ETH zürich



Apprenticeship Pulse - Factsheet

Apprenticeship Pulse Results December 2020

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Research Team

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Apprenticeship Pulse has been surveying the impact of the COVID-19 pandemic on basic vocational training on a monthly basis since April 2020. While Switzerland was in a shutdown in April, the measures in place at the time were gradually relaxed in the following months. After the summer months with relatively low case numbers and restricted measures, the second wave arrived in September. In October, this led to a sharp increase in the number of cases and a renewed tightening of the measures (particularly the expansion of the mask requirement, requirements for private events and spontaneous meetings, and the home office recommendation). In the following months, measures were tightened again, with private meetings being further restricted and restaurants, bars, cultural, leisure and sports facilities closed. In addition, Swiss universities switched to distance learning again, while lessons at schools could be continued with the corresponding hygiene and behavioral rules.

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This fact sheet provides an overview of the effects of the pandemic on training companies and apprentices in **December 2020.** It also compares these results with those of the previous surveys. These are bundled into phases: shutdown (April), easing (May-June), restricted measures (July-September), and October and November with more stringent measures. All results are weighted and are therefore representative for training companies and apprentices in Switzerland (more information is available in the fact sheet "Weighting and representativeness of the results").

Compared to earlier publications, the groups of young people for whom the results are presented separately have been adjusted. The previous Group 3 - apprentices in their last year of training – is not reported in this fact sheet.

- Group 1: Future apprentices in 2021
- Group 2A: Apprenticeship beginners 2020
- Group 2B: Current apprentices

The Pulse of Apprentices in December 2020 – Main Points

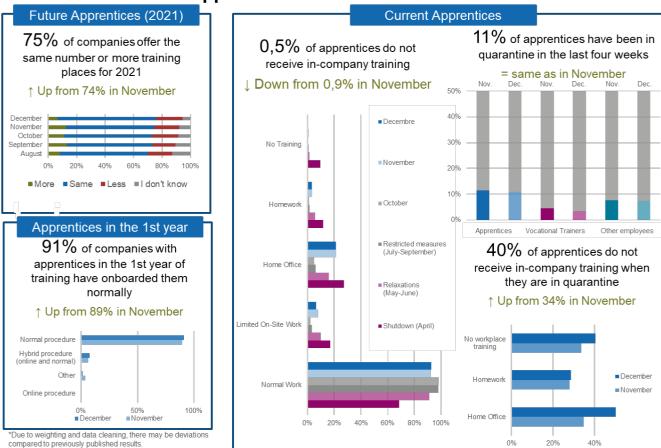


Figure 1: The headlines on Apprenticeship Pulse in December 2020.

Remarks: Results based on weighted data from Apprenticeship Pulse surveys 04.2020 (Apr

Remarks: Results based on weighted data from Apprenticeship Pulse surveys 04.2020 (April), 05.2020 (May), 06.2020 (June), 7.2020 (July), 08.2020 (August), 09.2020 (September), 10.2020 (October), 11.2020 (November), and 12.2020 (December). The left box shows the main results for future apprentices in 2021 and for apprentices in the 1st year of apprenticeship, the right box those for current apprentices.

In German-speaking Switzerland, young people who are about to start an apprenticeship (group 1) begin the application process one year before the start of the apprenticeship. In French-speaking Switzerland, this process does not start until spring. Since August 2020, there have been vacant apprenticeship positions in German-speaking Switzerland for the start in summer 2021. The December survey of the Apprenticeship Pulse enabled us to assess apprenticeship offerings for 2021 and compare it with the situation in the previous months.

In December, 75% (74% in November, 73% in October and September, 70% in August) of the companies surveyed reported that they offered the same number or more apprenticeships for the 2021 training year compared to this year. This figure has remained roughly stable over the last few months, although the proportion of companies offering more apprenticeships declined recently (to 6%; 12% in November, 11% in October, 13% in September, 8% in August). At the same time, the proportion of companies offering the same number of apprenticeships as in 2020 increased (to 69%; 61% in November, 62% in October, 60% in September, 62% in

August). 18% of companies (same in November and October, 16% in September, 17% in August) will offer fewer apprenticeships, and this proportion has barely changed since August. 6% of companies (9% in November and October, 11% in September, 13% in August) do not yet know how many apprenticeship places they will offer in 2021. In the next few months, Apprenticeship Pulse will survey the apprenticeship offer for summer 2021 in detail and thus be able to make statements again on the number of apprenticeships still open and already filled.

