaches in instruction (Mulder et al. 2009). The learner thereby becomes the central agent in the learning process.

Self-efficacy is the belief that a person will be able to initiate and successfully perform the intended behaviour. Self-efficacy has been shown to be a predictor of interests, motivation and goals (Lent et al. 2008) and is positively related to the goal level that determines performance (Phillips and Gully 1997).Positive attitudes towards life (Grob et al. 1991) is the cognitive evaluation of general well-being. Thus, a positive attitude towards the future course of life fosters the learning processes. Self-esteem is an evaluation in which individuals express approval or disapproval of themselves, leading to a judgment of their personal worth (Rosenberg et al. 1995). Low self-esteem is negatively correlated with well-being in adolescents (Karatzias et al. 2006). Persistence is a personality trait and is discussed as a predictor of both dropout rates (Barefoot 2004) and performance (Locke and Latham 1990) as it helps individuals to focus their attention on task requirements. Flexibility is the ability to adapt easily to new demands. Cognitive and behavioural flexibility is expressed in doing something new or differently without hesitation and is also an expression of curiosity and internal motivation.

Task: Job design

Job design shows strong effects on learning processes (Lantz and Brav 2007). A task must contain preparatory, executive and evaluative components (task identity), scope of action (autonomy), complexity and problem-solving elements (challenging work) or variability in order to allow for learning and the development of competences at the workplace (Hacker 2005). An important element of the learning process is direct feedback from task execution, combined with feedback from the trainer. Positive and negative feedback influence the learning process; in particular, errors can foster learning processes (Ohlsson 1996)

Trainer

The role of trainers is manifold: they are an instructor, coach, guide, mentor, confidant and boss. It is also their duty to introduce the apprentice into the workplace, leading them from a peripheral participation to becoming a full member of the community (Lave and Wenger 1991).

From the first day of the apprenticeship, the apprentice participates in the production process. Learning and the development of skills depend partly on the tasks available. On the other hand, the trainer is obliged to implement the curriculum. The trainer must guarantee the fulfillment of the curriculum so that it entails the necessity to monitor the learning process of the apprentice, thereby ensuring that professional competence is developed.

A good trainer can balance the needs of the company and those of the apprentice. It is not only vocational competence but also the pedagogical ability, qualifications and organizational

aptitude, combined with the ability to teach young people, that makes a good trainer. A trainer should enable reflection by giving time and space to the apprentice. They should handle errors positively and make use of them to instruct and teach the apprentice. The trainer is also an expert in their vocation and is able to explain things using appropriate didactical methods. As the apprentice is part of the production process, it is also important for the trainer to have high task-related demands.

As the apprentice becomes part of the community of work, trust becomes an important issue. The apprentice enters the company as a novice and it is a different place than school. The trainer becomes an important attachment figure. In most cases, it is an intergenerational connection, as the trainer is much older than the apprentice. It has been shown repeatedly that trust is an important element of any mentoring relationship (Rhodes et al. 2005). If there is no trust, working together becomes difficult. It is even more difficult to be in a learning relationship if there is no trust.

Team

Colleagues at work can be a valuable resource; they give social support, knowledge and insight into how things are really done. The downside is social conflicts, exclusion or bullying. Colleagues at work are a system of reference to evaluate their own skills and attitudes. Apprentices observe a lot, help experts and model what they are instructed. Part of the apprenticeship is best described as learning from a model (Bandura 1977) that is delivered by colleagues at work.

Curriculum

In Switzerland, the curriculum assigns specific educational and training tasks to the three learning places (company, vocational school, cross-company courses) in initial vocational education and training. The learning objectives specified in the curriculum are binding for the company. Thus, the trainer uses the curriculum as a baseline or guideline for the development and evaluation of the apprentice's competences.

Findings

Training satisfaction

The findings (see table 1) show that the pedagogical competences of the trainer are closely related with the apprentices' training satisfaction. Another important element is task variability, which is the possibility to carry out different tasks. Task variability and a well-equipped workplace that provides all the necessary material and information are associated with higher perceived overall training satisfaction and also has the positive effect of having good friends at work. A lack of documents and materials at the workplace is correlated with lower training satisfaction.

> Table 1. Regression analysis: Dependent-variable training satisfaction

	В	SE B	b
Task: Variability	.385	.050	.313***
Task: Missing documents	139	.046	117***
Team: Good colleagues	.140	.053	.099***
Trainer: Pedagogical competences	.845	.080	.439***

Note: R^2 = .494, ***p < .000, F(4, 375) = 93.664, N = 380; only statistically significant factors are shown. Source: Author.

Self-assessment of own overall performance at work

Task-related skills depend on self-efficacy, self-esteem, a positive attitude towards life and challenging work. Self-efficacy and self-esteem are independent predictors of task skills (see table 2). The negative effect of a positive attitude towards life is surprising, at first sight. Looking at the items of the scale, this positive attitude towards life may also express to some extent a satisfying behaviour: I am satisfied with my life; I am where I wanted to be and there is no need to go further or to achieve higher goals.

▶ Table 2. Regression analysis: Dependent-variable overall performance at work

	В	SE B	b
Individual: Self-esteem	.254	.053	.294***
Individual: Self-efficacy	.311	.077	.235***
Individual: Positive attitudes towards life	130	.047	158***
Task: Challenging work	.107	.044	.122***

Note: $R^2 = .151$,*** p < .000, F(4, 356) = 17.004, N = 361; only statistically significant factors are shown.

