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Evaluation  
of an apprenticeship support  
programme for young  
people in Germany:  
JOBLINGE's basecamp  
programme

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# **Evaluation of an apprenticeship support programme for young people in Germany**

JOBLINGE's basecamp programme

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# Abstract

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Work-based learning programmes, commonly known as apprenticeships or dual vocational education and training, are a proven way to help young people transition successfully from school to work. In Germany, apprenticeships remain the most popular education path for young people. However, recently the rate of apprenticeships that are terminated prematurely has increased, reaching a record high of one-third in 2022. A potential remedy to combat high apprenticeship drop-out rates are apprenticeship support programmes designed to provide support to young people throughout their apprenticeship until successful graduation. However, while many such programmes exist, evidence on their effectiveness is sparse. This paper evaluates the JOBLINGE basecamp initiative, an apprenticeship support programme operating in four locations across Germany. Findings suggest that the basecamp initiative is promising, enhancing apprentices' security in their apprenticeship and equipping them with essential skills to graduate successfully.

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# Executive summary

The transition from school to work can be a challenging time for many young people. One avenue to support young people in this transition are work-based learning programmes, commonly known as apprenticeships or dual vocational education and training. Such programmes provide opportunities to develop skills demanded in the labour market without having to complete tertiary education.

The apprenticeship system is especially prevalent in Germany, where it remains the most common educational path with a net entry rate of 50.3% in 2023. The share newly entering tertiary education among the same age group (net entry rate to tertiary education) is slightly lower at 43% and the remaining new entrants pursue either full-time vocational education or yearly school programmes designed to prepare young people to start an apprenticeship the next year. Young men are generally more likely to start an apprenticeship than young women and the number of men starting a new apprenticeship has been stable over many years. In contrast, the number of new female apprentices has steadily decreased since 2009, increasing the share of men among all new apprentices from 57% in 2009 to 64% in 2023.

Overall, apprenticeships have been losing some significance in Germany over the past years, driven primarily by smaller cohort complemented with a growing preference for tertiary education, particularly among young women. These trends have transformed the apprenticeship market, to a market increasingly benefitting apprenticeship seekers. While in 2011, the number of available apprenticeship positions was significantly lower than the number of interested applicants, supply and demand have since converged, and by 2022, the number of offered positions exceeded the number of seekers. In 2023, there were 101.8 open positions for every 100 apprenticeship seekers across Germany.

At the same time, the share of apprenticeships that are terminated prematurely has been steadily increasing, reaching a record high in 2022. These terminations can be initiated by either the employer or the apprentice or may occur if the apprentice fails to pass the required exams in vocational education and training (VET) school. The rate has grown from 25.0% in 2013 to 29.5% in 2022. While about half of those apprentices quickly secure new training positions after a contract termination, others remain without a follow-up solution six months after premature contract termination.

To address apprenticeship dropout rates and support apprentices in successfully completing their training, JOBLINGE – a Germany-wide initiative that aims to facilitate the integration of young people in disadvantaged situation into the workforce – launched a programme called basecamp in 2019, beginning with a pilot in Frankfurt and expanding to Berlin, Mannheim, and Essen in 2022-2023. This new addition to JOBLINGE's existing suite of programmes – which help young people secure apprenticeship positions – extends support throughout the apprenticeship itself. The goal of the basecamp programme is to ensure participants not only complete their apprenticeships successfully but also acquire the essential skills needed for a prosperous career afterward. Each year, the programme admits around 220 participants across the four locations, for an estimated budget of about EUR 400-500 000 per location.

The basecamp programme combines three key pillars of support. The first pillar is a dedicated space where apprentices can study, seek advice and connect with each other. The second pillar provides tailored and individualised assistance in case of problems at the VET school, at the training enterprise or in their private

life, allowing participants to reach out to basecamp staff for support whenever necessary. The third pillar focuses on equipping participants with skills essential for both completing the apprenticeship and succeeding in their future careers. Through tutoring and workshops on topics like exam preparation and learning strategies, apprentices are supported academically, while sessions on digital skills, financial literacy, and conflict management build skills for long-term professional success.

While the basecamp programme is still developing and expanding, this report presents an initial evaluation of its impact across the four locations operating in the 2023-2024 school year in Berlin, Frankfurt, Essen, and Mannheim. The evaluation draws on quantitative data from two surveys administered to basecamp participants (treatment group) and a comparable group of non-basecamp apprentices selected from VET schools close to the basecamp premises in each location (control group). The survey was distributed at the start of the programme in the third quarter of 2023 and again at the end of the school year in the late second quarter of 2024. Ideally, any changes in the differences observed between the treatment and control groups over this period would reflect the impact of the basecamp programme on the participants. However, key limitations of this evaluation design are the low sample size and the non-random assignment of participants to basecamp, preventing such a causal interpretation of the effects found. Therefore, quantitative results remain suggestive and are supplemented by qualitative evidence collected during a study visit to two out of the four locations.

The evaluation focuses on the three pillars of the basecamp approach, assessing their effectiveness individually while also identifying potential areas for improvement.