First-year apprentices (group 2A) started their apprenticeship between August and October this year. 68% (same in November) of the surveyed companies stated in December that they had apprentices who had started an apprenticeship this year. Of these companies, 91% (89% in November) onboarded their apprentices in the normal procedure, while 7% (6% in November) of companies combined this with an online procedure (hybrid procedure). Only very few surveyed companies used a purely online process for onboarding new apprentices (0%, 1% in November).

Apprentices in the midst of their training (group 2B)

were again severely affected in December by the measures taken against the pandemic. 93% of apprentices (92% in November, 98% in October, 98% in July-September, 91% in May-June, 69% in April) were working under protective measures required by the Federal Office of Public Health (in particular distance and hygiene rules). 7% of apprentices (8% in November, 2% in October, 3% in July-September, 10% in May-June, 17% in April) were at their workplace to a limited extent, and 21% (in November, 5% in October, 6% in July-September, 16% in May-June, 27% in April) were at least partially working from home. 3% of apprentices (in November, 1% in October, 2% in July-September, 6% in May-June, 12% in April) received homework for the practical part of their training and 0.5% (0, 9% in November, 0.6% in October, 1% in July-September, 2% in May-June, 10% in April) did not receive any training. The December survey shows hardly any change compared to November and still relatively high numbers for apprentices in home office, limited in-company work, and homework training.

In November and December, the Apprenticeship Pulse also collected information on the effects of the quarantine regulations for apprentices. Apprentices were frequently in quarantine: surveyed companies reported in December that 11% (same in November) of their apprentices had been in quarantine in the last four weeks from mid/late November to mid/late December, while only 3% of trainers (4% in November) and 7% of other employees (8% in November) were affected. Another challenge is the practical training of the quarantined apprentices. According to the December survey, 56% of apprentices (35% in November) continue their training at home during quarantine, 29% (28% in November) receive homework and 40% (34% in November) get no training at all while quarantined. As the detailed results show, these measures also have an impact on the training costs of companies and the productivity and knowledge of apprentices.

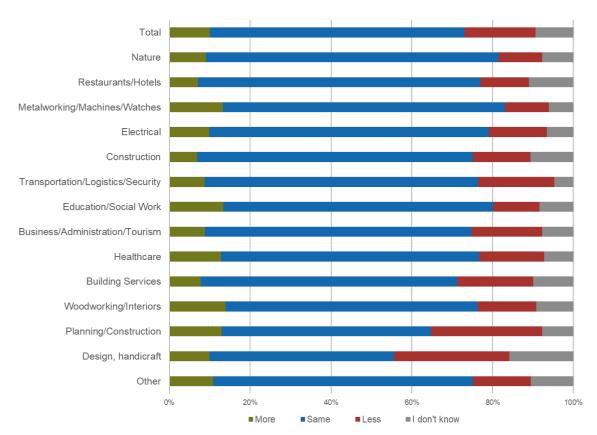


Figure 2: Apprenticeship vacancies in 2021 by occupational field.

Remarks: Results based on aggregated and weighted data from the monthly Apprenticeship Pulse surveys from August to December 2020. The graphic shows the percentage (in%) of apprenticeships from all apprenticeships surveyed for each possible type of apprenticeship offer in 2021 and per occupational field.