Source: Author.

Assessment of domain-specific skills

It was expected that variability, scope of action, autonomy, feedback and task identity (Hackman and Oldham 1975) would have a positive effect on skills, but based on the findings only variability is correlated with skills. This is probably due to the special situation of the apprenticeship and the role of the apprentice. The curriculum is well defined, so that the task characteristics seem to be less important than in an adult population. However, a high level of task variability combined with individual flexibility leads to better skills (see table 3). It was also found that apprentices in the third year of training report higher domain-specific skills than might be expected in an apprenticeship.

▶ Table 3. Regression analysis: Dependent-variable domain-specific skills

	В	SE B	b
Apprenticeship year (second or third)	.307	.049	.295***
Individual: Flexibility	.249	.070	.169***
Task: Variability	.178	.031	.278***

Note: R2 = .190,*** p < .000, F(3, 368) = 29.996, N = 372; only statistically significant factors are shown.

Source: Author.

Work-related attitudes

Work-related attitudes represent to some extent the traditional virtues of the workplace: accuracy, fidelity and reliability. The results show that these attitudes are significantly influenced by individual characteristics, such as persistence and self-efficacy (see table 4). Challenging work and direct feedback from the task have a positive effect as well.

▶ Table 4. Regression analysis: Dependent-variable attitudes

	В	SE B	b
Individual: Self-esteem	.101	.028	.186***
Individual: Persistence	.135	.037	.183***
Task: Challenging work	.075	.027	.136***
Task: Feedback	.102	.025	.208***

Note: R2 = .168, ***p < .000, F(4, 358) = 19.332, N = 363; only statistically significant factors are shown.

Source: Author.

School grades

Social support and persistence have a positive effect on school grades (see table 5). Gender and the vocational track (media design versus media production) also have an effect. Females have higher school grades than males and the apprentices in media production have lower school grades.

▶ Table 5. Regression analysis: Dependent-variable school grades

	В	SE B	Ь
Vocational track (1=media design; 2=media production)	032	.009	179***
Individual: Persistence	.024	.008	.140***
Team: Social support	.018	.009	.102***

Note. R2 = .086,*** p < .000, F(3, 391) = 10.279, N = 396; only statistically significant factors are shown.; only statistically significant factors are shown.

Source: Author.

The finding that social support and persistence have a positive effect on school grades is in line with school-based studies that showing a positive effect of the social support system (such as parents) on grades (see, for example, Neuenschwander, Frey and Gasser 2007). However, the explained variance is rather low. This may be explained by the fact that the independent variables

describe the situation at the workplace, whereas the dependent variable measures the performance at school. Different competences seem to be developed at the workplace and at school.

As an insight to all these regression analyses, it is striking that personality traits such as self-efficacy, self-esteem, a positive attitude towards life and persistence all have an impact on learning outcomes and success in life and career. The trainer can moderate the learning process by consciously developed pedagogical competences, such as task-specific requirements, especially variability and challenging work.

In the second study in the occupational field of construction, the author compared apprentices who had terminated their apprenticeship contract with a control group of non-terminators and thus determined the factors influencing the probability of apprenticeship contract termination. The dimensions of trainer, task and team of learning in the workplace were adapted to the conditions in construction by means of a factor analysis based on the term "training and working conditions"; the factor analysis of the working and training conditions was based on a second factor, "external framework conditions", which includes the three items "working outside in all weathers", "too much pressure on the construction site" and "was too physically demanding".

	В	SE B	OR
Apprenticeship was a compromise solution	1.262	.406	3.534**
Wrong career choice	-2.179	.447	.113***
Training conditions	-1.407	.478	.245**
External framework conditions	3.923	.477	50.568***

> Table 6: Optimized model for the prediction of apprenticeship contract terminations

Note: Constant – 3.458, **p < .01, *** p < .000, R²= .635, p = .000, N = 337; only statistically significant factors are shown. Source: Author.

The wrong career choice and unfavourable working and training conditions significantly increase the probability of belonging to the group of terminators (see table 6). When comparing these two groups, a surprising result emerged: the probability of belonging to the group of terminators decreased significantly the more that respondents stated that the apprenticeship was a compromise solution. External factors such as "hard physical work", "pressure on the construction site" or "working outside in all weathers" were not found to be reasons for quitting. The qualitative data from the interviews provided explanations for this result; young people with a termination of apprenticeship because they had graduated from school with poor results, so that one cannot speak of an actual career choice The author also investigated how long it took for apprentices in the termination group to re-enter a qualifying apprenticeship. It was found that after one year, more than half of the apprentices had entered a new apprenticeship (see table 7). The longer an apprentice did not manage to find a new company in the same or in a new skilled trade, the lower the probability of their re-entering the educational system.



> Table 7. Re-entry into a certifying apprenticeship after dropout, in months

Source: Author.