The basecamp premises (first pillar), visited both in Essen and Frankfurt, are well-designed, inviting spaces, though both participants and staff report that few participants actively utilize them. Participants primarily visit basecamp in emergency situations or for scheduled workshops, rather than for studying or socializing with peers. A key barrier for a more frequent use of the premises appears to be the opening hours: many basecamp locations close by the time participants finish work and are not open on weekends, when apprentices have more time to study.

basecamp has successfully established itself as the first point of contact for participants facing challenges with their apprenticeship and the individual support provided as part of the second pillar is effective and highly valued by participants. Across locations, participants consistently highlight basecamp staff's respect, empathy, and willingness to assist with any problem as the programme's most appreciated aspects. Those who have taken advantage of this support report that it was instrumental in resolving their issues successfully. Even participants who have not yet needed individual assistance mention that simply knowing the option is available gives them a sense of security and reassurance. This also translates into measurable effects: especially female basecamp participants are significantly less likely to consider dropping out of their apprenticeship at the time of the follow-up survey. However, basecamp does not appear to be associated with lower overall stress levels nor with increases in general satisfaction with their apprenticeship, and many participants report challenges in scheduling appointments due to high demand and restricted opening hours.

The third pillar of basecamp support – i.e., tutoring, workshops or social events – is mostly successful. The evaluation shows that the activities are well targeted, focusing strongly on support with challenges in VET school, an area where participants report to struggle most. Both the quantitative and qualitative evaluations demonstrate that these measures are effective in supporting participants in various dimensions: attending basecamp is associated with a notable reduction in feeling overwhelmed with VET school, especially among female participants. The share of participants needing support with VET school related topics also decreases significantly at follow-up. Workshops have been highly successful and are typically associated with improvements in the specific skill they target in the locations that offer them. Participants also express high levels of satisfaction with workshops, describing them as useful, interesting, and relevant. However, basecamp tutoring does not seem to translate to measurable improvements in neither occupation-specific skills nor reading or writing skills. This may be related to the current offerings not being sufficiently

available, partly because timing conflicts prevent participants from attending all offers they are interested in, and partly because participants express a desire for more offerings, such as expanding the availability and topics covered in tutoring or workshops.

Overall, the evaluation suggests that the basecamp programme provides a promising approach to supporting apprentices in their training and preparing them for successful careers. The evaluation of attending the programme for 6-8 months shows that through individualised support provided by the programme, participants feel more secure in their apprenticeships and attending basecamp is associated with a drop in considerations to quit the apprenticeship for female participants. Academic assistance, such as tutoring and targeted workshops, is further associated with reductions in feeling overwhelmed in VET school among participants, while career skills workshops are related with skill improvements in areas relevant for career success. However, a future long-term evaluation will be necessary to determine whether these suggestive positive effects are causal and persist over time, and whether support programmes such as basecamp can contribute to higher rates of successful apprenticeship completion.

To further improve the basecamp programme, the following key recommendations drawn from the quantitative and qualitative evaluation are proposed:

- **Improve the accessibility of basecamp for participants:** Accessibility of the basecamp premises could be improved by adjusting opening hours to better align with participants' schedules, such as offering extended evening hours on certain days, or opening one day on the weekend, and by increasing the available appointments for individual meetings to reduce wait times for participants when they require assistance.
- **Provide additional networking opportunities:** To meet participants' desire for more social events and networking opportunities, more regular social events could be incorporated into the standardised basecamp offering and opportunities could be included to mingle and socialise in existing offers (i.e., longer breaks, food offer after events...).
- **Increasingly involve training companies:** Involving training companies (i.e., employers of basecamp apprentices) may have several advantages. Informing employers about basecamp when apprentices join could encourage employer support and make it easier for apprentices to attend basecamp events. Regular check-ins with training companies, agreed upon by both parties, could provide a fuller picture of apprentices' progress, help pre-empt challenges, and encourage high training standards at companies. Additionally, collaborating with companies on resources like tutoring and aligning workshop topics with employer needs could enhance programme effectiveness. This engagement could also expand basecamp's network, providing opportunities for recruiting mentors and company experts for added support and specialised workshops.
- **Continue feedback culture and standardise data collection for continuous monitoring:** Institutionalising a feedback culture in the basecamp programme will ensure that participant input is regularly gathered and utilised to refine current offerings and co-develop new ones, keeping the programme responsive to evolving needs. Additionally, intensifying data collection with a streamlined, standardised system across locations will support continuous programme monitoring without increasing staff workload. Building a comprehensive database will enable more effective tracking of individual progress and provide valuable insights for future evaluations.

# 1 The apprenticeship market in Germany

## 1.1. Apprenticeships and upper secondary education in Germany

Upper secondary education in Germany can be broadly classified into two strands: full-time general education and vocational education and training (VET). The former comprises general education schools that allow students to eventually pursue tertiary education (*Gymnasium*) and specialised upper secondary schools (*Fachoberschule*) that focus on specific vocational fields and qualify students for entry into universities of applied sciences. VET education comprises the dual VET system, a hallmark of the German education system that combines part-time vocational school with training at a company, and full-time vocational schools which rely solely on full-time school education to obtain qualifications in various trades and professions. Outside of those two paths, there are various transition programmes available to support students who have not secured an apprenticeship position, such as one-year schools that provide full-time vocational education (*basic vocational education year*) or internships, both with the goal of improving students prospect of eventually entering the dual system.

Students who choose to pursue VET education within the dual system need to apply to training positions posted by training companies (employers) and sign a contract with the company to receive training in their firm according to a chosen occupational profile. The occupational profiles are defined by an official curriculum for in-company training and a corresponding syllabus for theoretical classes in VET schools. Each training company needs to provide a company trainer who is responsible for the apprentices practical training at the firm. Typically, dual apprenticeships last between 2-3.5 years and end with a final examination (Le Mouillour, 2023<sup>[1]</sup>).