Detailed Results

Apprentices starting in 2021 (Group 1)

In December, 75% of companies (74% in November, 73% in October and September, 70% in August) reported that they are offering the same number or even more apprenticeship positions for the 2021 training cohort compared to 2020. However, the proportion of companies that offer more apprenticeships decreased compared to 2020 (to 6%: 12% in November, 11% in October, 13% in September, 8% in August), while the proportion of companies with the same number of apprenticeship places has increased (to 69%; 61% in November, 62% in October, 60% in September, 61% in August). In addition, 18% of companies (same in November and October, 16% in September, 17% in August) will offer fewer apprenticeships in 2021 than in 2020 and 6% (9% in November and October, 11% in September, 14% in August) do not know yet.

Figure 2 shows that the supply of apprenticeship places varies for 2021 across occupational fields, but there are hardly any changes compared to the previous month. The largest proportion of companies offering more apprenticeships for 2021 is found in the occupational field "Woodworking/Interiors" (14%), followed by "Planning/Construction", "Health", "Education/Social Work" and "Metal/Machines/Watches" (13% each). The occupational field of "Planning/Construction", at 28%, also

has the largest proportion of training companies offering fewer apprenticeships, followed by "Information Technology" (21% each).

There are various reasons why the training companies offer more or fewer apprenticeships for the 2021 training period compared to 2020. The demand for skills is the most important reason for the current supply of apprenticeship places. 72% of surveyed companies (71% in November, 70% in October, 68% in September, 62% in August) do not need any additional employees with these skills. On the other hand, 28% of training companies (29% in November, 23% in October, 23% in August and September) assume that they will need more employees with such skills now or in the future. 11% (same in November, 8% in October, 9% in September, 12% in August) are offering more places to show solidarity with the young people who have had a harder time looking for an apprenticeship this year. Finally, 17% of training companies (20% in November, 21st % in October, 21% in September, 10% in August) plan to offer more apprenticeship positions for 2021 than they did for the cohort starting in 2020.

	Apprentices at work		Apprentices at home		
	Normal Work	Limited On-Site Work	Home Office	Homework	No workplace training
Total	93%	7%	21%	3%	0.5%
Building	99%	0%	0%	1%	1%
Education/Social Work	99%	1%	0%	1%	1%
Electrical	97%	5%	5%	2%	1%
Vehicles	97%	2%	0%	2%	2%
Restaurants/Hotels	88%	11%	1%	3%	4%
Building Services	99%	2%	1%	2%	0%
Healthcare	99%	2%	1%	1%	1%
Woodworking/Interiors	100%	0%	2%	1%	0%
Information Technology	75%	12%	55%	5%	0%
Metalworking/Machines/Watches	99%	2%	1%	2%	0%
Nature	98%	1%	0%	2%	1%
Planning/Construction	95%	4%	18%	2%	1%
Sales/Purchasing	96%	6%	3%	2%	1%
Transportation/Logistics/Security	99%	2%	0%	1%	1%
Business/Administration/Tourism	90%	8%	30%	4%	0%
Other	95%	5%	15%	1%	1%

Figure 3: Effects of the pandemic on the training of apprentices by professional field.

Remarks: Results based on weighted data from the Apprenticeship Pulse Survey in December 2020. For each measure and occupational field, the table shows the proportion (%) of apprentices among all apprentices covered by the surveyed apprenticeship companies in the respective occupational field (multiple answers possible); Occupational fields with fewer than 50 apprenticeship companies are grouped under "Others".

First year students (Group 2A)

In December, 68% of the surveyed companies (same in November) stated that they had apprentices who had started their apprenticeships in the summer of 2020. Of these companies, 91% (89% in November) have onboarded their new apprentices in the normal procedure, 7% (6% in November) combined this with an online procedure (hybrid procedure) and only very few companies have onboarded their new apprentices purely online (0%; 1% in November).

Although a relatively large number of companies were able to train their new apprentices "normally", they be-

lieve that this training was less effective than in the previous year (value of -0.16 on a scale from -2 "much worse" to 2 "much better"; same in November). 48% of the training companies justify this with the fact that the protection concepts sometimes cause difficulties (in particular distance rules and mask requirements). Other important reasons were that the new apprentices had to be more independent and flexible this year (48% of companies) and that the integration into the new team is more difficult due to home office (31% of companies) and that supervision and training of apprentices is more difficult while working from home (25% of companies).