All these results show that young people from families with a low socio-economic background are disadvantaged in many ways. Even when they enter school, these children do not have the same personal predispositions due to a lack of support from their parents. As they often perform poorly at school due to a lack of social support, they can only choose professions with lower-performance requirements, which represents a further disadvantage. In addition, they often do not develop life skills such as problem-solving, analytical and socio-emotional skills during childhood and adolescence and are often unable to successfully complete an apprenticeship due to multiple problems in everyday life. For a successful transition from school to work, it is crucial to coach them throughout the apprenticeship, especially when the company cannot invest unproductive time in additional support for the apprentice. In order to better understand the needs of this target group, two sociological models were used in addition to the author's two studies, which are discussed in more detail below.

2 Habitus as an expression of cultural and social capital

Social reproduction is a concept that was developed by the French sociologist Pierre Bourdieu. It explains the mechanisms by which existing social and cultural forms, values, attitudes and experiences are transmitted from generation to generation. According to Bourdieu, every child is differently equipped with cultural, economic and social capital when entering school. That means that a child from a family with a low socio-economic background is already very much disadvantaged at the beginning of their school education. It is up to the educational system to help these disadvantaged children to keep up with their schoolmates.

Unfortunately, disadvantaged children may be even more disadvantaged by early tracking at the age of 12 into different performance paths, as is the case in Switzerland. Socially disadvantaged families also often live in areas of worse-performing schools than wealthier families and these children may end up on lower-performance tracks with fewer career choices. They may also receive poorer education through worse-performing schools that have more socially disadvantaged children and limited cultural, social and economic capital. In that context, what does habitus as an expression of social and cultural capital mean?

Children "inherit" habitus or behaviours from their parents. Their social actions are no longer defined as the result of conscious decisions but are influenced by their parents' dispositions to think and act. Habitus refers to the individual's attitudes and values in the social world, their habits and way of life. Habitus is acquired in the social environment through experience and dictates how one should move in the social world. Thus, the individual does not move about in the social world on the basis of inner freedom but tries to choose a narrower social world in such a way that their acquired habitus comes into its own and the individual feels comfortable in it. Through the habitus, the social conditions of existence of an individual are created as a kind of protective function of the individual. The habitus is based on the concept of capital accumulation, which Bourdieu developed to explain the "inequality of school performance of children from different social classes" (Bourdieu 1983, 185) and to name the principle of social effects. For Bourdieu, capital is "accumulated labor, either in the form of matter or in internalized, 'incorporated' form" (Bourdieu 1983, 183), while habitus is an expression of cultural and social capital, which are defined more fully below.

Cultural capital

Cultural capital manifests itself in three forms:

- 1. In an objectified state in the form of books, works of art, pictures and technical instruments, cultural capital can usually be expressed directly in monetary amounts and thus converted into economic capital (Fuchs-Heinritz and König 2014). In particular, the possession of books in a family has a considerable influence on certain achievements, especially on the reading skills of children.
- 2. In an incorporated, internalized state, "cultural capital consists of the cultural knowledge, abilities and skills of an individual" (Fuchs-Heinritz & König, 2014, 130), which may be expressed as "education" in German, "culture" in French and "cultivation" in English. According to Bourdieu,

the accumulation of culture requires a "process of unification" (Bourdieu 1983, 186). Time must be invested in the appropriation of cultural capital. During primary education, an individual already unconsciously internalizes cultural capital, which varies greatly depending on social background. Growing up in a certain milieu influences the form of cultural capital, which is reflected in the manner of speaking and social behaviour – the habitus. Thus, cultural capital is linked to the person in his or her biological uniqueness and is passed on by way of social inheritance, which admittedly always happens in secret and often remains completely invisible.

3. In addition to incorporated cultural capital, there is also institutionalized cultural capital, the objectified form of incorporated cultural capital; it is declared legitimate in the form of graduation certificates and educational diplomas, because it meets institutional standards in the form of examinations (Fuchs-Heinritz and König 2014). The school diploma represents a form of educational capital and is the product of a transformation of economic capital into cultural capital, as education requires time and money.

Social capital

Social capital is an individual's network of social relationships, including their friendships, relationships of trust and acquaintances, as well as memberships in groups, organizations or professional associations (Fuchs-Heinritz and König 2014). However, the members of a social group presuppose the recognition of a minimum of homogeneity in habitus among the participants, which strongly influences the possibilities of relationship-building and the endowments of social groups with economic and cultural capital.

The network of relationships is the product of individual or collective investment strategies, which are consciously or unconsciously aimed at creating and maintaining social relations that sooner or later promise tangible benefits. To maintain this network of relationships, time-intensive relationship work is necessary, which is what Bourdieu means by "reproduction of social capital". Finally, social capital serves to maintain and increase economic and cultural capital. However, the members of a social group presuppose the recognition of a minimum of homogeneity in habitus among the participants, which strongly influences the possibilities of building relationships and the endowment of social groups with economic and cultural capital. In summary, according to Bourdieu, it is the endowment of the family of origin with economic, cultural and social capital that ultimately determines the acquisition of educational qualifications and thus educational success.