Dual VET education remains the most popular educational path for upper secondary education in Germany. In 2022, this path amounted to a net entry rate of 50.3% into dual VET education (Figure 1), where the net entry rate is measured by computing the share of new entrants into dual VET education for each age and summing the shares over all ages. In contrast, the net entry rate for tertiary education stood at 43% and the remaining new entrants distribute into full-time vocational schools and available transitional programmes.<sup>1</sup>

New entry into dual VET education have been declining over the past years from 54.2% in 2013 to 50.3% in 2022. Covid-19 led to a particularly large decline in the net entry rate in 2020 of 4.7 percentage points.

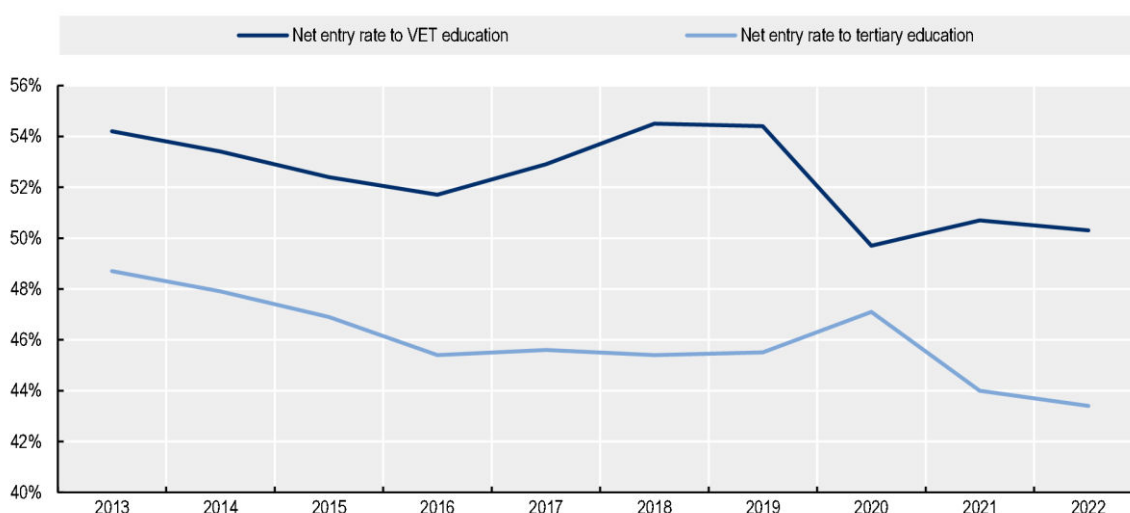
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<sup>1</sup> Note that the overall sum of shares for dual VET education, full-time vocational schools, tertiary education and transitional programmes may be larger than 100 due to the computation of the net entry rate. The rate computes the share of new entrants in a given education of a given age over the total population of this age and sums the shares for each age considered (OECD, 2018<sup>[2]</sup>). This approach hence double counts individuals who start more than one educational path in the course of their career, such as individuals that have previously started an apprenticeship and later on start tertiary education for example.

Net entry into tertiary education on the other hand rose dramatically between 2000 and 2013 and has since declined again (from 28.4 % in 2000 to 48.7% in 2013 down to 43.4% in 2022). For tertiary education, Covid-19 led to a small temporary increase in the net entry rate of 1.6 percentage points in 2020.

### Figure 1. The apprenticeship remains the most common educational path in Germany

Net entry rate into education, either dual VET education or tertiary education, 2013-2022.



Note: VET education refers to dual vocational education and training. The net entry rate into education is computed according to the standard OECD net entry rate (OECD, 2018<sup>[2]</sup>) by computing the share of new entrants in a given education of a given age over the total population of this age and summing the shares for each age considered. The net entry rate to VET education considers age groups between 16-24 by each age-year and summarises all new entrants below 16 and all new entrants above 24 into one group. See BIBB (2025<sup>[3]</sup>) for the exact definition. No information for the age range is provided for the net entry rate to tertiary education by the Federal Statistical Office. Other educational options on upper secondary level and above in Germany include full-time vocational schools and transitional programmes preparing students for entering a dual apprenticeship at a later stage.

Source: Data on entry into tertiary education provided by the Federal Statistical Office of Germany (Federal Statistical Office of Germany, 2022<sup>[4]</sup>) and data on entry into vocational education taken from table A5.8-4 of the 2024 data report on apprenticeship statistics by the Federal Institute for Vocational Training (Bundesinstitut für Berufsbildung, 2024<sup>[5]</sup>).

## 1.2. Recent developments in the German apprenticeship market

In line with the steady decline in the share of new entrants into dual VET education, the overall number of newly signed apprenticeship contracts is also more than 6% lower in 2023 compared to 2014. The drop was driven mainly by an overall reduction in the number of lower secondary school graduates due to demographic change (Figure 2), accompanied by a decreasing interest in dual VET education by young people.