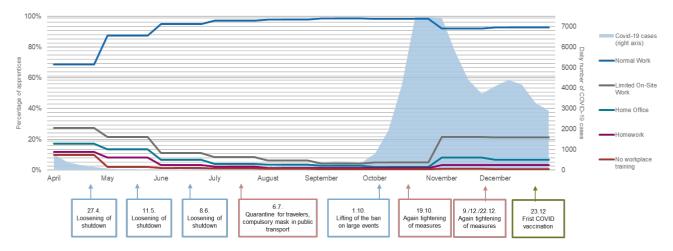


Figure 4: Effects of the pandemic on the training of apprentices over time.

Remarks: Results based on weighted data from the monthly Apprenticeship Pulse surveys from April to December 2020. On the vertical axis on the left-hand side, for each measure for in-company training, the graph shows the proportion (%) of apprentices out of all apprentices covered by the surveyed apprenticeship companies (Multiple answers possible). The daily Corona case numbers from April to December 2020 (weekly average) are shown on the vertical axis on the right-hand side.

Current apprentices (Group 2B)

Figure 3 shows the effects of the pandemic on practical training overall and per occupational field. With an average of 93% (92% in November, 98% in October, 98% in July-September, 91% in May-June, 69% in April), apprentices worked mostly or almost completely normally in December in most occupational fields (with protective measures taken by the Federal Office of Public Health). The proportion of apprentices working from home remained the same in December as in November (21%; 5% in October, 6% in July-September, 16% in May-June, 27% in April). The percentage of apprentices in home office in the fields of "Information Technology" (55%) and "Business/Administration/Tourism" (30%) were well above average.

The proportion of apprentices with limited on-site training is 7% (8% in November, 2% in October, 3% in July-September, 10% in May-June, 17% in April), and that of apprentices doing homework for practical training is 3%

(same in November, 1% in October, 2% in July-September, 6% in May-June, 12% in April). The share of apprentices without any training is 0.5% (0.9% in November, 1% in October, 2% in July-September, 6% in May-June, 12% in April). The proportion of apprentices without practical training is comparatively high in the occupational fields of "Hospitality/Hotel" (4%) and "Vehicles" (2%). In the "Hospitality/Hotel" occupational field, there are also relatively few apprentices working normally in their training companies (88%), while an above-average number of apprentices receive limited on-site assignments and/or homework for the practical part of their training (3%).

Figure 4 shows the development over time of apprentices doing normal work, working from home, doing limited on-site work, doing homework for their practical training, and doing no practical training. The figure plots this alongside Switzerland's COVID-19 case numbers and major events. While the proportion of

apprentices with normal work increased continuously until October, it fell again when the measures were tightened again in November and remained more or less stable in December. The opposite applies to the other effects, especially the recent sharp increase in home office

and limited on-site work in November, but the latter decreased a little in December.

Quarantine measures

Business and society are currently also concerned with the quarantine regulations to protect against further infections. These measures mean that apprentices may be confronted with temporary interruptions in their training, and that companies may have to deal with sudden requirements that apprentices, trainers, or other employees stay home. Figure 5 shows for each occupational field the proportion of apprentices, vocational trainers and other employees were in quarantine according to the November and December surveys.

In the four-week period prior the surveys, around 11% (same in November) of the apprentices, 3% (4% in November) of the vocational trainers and 7% (8% in November) of the other employees were in quarantine. Figure 5 shows that the occupational fields were affected to varying degrees. In the occupational fields of "Health", "Business/Administration/Tourism", "Information Technology" and "Social Work", above-average numbers of apprentices were quarantined (12% each).

When asked what apprentices do when they must quarantine due to potential COVID-19 exposure, companies report that 56% of quarantined apprentices (35% in November) can work from home, 29% (28% in November) receive homework for their practical training, and 40% (34% in November) do not receive any practical training. However, the training companies believe that the apprenticeship in their company is only slightly affected by the quarantine measures (value of 1.79 on a scale from 1 "weak" to 5 "strong"; 1.85 in November) and there are hardly any differences between the various occupational fields.