As soon as they enter school, children bring with them different incorporated cultural capital, which is reflected in linguistic expression, different prior knowledge and different ways of interacting and learning (Sacchi et al. 2011). Thus, the different achievements of children owe more to differences in the endowment of incorporated human capital arising from their origin than to their different talents, although the pre-eminence of their talents is often postulated in education policy, thus perpetuating the myth of equal opportunities in the education system. For Bourdieu, "ability" or "talent" is the product of an investment of time and cultural capital (Bourdieu 1983, 186). For Bourdieu, school performance evaluations are also determined by the social background of the pupils, such as non-performance factors in terms of their appearance, clothing and linguistic expression, so that the habitus of a pupil is included in their evaluation. Thus, to a large extent, this also reflects incorporated cultural capital, which "produces permanent, brutal discontinuities from a continuum of minimal differences in performance" (Bourdieu 1983, 190). In other words, the education system converts the slightest differences in performance into permanent "class differences" (Sacchi et al. 2011). Social background is decisive not only for success at the individual level of educational decisions but also at the institutionalized level of selection processes .Children from uneducated homes are often given lower grades by teachers than those from educated homes, which is also reflected in selection processes for different achievement levels. Family social capital also plays a major role in the transition to the education market; the social status of the family, as well as the size and quality of its network of relationships, influence the opportunities of family members on the training market. In addition, young people from educationally disadvantaged backgrounds do not exhibit the same behaviour and life aspirations, attitudes, basic values and desired social status and therefore often stay in their own groups, their so-called peer groups, because this gives them a feeling of security and safety.

To gain a better understanding of these social clusters, which also form in the world of work, section 3 below links the concept of Bourdieu to the SINUS Meta Milieus model, which clusters groups with similar cultural, social and economic capital.

3 SINUS Meta Milieus model

The SINUS Meta Milieus model was developed by the SINUS Institute, an independent institute for market and social research in Germany (SINUS Institut 2024). The model is based on the lifeworld analysis of society. At the international level, there are transnational models, one for established markets and one for emerging markets (see figs. 2 and 3).

The SINUS Meta Milieus have been established in more than 50 countries. They can be used in the European Union, as well as in the Asia–Pacific, Latin American and North American Free Trade Agreement economic areas, and can be developed for countries in other regions at any time. Common patterns can be identified in almost all countries of the world in terms of value orientations, lifestyles and consumer preferences. Most of the time, it can be seen that people from different countries but comparable milieus have more in common with each other than with the rest of their compatriots.

The SINUS model describes different social milieus, each with characteristic attitudes and life orientations. Each social milieu, representing a specific "life world", determines the recognition of a minimum of homogeneity in social behaviour among group members. Table 8 and 9 explain the characteristics of each milieu in terms of behaviour, life aspirations, attitudes, basic values and desired social status. In figures 2 and 3, the milieus in the model are placed in the X coordinate axis for basic values and the Y coordinate axis for the level of social status. The more a milieu is towards the zero point, the more traditional and safety-oriented is the milieu. The more a milieu is placed to the right on the X axis, the more opener it is to new challenges and cultural differences; people belonging to these milieus can easily handle unsafe situations. They are often freelancers and have their own business as they love change and new experiences. The concept of Bourdieu and the SINUS meta milieu model fit together as they analyse the social behaviour of groups or families.



Figure 2. SINUS Meta Milieus model for established markets

Source: SINUS Institut (2024).

▶ Table 8. Descriptions of SINUS Meta Milieus of established markets

SINUS Meta Milieu	Description
Established	Status-driven conservative elite . High self-confidence; classic responsibility and perfor- mance ethics; exclusivity and status claims; acceptance of social order.
Intellectuals	Academic elite with post-material roots. High affinity for indulgence, sensuality, art and culture; critical of globalization; advocating for justice and public welfare; taking responsibility for oneself and others; affinity for (continuing) education and embracing quality of life.
Performers	Efficiency- and progress-oriented modern elite. Global economic and liberal thinking; af- finity for "best in class" consumption, modern design, early adopting; interest in technology and digitalization; competitive and career-oriented, networker; open to change, new things.
Cosmopolitan avant garde	Ambitious and individualistic avant garde. Cosmopolitan, urban, mobile and flexible; dig- ital nomads, lifestyle vanguards; pronounced self-expression; postmodern lifestyle elite, an- ti-mainstream, desire to stand out; joie de vivre, ambitious and success-oriented.
Progressive realists	Drivers of social transformation. Sustainable lifestyle without ideology of renunciation; driving the global social transformation; progressive, optimistic; taking responsibility for society; ease of dealing with contradictions, party and protest, seriousness and entertainment.
Adaptive navigators	Adapting modern mainstream. Flexible pragmatists; young modern middle class; high willingness to adapt and perform; modern lifestyle, digital affinity; reliable and loyal, open to new – but tested and verified – things.
Sensation-oriented	Materialistic- and entertainment-focused (lower) middle class. Hedonistic approach, with focus on today; conspicuous consumption; adjustment if necessary, breakout if possible; unconcerned, open to risks; anti-bourgeois yet materialistic lifestyle, rejection of political correctness and conventions; looking for fun, action, entertainment, stimulation.
Conventional main- stream	Harmony-seeking older middle-class. Middle class under financial and ideological pres- sure; desire for secure circumstances, fear of losing well-deserved achievements; search for community, cohesion, social life, neighborly support – down to earth; distrust towards the pri- macy of the elites – feeling of being left out in favour of others.
Traditionals	Order-seeking older generation. Petty bourgeois world, traditional working-class culture; desire for social security, harmony, consistency; (voluntary) disconnection from modern life-style and digital culture; desire for simple, safe, down-to-earth lifestyle.
Consumer materialists	Lower class striving for orientation and participation. Precarious living conditions; undemanding adaptation to necessities; desire for consumption standard of the middle class; defiant cohesion within their own community; fear of speed of change, being left behind.