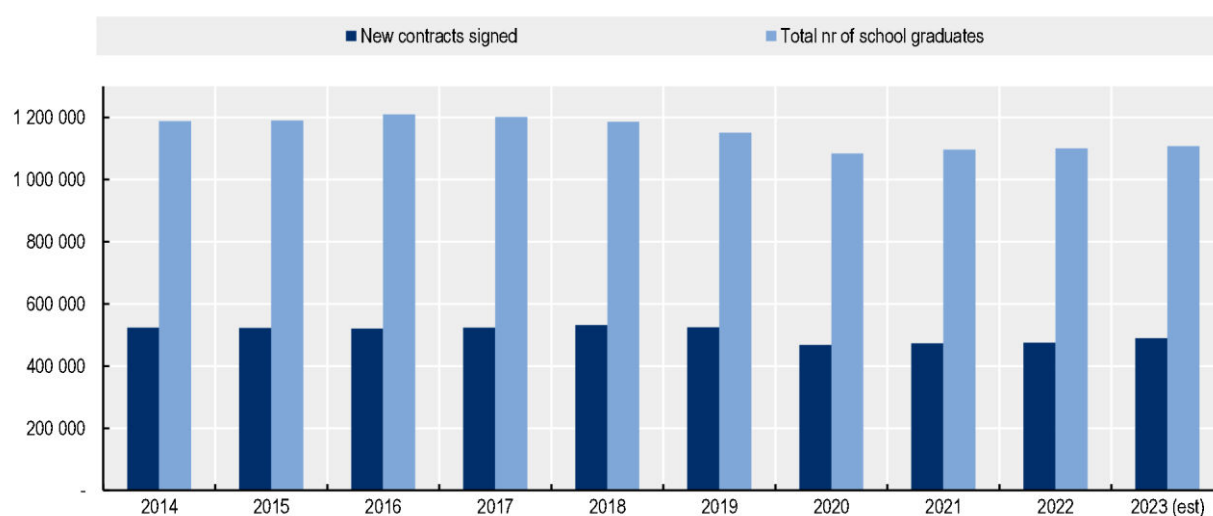
The declining interest in dual apprenticeships was mainly driven by women: the number of women starting a dual apprenticeship position has decreased steadily since 2011 with an even larger drop in 2020 due to the pandemic. Since 2020, the number of women starting a new apprenticeship has stabilised (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>). During the same time period, the number of men looking for a dual apprenticeship has stayed constant or even increased slightly up until the Covid-19 pandemic. Overall, the share of women among all apprenticeship starters was 41.2% in 2011 and decreased to 36.1% by 2023. Women have instead been increasingly likely to opt for full-time vocational schools or tertiary education, in line with rising shares of women with a tertiary education degree across the OECD (OECD, 2021<sup>[7]</sup>). This development can on the one hand be attributed to migration patterns: in recent years, the

majority of young migrants arriving in Germany have been male, many of whom show a strong inclination toward the dual apprenticeship system. On the other hand, young men with an upper secondary qualification granting access to tertiary education (*Studienberechtigung*) have also increasingly opted to pursue a dual apprenticeship instead of a tertiary degree (Dionisius, Kroll and Ulrich, 2018<sup>[8]</sup>). This contributed to a generally increasing share of new apprentices in the dual system who would have a qualification granting access to tertiary education, from 23.9% in 2012 to 28.5% in 2022 (Bundesinstitut für Berufsbildung, 2024<sup>[5]</sup>). Together, these two developments have helped to offset the decline in male school graduates resulting from demographic changes, thereby maintaining stable participation rates among male applicants in the dual apprenticeship system. In contrast, the declining participation of young women in dual apprenticeships is likely linked to their comparatively stronger academic performance. Improved school outcomes have increasingly expanded educational and career pathways beyond the dual system for more young women, contributing to their decreasing representation among apprentices (Dionisius, Kroll and Ulrich, 2018<sup>[8]</sup>).

While interest in dual VET education has declined among young people, firms are showing increased demand for apprentices due to increasing skill shortages in the German labour market. With the exception of the Covid-19 years, the supply of offered apprenticeship positions has risen (Bundesinstitut für Berufsbildung, 2024<sup>[5]</sup>).

**Figure 2. The number of school graduates are lower than a decade ago**

Number of new apprenticeship contracts signed and total number of school graduates, 2014-2023.



Note: The total number of school graduates includes graduates from lower secondary school, graduates of upper secondary schools leading to qualification for tertiary education (Gymnasium), graduates of specialised upper secondary schools (*Fachoberschule*), as well as graduates of transitional schools that prepare students for an apprenticeship. Graduates from upper secondary schools are included as students can opt to pursue an apprenticeship also after completing an upper secondary education that would qualify them for tertiary education. Numbers for 2023 are preliminary estimates.

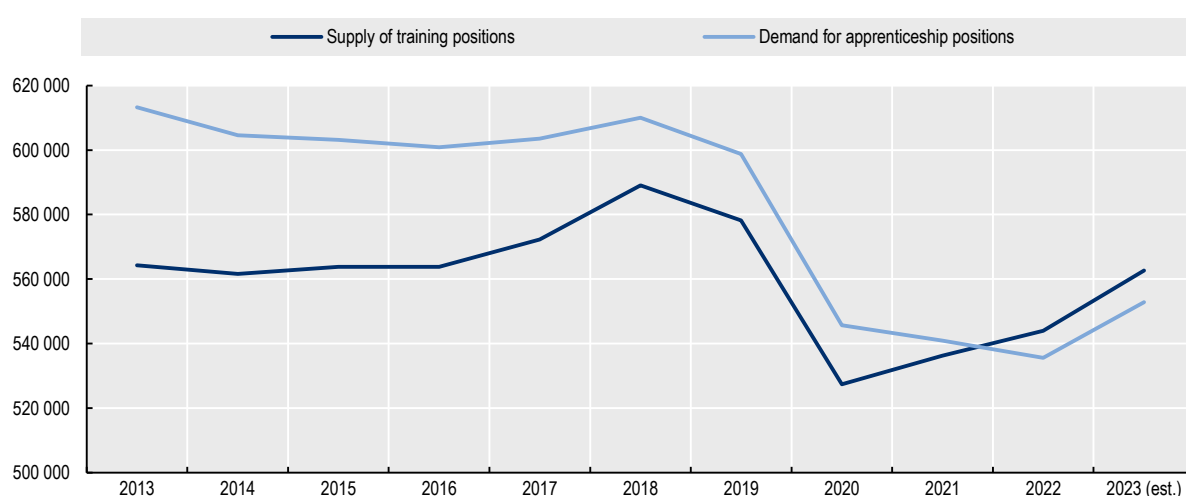
Source: 2024 data report on apprenticeship statistics by the Federal Institute for Vocational Training (Bundesinstitut für Berufsbildung, 2024<sup>[5]</sup>).