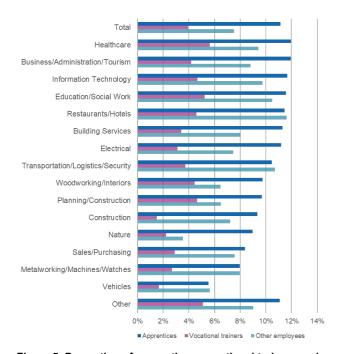


Figure 5: Proportion of apprentices, vocational trainers and other employees in quarantine by occupational field.

Remarks: Results based on weighted data from the Apprenticeship Pulse surveys in November and December 2020. The graph shows the proportions of apprentices (blue), vocational trainers (pink) and other employees (light blue) per occupational field.

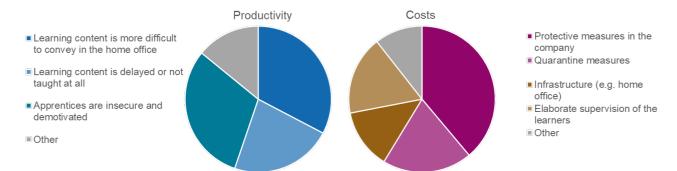


Figure 6: Reasons for the lower productivity of apprentices and higher training costs.

Remarks: Results based on weighted data from the Apprenticeship Pulse Survey in December 2020. The graphic shows the shares of training companies per possible reason for COVID-related changes in the productivity of apprentices and in costs.

Effects on Productivity and Costs

Companies were also asked how the changes since the COVID-related shutdown have affected the productivity of apprentices and their training costs. In both cases, a worsening of the situation is evident, even if the effects are relatively small. The companies believe that the productivity of apprentices has tended to decrease (value of -0.3 on a scale from -2 "much lower productivity" to 2 "much higher productivity"; same in November, -0.1 in October and September). Figure 6 shows that this is often justified by the fact that the learning content is more difficult to convey while working from home (31% of companies)

or is delayed or not conveyed at all (23% of companies) and that apprentices are insecure and demotivated because of the situation (31% of companies).

According to the surveyed companies, training costs have risen (value of 0.2 on a scale from -2 "much lower costs" to 2 "much higher costs"; same in November, 0.1 in September and October). The companies attribute these higher training costs in particular to the protective measures (40% of the companies), but also to the quarantine measures (21% of the companies), the more complex supervision of the apprentices (17% of the companies) and new infrastructure (e.g. for home-office; 10% of the companies).

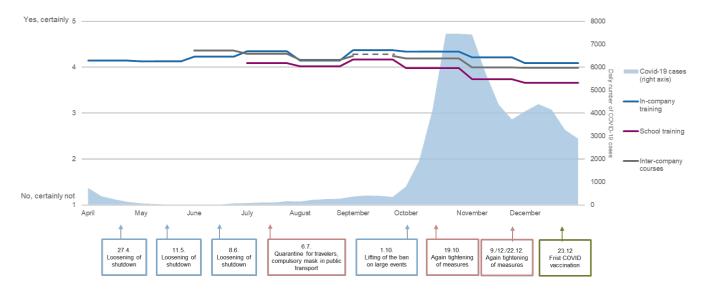


Figure 7: Catching up on the material missed due to the corona pandemic over time.

Remarks: Results based on weighted data from the monthly Apprenticeship Pulse Surveys from April to December 2020. The graph shows on the vertical axis on the left whether the companies think that the apprentices are definitely no longer (1) or sure (5) can still catch up. The daily Corona case numbers from April to December 2020 (weekly average) are shown on the vertical axis on the right-hand side.