Source: Sinus Institut (2024).



▶ Figure 3. SINUS Meta Milieus model for emerging markets

Source : Sinus Institut (2024).

▶ Table 9. Descriptions of SINUS Meta Milieus of emerging markets

Sinus Meta Milieu	Description
Conservative estab- lished	Heirs of authority and order. Patriarchic, claim of power, status and leadership, family- and clan-thinking; sense of duty and order; social prestige, ethics of responsibility; religion and tradition.
Modern established	Cultivated connoisseurs. Sophistication, status orientation, strategic life-planning; indul- gence and work-life-balance, education and qualification; liberal and tolerant, social and eco- logical responsibility; leadership with a sense of purpose.
Modern performing	Competitive modern elite. Economic elite, entrepreneurship, performance and efficiency, self-determination; semi-global thinking; superiority and distinction, willingness to perform; achievers, networkers and risk-takers; best-in-class mindset.
Cosmopolitan avant garde	Individualistic digital mavericks. Young and wealthy, digital, global, mobile socializers; global-western attitude; creative and individualistic, self-realization; freedom and independence; entrepreneurial spirit.
Success-oriented	Pragmatic social climbers. Willingness to perform, social climber mentality, flexibility- and security-driven; balance of work and family/friends; sense of tradition and order; pragmatic and ambitious.
Sensation-oriented	Thrill-seeking trend-followers: Spontaneity, fun, thrills and action; trend adoption and imitation of Western lifestyles; carefreeness, independence; try to keep up with trends and brands; conflict with traditional values and religion; materialism; flexible and mobile.
Adapting mainstream	Adapted harmony-seekers. Conservative-materialistic, status-oriented, order and harmo- ny; balance of secular and religious life; social rules and moralities; feel pressure to keep up; next-generation thinking; search for community, cohesion, neighbourly support.
Traditional rural	Enrooted traditionalists. Strong community and family ties; religion and belief (spirituality); ritualized everyday life; obedience and modesty; afraid of losing traditions, rules and values.
Urban working class	Working class without prospects. Socially deprived, uprooted, fear and resentments; over- charged by modernization, striving for basic needs; short-term consumer orientation, materi- alism; solidarity within own network; seek entertainment for distractions.

Source: SINUS Institut (2024).

It is therefore not surprising that young people often opt for similar professions to those of their parents; every community of work has its own habitus, its way of social interacting, values and attitudes. As a result the young person chooses a working environment in which his acquired habitus is accepted and gives him safety and protection.

To summarize, the author transfers the findings from the studies to the target group of disadvantaged young people in order to make recommendations for policymakers, employers`associations and trade unions. In doing so, she first locates this disadvantaged group of young people in the SINUS model in order to establish a match with the skilled trades.

4 Matching of milieus and skilled trades:

Untapped potential of human capita

A good fit between the apprentice and their training company is a basic prerequisite for successful training (see fig.1). A high quality of training and quality apprenticeships are characterized by an open, trusting atmosphere and a constructive error culture. But this alone is not enough to ensure a high level of fit for the apprentice. If the values, forms of interaction and life aspirations do not correspond to the apprentice's acquired habitus, which he has unconsciously adapted from his family, he will not feel comfortable and protected in the new community of work, which can also lead to dropout.

Considering disadvantaged young people, it is usually not the habitus that leads to dropout but the lack of problem-solving skills and learning strategies, as well as the low frustration tolerance combined with the low self-efficacy experienced at school, that have a degrading influence on self-esteem. The importance of individual characteristics for a successful learning process cannot be overemphasized; unfortunately, grades say little about the performance potential of learners, as grades are largely determined by the cultural, social and economic capital of parents as well as the performance expectations of teachers – factors that children and young people from low-income and socially disadvantaged families can hardly influence.

For this reason, these children must already be supported in elementary school in order to create equal opportunities so that they can achieve their full potential. When it comes to the transition to the labour market, it is often difficult to catch these young people during the often very difficult period of puberty with hormonal fluctuations, because their personality traits have already been negatively reinforced by the frustrations that they have often experienced despite their best efforts. If addiction problems are already present, it becomes even more difficult to keep them in the education process in the long term. The importance of good training quality as a form of prevention against the risk of dropping out is elaborated in this paper. Training satisfaction and training quality are highly correlated, which is conducive to an optimal fit perception of the chosen profession. Young people with a terminated apprenticeship contract indicate lower self-esteem, lower self-efficacy and lower confidence in their success than young people without a terminated apprenticeship contract.

In the contract termination group, the wrong career choice was cited as the main reason for the termination, along with the difficult training conditions. Based on the interviews, it is assumed that young people in lower-performance groups and from families with low socio-economic background often did not make a conscious choice of apprenticeship but rather took the first available apprenticeship for fear of not receiving training, which favours problems with the fit. While conducting the interviews with the contract termination group, it was noticeable that adolescents mentioned similar desires, fears, school experiences and conflict-resolution patterns. Disadvantaged adolescents often had dysfunctional coping strategies. Adolescents with unconscious impulsive and reactive conflict-resolution patterns reported increased use of addictive substances such as cigarettes, alcohol or marijuana. Young people with accumulated negative social and emotional experiences are particularly sensitive to a poor working environment and to caregivers who do not engage with them emotionally. They are very quick to blame themselves and therefore quickly withdraw.