Overall, these developments led to an apprenticeship market increasingly in favour of apprenticeship seekers. While the number of offered apprenticeship positions was still considerably lower than the number of interested young people in 2011, the supply and demand have converged and since 2022, there were more offered positions than apprenticeship seekers (Figure 3). In 2023, there were 101.8 open positions for every 100 apprenticeship seekers in Germany overall (Bundesinstitut für Berufsbildung, 2024<sup>[5]</sup>).

However, these numbers mask vast heterogeneity across Germany. In the four federal states of interest in this report (see section 2.3 for more information about the programme and the four federal states where the basecamp programme operates), the numbers range from 82.6 open positions for every 100 applicants in Berlin, to 94.8 in Nordrhein-Westfalen<sup>2</sup>, to 96.9 in Hessen<sup>3</sup>, and up to 109.2 in Baden-Württemberg<sup>4</sup> (Figure 4). Therefore, only apprentices who are attending the basecamp location in Baden-Württemberg faced a more favourable apprenticeship market while the other locations all exhibit higher demand for apprenticeship than supply. This pattern is mirrored by general labour market conditions, as youth unemployment rates are also highest in Berlin and lowest in Baden-Württemberg (Figure 4).

### Figure 3. Since 2022, there are more apprenticeship positions than interested young people

The number of training positions advertised by firms (supply) and the number of young people searching for a dual apprenticeship position (demand), 2013-2023.



Note: The supply is measured as the newly signed apprenticeship contracts by September 30 of each year plus the positions remaining still open at that date which are registered with job centres. Demand is measured as the number of young people registered with job centres. Numbers for 2023 are preliminary estimates.

Source: (Bundesinstitut für Berufsbildung, 2024<sup>[9]</sup>).

In line with these observations are also the share of apprenticeship seekers who wanted to start in summer/fall 2023 but who had not found a training position by January 2024 (Figure 4). This share was close to 21% in Berlin, where the number of offered positions was considerably lower than the amount of young people seeking an apprenticeship. However, also in Baden-Württemberg, where there were more positions on offer than apprenticeship seekers, 5% of all interested students had not found a position by January 2024. Even though there are no exact data collected on the reasons, the Federal Institute for Vocational Training and Education (Bundesinstitut für Berufsbildung, 2024<sup>[5]</sup>) speculates that education mismatches are largely responsible for these 5%, i.e. the apprentices still searching often have too low educational qualifications for the remaining offered positions. Overall, about 11.5% of all applicants were left without a training position in 2023. While this number is high (and also slightly higher than the 11.3%

<sup>2</sup> The Essen basecamp location is located in Nordrhein-Westfalen.

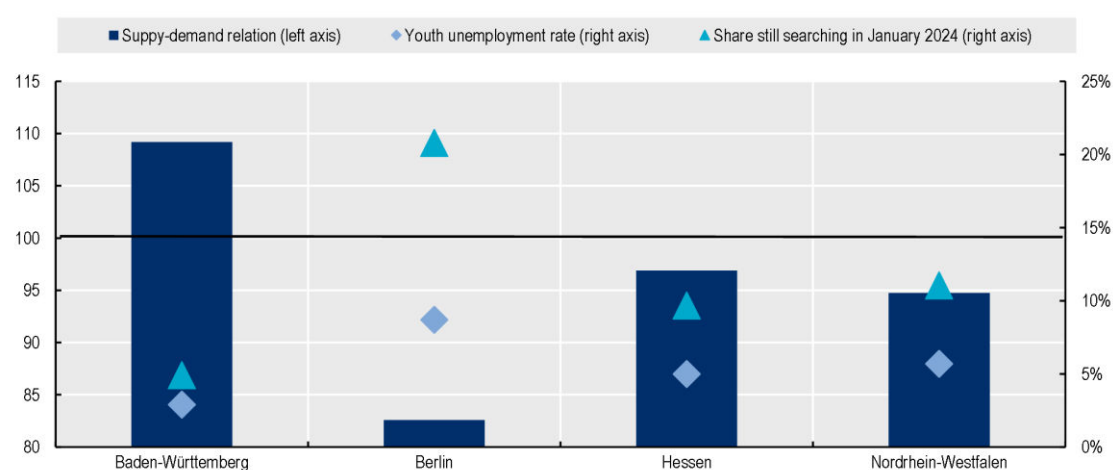
<sup>3</sup> The Frankfurt basecamp location is located in Hessen.

<sup>4</sup> The Mannheim basecamp location is located in Baden-Württemberg.

in 2022), it marks a decrease compared to numbers for 2019, 2020 and 2021 (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>).

#### Figure 4. Baden-Württemberg exhibits the most favourable labour market for apprentices

The supply-demand relation of apprenticeship positions, youth unemployment rate, and the share of young people still searching for an apprenticeship in January 2024, 2023.