Catching up on Missed Material

Figure 7 shows that, in December, training companies again became less confident that the apprentices can catch up on the school material they missed due to the pandemic in the remaining apprenticeship period. Scoring 4.09 (4.22 in November, 4.34 in October, 4.23% in July-September, 4.15% in May-June, 4.10% in April) out of 5 points (5 stands for "everything can be made up for"), the training companies think that apprentices cannot fully make up for the material they have missed in the company training in the remaining apprenticeship period. The value for school education is somewhat more pessimistic (3.66; 3.74 in November, 3.91 in October, 3.97% in July-September). For the inter-company courses, the value is 3.99 (4.00 in November, 4.12 in October, 4.13% July-September,

4.24% in May-June, 4.12 in April) and thus between those of school-based training and practical training.

The training companies have become even more pessimistic - particularly with regard to school-based training. According to the surveyed companies, this may be related to the fact that the apprentices are insecure and demotivated. 53% of apprentices are in companies that think all apprentices are equally affected by the COVID-19 pandemic, while around one-fifth are in companies that identify apprentices in the first year of training and those in the last year of training as being most affected. However, 28% of apprentices are in companies who identify weaker apprentices as the group most affected.

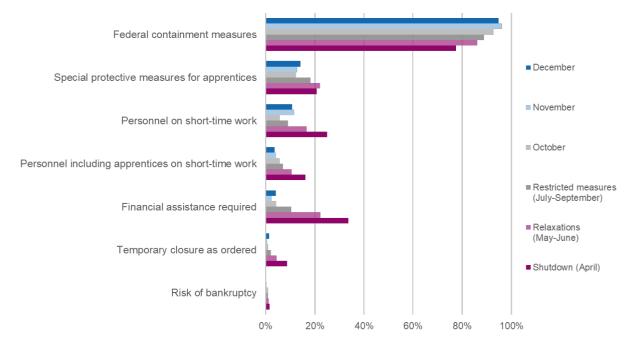


Figure 8: How the training companies and their apprentices were affected by the corona pandemic.

Remarks: Results based on weighted data from the monthly Apprenticeship Pulse surveys from April to December 2020. The graphic shows the percentage of apprenticeships affected (in%) of all apprenticeships surveyed for each impact of the corona pandemic.

Effects on Training Companies and Apprentices

The surveyed companies and their apprentices were also affected differently by the corona pandemic in December. Figure 7 shows that in 95% (96% in November, 93% in October, 89% in July-September, 86% in May-June, 77% in April) of the companies were working with protective measures according to the Federal Office of Public Health. Short-time work has become more common again for apprentices, with 3% (2% in November, 4% in October, 10% in July-September, 22% in May-June, 34% in April) of the companies having their staff

including apprentices on short-time work. In contrast, the proportion of companies that had protective measures that affect apprentices in particular remained more or less constant (11%; 12% in November, 6% in October, 9% in July-September, 17% in May-June, April 25th) % in April).

Data and Representativeness

2,500 training companies (2,292 in November, 2,552 in October, 2,664 in September) of various sizes from all cantons and occupational fields took part in the Apprenticeship Pulse survey in December 2020. The questions were answered by people with different functions in the training companies, with apprentice trainers as well as HR specialists and managers being represented. Since 44,660 training companies were contacted for the survey, the Apprenticeship Pulse achieved a response rate of 5.60% in December (5.13% in November, 5.71% in October, 5.96% in September). However, the calculation of the response rate is not exact because the survey was not only sent directly to the list of training companies, but was also distributed using other channels.

The surveyed training companies cover 2.72% (2.50% in November, 2.78% in October, 2.91% in September) of all training companies in Switzerland. The coverage for

German-speaking Switzerland is better than for the other two language regions. In December, the survey captured 3.54% of companies in German-speaking Switzerland (3.21% in November, 3.52% in October, 3.71% in September) compared to 1.58% of those in Latin (French-speaking and Italian-speaking) Switzerland (1.56% in November, 1.81% in October, 1.72% in September). In addition, large companies tend to be overrepresented compared to SMEs. However, the weighting procedure used corrects for differences in representativeness by language region, occupational field and company size.

The surveyed training companies together offer 23,158 apprenticeships (24,046 in November, 22,554 in October, 23,925 in September) in a wide range of regions and occupational fields.

Further Information at www.lehrstellenpuls.ch.

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