When talking about their wishes or aspirations during the interviews, most of these young people want to create a family, have two children, a girl and a boy, a nice car and a safe job. A life aspiration is not a career but a happy and stable daily life with a safe wage every month. For them, work is not self-fulfillment but livelihood and the community of work is essential for their well-being and for not quitting the job. But unfortunately, they do not correlate work with conscious learning in the form of an apprenticeship. They often see apprenticeship as a waste of time as they need money to become independent of their parents or even to support them.

The descriptions of the milieus of lower social status and traditional values – the "urban working class" and "traditional rural" milieus of emerging countries (see table 9) or the "traditionals" and "consumer materialists" milieus in established markets (see table 8) – explain these needs and desires precisely. Both milieus do not like change, prefer strong family ties and seek a regular income. The "urban working class" milieu in emerging markets and the "consumer materialists" milieu in established markets feel socially disadvantaged and strive to meet their basic needs and achieve what it means to belong to society. However, those in the "traditionals" and "traditional rurals" milieus strive for obedience and modesty and cling to tradition. Traditional values and rules are very important for them.

As skilled trades have long traditions and the work is mainly done by hand, people from these two milieus feel attracted by these working conditions, for which a strong community is demanded. Going for a beer after work fits these life worlds, as is having fun together. Coarse language is often predominant. Skilled trades are proudly recognized by their family members, which is important for young people when choosing an apprenticeship.

5. Conclusions and recommendations

Dropout is not a cause for concern as long as young people re-enter a certifying apprenticeship programme, as the transition into the labour market is often non-linear and a normal allocation process for young people; however, disadvantaged young people from low-income families have a much higher risk of dropout without re-entrance. It is important to recognize the striking fact that strong individual characteristics such as self-esteem, self-efficacy and perseverance are predictors of success in learning not only at school but also at work. That is why school grades do not represent cognitive ability but social support at home

The more support children receive at home, the more self-confidence and self-efficacy they develop. In addition, well-educated parents often take advantage of extracurricular activities and thus provide their children with additional support. In addition, educated parents have a large social network through which their children often find their first job. This multiple deprivation of disadvantaged young people increases with each transition, from school to apprenticeship or university and beyond into the workforce. Therefore, the seeds of the risks of long-term limited employment are sown early in life, in a child's upbringing and family circumstances

For this reason, apprenticeships give disadvantaged young people a new chance to build up their self-efficacy and self-esteem as they like crafts performed by hand, which are highly recognized in their families and communities. First, however, they need safety and recognition in the new learning environment. They must believe in themselves again as they have hardly had any success at school. This process takes time and patience for companies, training providers and apprentices as well.

To conclude, the author has elaborated a number of pragmatic and practical recommendations for policymakers, employers' associations and trade unions to emphasize the transformative power of quality apprenticeships in skilled trades, in the belief that this huge untapped potential of disadvantaged and vulnerable young people is waiting to be discovered as valuable human capital.

Recommendations

In most countries – except those with long-term, traditional, dual vocational educational and training systems such as Switzerland, Germany, Austria, Denmark and the Netherlands – apprenticeships have a low reputation in society and disadvantaged young people are often streamed into apprenticeships because they lack good school reports. These recommendations should help to better meet the needs of this target group in order to successfully integrate them into the labour market

Inequality of opportunity in the education system due to family background must be addressed politically and socially. There is still a prevailing opinion in society that educational success is meritocratic, although sociological models clearly show that family background has a significant influence on educational opportunities and success.

Children at risk need to be identified in elementary school and given additional support in developing their social and emotional skills. The seeds of the risks of long-term limited employment are sown early in life, in a child's upbringing and family circumstances. This is exactly why these socio-emotional skills are needed to engage in learning processes at all and are therefore indispensable for skills development.

Disadvantaged young people must receive coaching in career choice and the search for a suitable training place in high school. Due to their unsupportive background, these young people do not have the social network through which quality apprenticeships are found; they are too often forced to end up in the informal labour market without any protection and with precarious employment. Care must be taken to ensure that this target group in particular can rely on an appreciative working environment in order to build up a healthy sense of self-worth.

Apprentices must be contractually employed for the entire duration of their training and **must be remunerated.** If there is no financial security, there are too many interruptions and the risk of not completing the apprenticeship increases because disadvantaged young people need to assure their livelihood.

A standardized training schedule in the workplace is necessary and must be coordinated with the schedule at training providers. In dual training, an apprentice spends an average of 80 per cent of their time in the company and 20 per cent at a training provider. Simply carrying out a task can have a certain training effect, but it has little to do with sustainable skills development. Workplaces and tasks must be designed in such a way that learning can take place. The workplace is the most important learning environment for developing work-related skills directly. The training provider supports this process by teaching the theoretical and more academic elements of the occupation. A curriculum supports the trainer in the structured training of the apprentice, as it is much more challenging to impart the skills required for an apprenticeship in the work process than in the school context, in which learning assignments can be constructed according to the curriculum. In the work process, the order situation determines the learning opportunities. These coordinated training schedules provide orientation and security, not only for disadvantaged young people but also for the company to deliver quality apprenticeships.