Note: The supply demand relation measures how many training positions are offered for every 100 apprenticeship seekers. If the relation is above 100, the situation is favourable for apprentices. The corresponding vertical axis is on the left and the ratio is shown as bars. The vertical axis for the youth unemployment rate and the share of young people still searching for an apprenticeship in January 2024 is on the right and the rates are shown as symbols.

Source: (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>), (Bundesagentur für Arbeit, 2023<sup>[10]</sup>).

On the other end of the match, establishments are sometimes unable to fill their advertised apprenticeship positions. The share of unfilled positions has been increasing steadily, from 6.4% in 2013 to 13.4% in 2023. This development was particularly pronounced in the south-eastern part of Germany, where on average over 20% of offered training positions remained unfilled in 2022 (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>).

The mismatch between offers and applicants is mainly driven by a mismatch in education qualifications, particularly for lower education qualifications. There were more than double as many applicants with only the lowest-track secondary degree in Germany (*Hauptschulabschluss*) as there were training positions that required only the lowest degree. For medium levels of education, qualifications required in the advertised positions and those of applicants were more evenly matched and for high education qualifications there were more training positions than applicants (Table A1.1.2-2 in Datenreport 2023 of the Bundesinstitut für Berufsbildung (2024<sup>[6]</sup>)).

A further driver of unfilled positions is a mismatch between the occupations of interest for apprenticeship seekers and the occupations offered by training enterprises. Table 1 shows the 15 occupations with the highest share of unfilled positions and the 15 occupations with the highest share of unsuccessful applicants. As can be seen, there is no overlap between the two sides of the market, indicating that occupations that are popular among young people are not necessarily those that companies are looking for apprentices in.

**Table 1. Occupations with highest mismatch of supply and demand do not align**

Occupations ranked by share of unfilled positions (first column), and occupations ranked by share of applicants who did not find a training position (third column), 2023.

Occupations with high share of unfilled positions	Share of unfilled positions	Occupations with high share of unsuccessful searchers	Share still searching
Plumber	46.1	Media designer in image and sound	43.4
Specialist salesperson in the food trade	45.3	Animal caretaker	39.4
Concrete and steel-reinforced-concrete worker	43.4	Designer for visual marketing	37.6
Butcher	41.7	Sports and fitness salesperson	35.3
Pipeline constructor	36.0	Media designer in digital and print	32.4
Glazier	35.8	Funeral director/undertaker	29.8
Plasterer	33.3	Interior decorator	25.5
Scaffolder	32.0	Specialist employee for employment market services	25.2
Specialist in system catering	31.2	Specialist for protection and security	24.9
Baker	30.4	Florist	24.6
Specialist for furniture, kitchen and relocation services	29.8	Specialist employee for media and information services	23.5
Hearing aid acoustician	29.6	Housekeeper	23.3
Salesperson in retail	29.2	Bookseller	21.7
Sports and fitness salesperson	27.8	Real-estate agent	21.4
Stonemason and sculptor	27.2	Salesperson in E-Commerce	21.1

Source: Table A1.1.2-2 in the 2023 data report of the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>)

Another indicator for a mismatch between apprentice and training firm is the rate at which apprenticeship contracts are terminated prematurely (either by the employer, the apprentice or due to the apprentice not passing the required exams in school). This rate has been increasing in Germany over the past years, from 25% in 2013 to 29.5% in 2022.<sup>5</sup> It also varies considerably across Germany. In 2022, the highest value was observed in Berlin with 34.8%, and the lowest value in Baden-Württemberg with 26.5%. Hessen and Nordrhein-Westfalen lie in the middle with 28.7% and 30.3%, respectively (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>). The Federal Institute for Vocational Education and Training speculates that the increase can be explained by favourable labour market conditions, facilitating finding a new training position quickly (Uhly and Neises, 2023<sup>[11]</sup>). However, only about half of those whose contract is terminated prematurely are estimated to quickly secure a new training position, while the remaining half often finds this more difficult (Bundesinstitut für Berufsbildung, 2024<sup>[5]</sup>).

Another side of the coin of the above-mentioned premature termination of an apprenticeship as an indicator of a mismatch is instead the rate at which companies retain their apprentices after training completion as an indicator for a successful match between apprentice and training firm. This retention rate is measured as the share of apprentices who stay with their training company among all apprentices of that company who finish the apprenticeship the same year. While numbers are not available by Land, the overall retention rate has steadily increased since 2013, from 67% to 77% in 2022. The retention rate is highest among large companies, where it reached 87% in 2022 for companies with more than 500 employees (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>).

<sup>5</sup> The number for 2021 is partially based on estimates, as the number of contracts that started in 2021 and that were not yet terminated in 2021 but that will be terminated before completion is not yet known as apprenticeships may last up to 3.5 years.