Training companies require formal training accreditation and must be registered. This can prevent apprentices from being used as cheap labour, because accreditation places requirements on trainers and in-company training schedules. It can also protect disadvantaged young people, who are not capable of judging the training quality of a company; they simply want to work and earn money.

Certified pedagogical and didactic trainers are mandatory for in-company training. The role of the trainer is crucial for constructive learning processes. Trust plays a major role for disadvan-taged young people. Trust seems to be rooted in trainers having good work-related instructional skills. It starts with work allocation and includes adequate instructional techniques and honest and direct feedback, as well as the positive handling of errors.

Public-private partnerships are crucial for industry-driven apprenticeships. Government, employers' associations and trade unions must jointly take responsibility for a strong apprentice-ship system at the national and regional levels. Sector skills councils can provide a good forum for addressing this necessity. Government is responsible for the legal framework, the employers' associations are responsible for the content of the training programmes and the curriculum and the trade unions are responsible for protecting apprentices against exploitation.

Small and medium-sized enterprises (SMEs) need low-threshold advice centres for training problems. In most countries, SMEs play a fundamental role in their economy. In Switzerland for example, SMEs¹ represent more than 99 per cent of companies and create two thirds of the jobs in the country. Therefore, they offer the most apprenticeships but can only provide limited unproductive time to support disadvantaged young people due to production pressure and the skills shortage. That is why there is a need for state-funded sectoral advice centres that young people can contact without bureaucratic delays should any problems arise during their apprenticeships. Disadvantaged young people in particular have little tolerance for frustration, so that solutions must be found quickly when such problems arise. When the perfect sociological match between disadvantaged young people and skilled trades fails during apprenticeships, there are too many low-skilled workers in the workforce facing a risk of being exposed to limited employment and poor social outcomes.

Employers need selection instruments to identify disadvantaged young people. Disadvantaged young people need conscious relationship-building at the beginning of their apprenticeships in order to proactively address any emerging problems. A specific online questionnaire targeting the problem areas of disadvantaged young people could help to quickly identify them in order to decide whether companies can provide the necessary resources for integration or whether coaching needs to be initiated. This online tool could also assess literacy and numeracy skills to determine skill levels and send young people for additional basic skills training across occupations, when needed. In Australia for example, group training providers take on a formal employer's role while "leasing" apprentices to "host employers". Group training organizations² often provide extra support to apprentices and employers under their care but require additional administrative arrangements for countries.

Qualification should be achieved through the accumulation of microcredentials. As young people transitions and especially the ones of disadvantaged young people are often iterative, disruptive, non-linear, complex and with unforeseen interruptions, assessments should concentrate on microcredentials during apprenticeships which can lead to bundled sectoral qualifications. At the same time, they serve as recognition of prior learning, if disadvantaged young people later continue their apprenticeship or enter another profession. Microcredentials can also serve as a qualification during job application.

Quantitative and qualitative longitudinal studies are needed to measure educational outcomes for disadvantaged young people. A comprehensive and long-term approach is required to ensure the successful integration of disadvantaged young people into the labour market. Therefore, accompanying longitudinal studies are needed. The author also suggests that qualitative studies be conducted to identify the specific needs and strengths of different life worlds in order to achieve a better match of work community and individual characteristics in different sectors, as labour turnovers consume many resources and increase the risk of dropout, especially for vulnerable target groups.

All these recommendations must be adapted to country-specific training conditions and regional industrial skill demands and skill supplies, which vary greatly by country and region. The aim of any training system must be to make the best use of the human capital available in a given country through skills development for economic growth, individual well-being and prosperity.

¹ See Switzerland, The Federal Council, "Figures on SMEs: Essential Points in Brief".

² See Australia, Queensland Government, Department of Employment, Small Business and Training, "What Is a Group Training Organisation?

References

Bandura, Albert. 1977. Social Learning Theory. Prentice-Hall.

Barefoot, Betsy. O. 2004. "Higher Education's Revolving Door: Confronting the Problem of Student Drop Out in US Colleges and Universities". *Open Learning* 19 (1): 9–18.

Bidjerano, Temi, and David Yun Dai. 2007. "The Relationship between the Big-Five Model of Personality and Self-Regulated Learning Strategies". *Learning and Individual Differences* 17(1): 69–81.

Bourdieu, P. 1983. "Ökonomisches Kapital, kulturelles Kapital, soziales Kapital". In *Soziale Ungleichheiten*, edited by Reinhard Kreckel, 183–198. Schwartz.

Fuchs-Heinritz, Werner, and Alexandra König. 2014. Pierre Bourdieu: Eine Einführung. UVK.

Grob, Alexander, et al. 1991. "Berner Fragebogen zum Wohlbefinden Jugendlicher (BFW)". *Diagnostica* 37 (1): 66–75.

Hacker, Winfried. 2005. Allgemeine Arbeitspsychologie: Psychische Regulation von Wissens-, Denk – und körperlicher Arbeit. Huber.

Hackman, J. Richard, and Greg R. Oldham. 1975. "Development of the Job Diagnostic Survey". *Journal of Applied Psychology* 60 (2): 159–170.