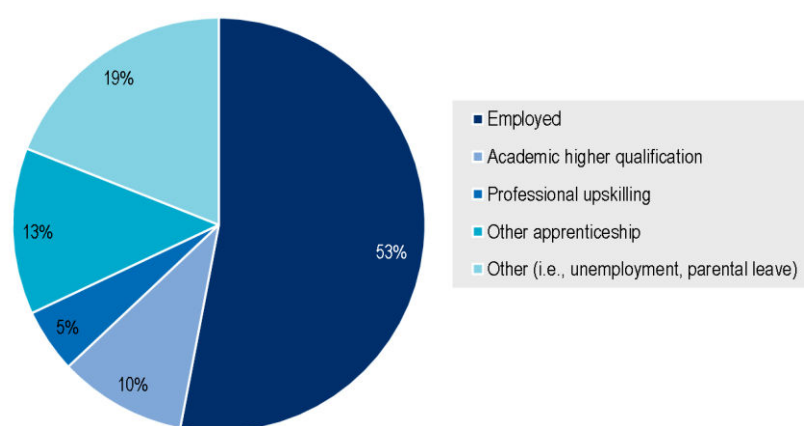
Overall, the situation for apprentices was most favourable in Baden-Württemberg, with considerably more positions offered than apprenticeship seekers and with fewest apprentices who do not succeed in finding a suitable training position. This is likely linked to the region's industry mix, with Baden-Württemberg boosting many small and medium enterprises related to the car industry, thus contributing to a rich offering of dual apprenticeship positions. In Berlin, the situation for apprenticeship seekers is the hardest. There were considerably fewer positions offered than apprenticeship seekers and youth unemployment is generally highest. At the same time, the apprenticeship market is less important in Berlin with only slightly more than 30% of graduates starting an apprenticeship, compared to close to 50% in Baden-Württemberg (Bundesinstitut für Berufsbildung, 2024<sup>[5]</sup>).

### 1.3. Continuation after an apprenticeship

The German apprenticeship system leaves many options for continuation after an apprenticeship. Apprentices may either start working in their occupation, or they can pursue further education, either on an academic track in an applied science university or university – often with an additional intermediate degree necessary – or by pursuing an advanced professional degree. Figure 5 plots the educational or occupational status of young people who attended 9<sup>th</sup> grade of lower-track secondary education in 2010, in the 36 months after completing their apprenticeship. It is important to note that the figure does not include young people who attended higher-level secondary education and hence only reflects the outcomes of young people at the lowest end of the German secondary education system. The figure shows that while the majority of young people directly start working in their occupation, a subset of 15% pursue additional education, either at an applied science university or a university or by pursuing a further professional degree; 13% pursue another apprenticeship.

#### Figure 5. Status 36 months after finishing an apprenticeship

Status 36 months after finishing an apprenticeship, for 2010 graduates of 9<sup>th</sup> grade of lower track secondary education in Germany (*Hauptschule*).



Note: The underlying data are from the German National Education Panel Study (NEPS), which follows a random subset of the cohort which attended 9<sup>th</sup> grade of lower track secondary education in Germany (*Hauptschule*) over time.

Source: OECD replication of a figure in the data report 2023 of the Federal Institute of Vocational Education and Training OECD replication of a figure in the data report 2023 of the Federal Institute of Vocational Education and Training (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>).

## 1.4. The effects of Covid-19 on the apprenticeship market

The apprenticeship market was hit severely by the Covid-19 pandemic, reducing both the number of training positions offered by establishments and the number of school graduates interested in pursuing an apprenticeship. The estimated number of new apprenticeship seekers in 2023 was 7.7% below the 2019 figure, and the number of apprenticeship contracts signed remained 6.5% lower than the pre-pandemic figure of 2019 (Figure 1 and Figure 2).

While some recovery has occurred since then, numbers are still much below pre-Covid-19 levels. Table 2 shows that the apprenticeship markets in Berlin and Hessen were hardest hit by Covid-19, with a drop of 14.2% and 13.2% respectively of newly signed apprenticeship contracts between 2019 and 2020. While there has been a recovery across the Länder (compare third column in Table 2), the number of newly signed contracts in 2023 has not yet reached 2019 levels in any Land (compare fourth column in Table 2). The recovery has further halted in 2022 in Berlin and Nordrhein-Westfalen with both observing a slight decrease in newly signed contracts between 2022-2023. In contrast, the recovery is proceeding strongly in Baden-Württemberg and Hessen, with a growth rate of above 5% in newly signed contracts between 2022 and 2023.

**Table 2. Covid-19 hit apprenticeship markets hard across Germany**

Covid-19-induced drop and recovery in number of newly signed apprenticeship contracts, 2019-2023.

	2020 to 2019	2023 to 2022	2023 to 2020	2023 to 2019
Baden-Württemberg	-10.3%	5.2%	4.2%	-6.5%
Berlin	-14.2%	-0.4%	6.8%	-8.4%
Hessen	-13.2%	5.8%	7.5%	-6.7%
Nordrhein-Westfalen	-12.7%	-0.3%	4.7%	-8.6%

Source: OECD tabulation based on data from the report on 2023 data by the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>).

## 1.5. Apprenticeship support programmes in Germany

Apprenticeship support programmes can be classified into two sets of programmes. Pre-apprenticeship programmes target students and young people looking for an apprenticeship. They provide support in finding a suitable apprenticeship position or training to equip young people with skills necessary to start an apprenticeship. Next to pre-apprenticeship programmes, various apprenticeship support programmes target apprentices during their training, providing assistance with VET school, or help in case of problems at the training firm with the goal of enabling apprentices to graduate successfully.

Germany offers various pre-apprenticeship programmes under the umbrella term *basic vocational education year*. Such programmes are aimed either at students who have completed lower secondary education but who have not been able to find a training position or students who have dropped out of school and wish to get a qualification allowing them to later pursue an apprenticeship. These programmes are government run and are offered at vocational schools. In Germany, around 10% of upper secondary VET students are enrolled in such a programme (OECD, 2023<sup>[12]</sup>). Similar programmes have shown to be successful in various settings and contexts across the OECD (Box 1).