Hasler, Patrizia. 2016. "Lehrvertragsauflösungen im Schweizer Bauhauptgewerbe: Unausgeschöpftes Potenzial – Ursachen und Massnahmen". PhD dissertation, Institute for Educational Science at the University of Stuttgart. Available at: https://elib.uni-stuttgart.de/ bitstream/11682/9038/1/16-10-06_Dissertation_Hasler_Patrizia.pdf

---. 2024. "The Untapped Potential of Disadvantaged Young People for Apprenticeships in Skilled Trades".

----. Unpublished. "Lernförderliche Bedingungen am Arbeitsplatz - Rolle der Berufsbildnerinnen und -bildner in Bezug auf die Ausbildungszufriedenheit der Lernenden". Master's thesis, Swiss Federal University for Vocational Education and Training.

Judge, T.A. 2009. "Core Self-Evaluations and Work Success". *Current Directions in Psychological Science* 18 (1): 58–62.

Karatzias, Athanasios, et al. 2006. "Predicting General Well-Being from Self-Esteem and Affectivity: An Exploratory Study with Scottish Adolescents". *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation* 15 (7): 1143–51.

Kyndt, Eva, Filip Dochy and Hanne Nijs. 2009. "Learning Conditions for Non-Formal and Informal Workplace Learning". *Journal of Workplace Learning* 21 (5): 369–383.

Lamamra, Nadia, and Jonas Masdonati. 2009. Arrêter une formation professionnelle: Mots et maux d'apprenti-es. Antipodes.

Lantz, Annika, and Agneta Brav. 2007. "Job Design for Learning in Work Groups". *Journal of Workplace Learning* 19 (5): 269–285.

Lave, Jean, and Etienne Wenger. 1991. *Situated Learning. Legitimate Peripheral Participation.* Cambridge University Press.

Lent, Robert W., et al. 2008. "Longitudinal Relations of Self-Efficacy to Outcome Expectations, Interests, and Major Choice Goals in Engineering Students". *Journal of Vocational Behavior* 73(2): 328–335.

Locke, Edwin A., and Gary P. Latham. 1990. "Work Motivation and Satisfaction: Light at the End of the Tunnel". *Psychological Science* 1 (4): 240–246.

Mulder, Martin, et al. 2009. "The New Competence Concept in Higher Education: Error or Enrichment?" *Journal of European Industrial Training* 33 (8/9): 755–770.

Nägele, Christof, and Patrizia Hasler .2011. "Learning at the Workplace: Optimal Learning Environments". In *Assuring the Acquisition of Expertise: Apprenticeship in the Modern Economy*, edited by Zhiqun Zhao, Felix Rauner and Ursel Hauschildt, 125–128. Foreign Language Teaching and Research Press.

Neuenschwander, Markus P. 2014. "Selektion beim Übergang in die Sekundarstufe I und in den Arbeitsmarkt im Vergleich". In *Selektion in Schule und Arbeitsmarkt: Forschungsbefund und Praxisbeispiele*, edited by Markus P. Neuenschwander, 63–97. Rüegger Verlag.

Neuenschwander, Markus P., Mirjam Frey and Luciano Gasser. 2007. Übergang in die Sekundarstufe II und Wirkungen der Berufsbildung. University of Zürich.

Ohlsson, Stellan. 1996. "Learning from Error and the Design of Task Environments". *International Journal of Educational Research* 25 (5): 419–448.

Phillips, Jean M., and Stanley M. Gully. 1997. "Role of Goal Orientation, Ability, Need for Achievement, and Locus of Control in the Self-Efficacy and Goal-Setting". *Journal of Applied Psychology* 82: 792–802.

Rhodes, Jean E., et al. 2005. "Promoting Successful Youth Mentoring Relationships: A Preliminary Screening Questionnaire". *The Journal of Primary Prevention* 26 (2): 147–67.

Rosenberg, Morris, et al.1995. "Global Self-Esteem and Specific Self-Esteem: Different Concepts, Different Outcomes". *American Sociological Review* 60 (1): 141–156.

Sacchi, Stefan, et al. 2011. "Die Bedeutung von sozialer Herkunft und Migrationshintergrund für den Übertritt in anerkannte nachobligatorische Ausbildungen in der Schweiz". In *Transitionen im Jugendalter. Ergebnisse der Schweizer Längssschnittstudie TREE*, edited by Manfred Max Bergman et al., 120–156. Seismo Verlag.

Semmer, Norbert K., Waltraud Barr and Gerd Steding. 2000. "Unterweisungen in der betrieblichen Praxis: Von den Schwierigkeiten des guten Erklärens". *Zeitschrift für Arbeits – und Organisationspsychologie* 44(4): 221–228.

SINUS Institute. 2024. "SINUS Milieus". Available at: https://www.sinus-institut.de/en/sinus-milieus/ sinus-milieus-international.

Advancing social justice, promoting decent work

The International Labour Organization is the United Nations agency for the world of work. We bring together governments, employers and workers to improve the working lives of all people, driving a human-centred approach to the future of work through employment creation, rights at work, social protection and social dialogue.

Contact details

ILO Regional Office for Asia and the Pacific DWT–Bangkok

ILO Country Office for Thailand United Nations Building, 11th Floor Rajdamnern Nok Avenue, P.O. Box 2-349 Bangkok 10200 Thailand T +662 288 12 34 bangkok@ilo.org