The JOBLINGE programme evaluated in this report (see Chapter 2) is a non-government pre-apprenticeship programme intended to support participating apprentices during their apprenticeship and prepare them for a successful future career. A first evaluation of the JOBLINGE programme was undertaken by the OECD in 2021, focussing on the digital catch-up module intended to strengthen

participants' digital skills (OECD, 2021<sup>[13]</sup>). While attending that module is not found to have an overall effect on finding an apprenticeship compared to just attending the JOBLINGE programme, participants who took the module are found to be more likely to take up a STEM occupation or go into further education by attending a full-time vocational education training school (OECD, 2021<sup>[13]</sup>).

Another set of pre-apprenticeship programmes targets young people while they are still in compulsory education. A typical strand of such programmes focuses on mentoring. These programmes have proven particularly successful for young people at risk, as they often lack support at home. Mentoring has shown to be an effective substitute in many cases. For example, the ROCK YOUR LIFE programme that operates in Germany, Switzerland, and Austria pairs students in lower-track secondary school with university students who act as mentors and support the students in secondary school both with schoolwork as well as with applications to apprenticeships. The programme has been evaluated by Resnjanskij et al. (2024<sup>[14]</sup>), who find that it is particularly successful for students from disadvantaged backgrounds: it increases their labour-market prospects by more than half a standard deviation, closing the initial gap in prospects compared to other students.

Next to pre-apprenticeship programmes, support programmes during the apprenticeship can help alleviate issues arising during apprenticeships and potentially reduce dropout rates (Kis, 2016<sup>[15]</sup>). In Germany, assistance is available from the German government targeted to all apprentices at risk of dropout, as well as to dropouts. The two programmes, called *Assistierte Ausbildung (Asa)* and *Ausbildungsbegleitende Hilfen (abH)* are offered by the German public employment service. The programmes provide remedial education, tutoring and exam support and help with overcoming learning difficulties. They further offer mentoring, mediation between employee and apprentice as well as support with everyday problems or issues at home (OECD, 2023<sup>[12]</sup>). Another government programme aiming to prevent apprenticeship dropout is the *Verhinderung von Ausbildungsabbrüchen (VerA)* programme initiated by the German Federal Ministry of Education. The programme relies on senior experts who counsel apprentices on a voluntary basis (OECD, 2023<sup>[12]</sup>).

### Box 1. Apprenticeship support programmes in OECD countries

Pre-apprenticeship programmes have shown to be successful in various settings and contexts across the OECD (Kis, 2016<sup>[15]</sup>). Such programmes tend to target three sets of skills: numeracy and literacy skills, vocational and occupational skills, and soft skills such as job search and interview skills as well as conscientiousness, teamwork and resilience with the goal of making young people ready for an apprenticeship (Kis, 2016<sup>[15]</sup>).

One example of such a programme is the SEMO programme in Switzerland. The programme offers a training semester for apprentices where they benefit from individual job coaching, courses on job application procedures, CV writing and interview training. The programme further offers an initial individual assessment of potential skill deficits and supports apprentices to improve in the areas where they identified difficulties. Another strand of the programme focuses on finding the right job for young people (Kilchmann et al., 2016<sup>[16]</sup>). According to Mühlebach (2017<sup>[17]</sup>), 68% of participants in the programme leave the programme having found either an apprenticeship, a job or another training opportunity. However, 32% leave the programme without any immediate prospects. Similar programmes in Switzerland are the *Practice Firm* and the *VET Case Management* programme (Kilchmann et al., 2016<sup>[16]</sup>) and the *INVOL* programme specifically targeted at refugees (Stalder et al., 2021<sup>[18]</sup>; Stadler et al., 2023<sup>[19]</sup>).

Other pre-apprenticeship examples are a 6-week to 6-month traineeship programme offering support with applications and interview preparation in the UK or the Scottish Certificate of Work Readiness programme which consist of 3-4 weeks of off-work training on skills and an internship at a company to

gain work experience (Kis, 2016<sup>[15]</sup>). In Sweden, an individualised programme prepares students who do not meet admission requirements to upper secondary vocational education for entry into such a programme or the labour market (OECD, 2023<sup>[12]</sup>). The *vocational training bridge programme* in Hungary specifically provides support to students at high risk of drop-out by (OECD, 2023<sup>[12]</sup>). France has introduced a pre-apprenticeship programme in 2019 designed to prepare candidates for a subsequent apprenticeship (OECD, 2023<sup>[12]</sup>). In Denmark, Hungary or Norway, apprenticeships usually start with an initial year at VET school, before apprentices find a training enterprise and switch to a dual-training model. While this reduces the number of students who do not find an apprenticeship position directly after compulsory schooling, it may leave some students without a way forward after the first year in VET school, if they do not find a training enterprise. To account for such cases, some countries have introduced school-based VET programmes, where apprentices complete their apprenticeship solely by attending VET school and without training in an enterprise. In Austria, the *Überbetriebliche Ausbildung* has this function (OECD, 2023<sup>[12]</sup>).

Additionally, there are many examples of apprenticeship support programmes to assist apprentices during the apprenticeship (Kis, 2016<sup>[15]</sup>). These programmes typically contain academic support such as tutoring, vocational support for job-related tasks at the training firm as well as investments in other work-relevant skills such as time keeping or teamwork. Many of them also offer mentoring or mediation in case of issues arising with the training firm.

In Austria, the training assistance programme targets young people with disabilities, special needs, or without a formal education. The programme provides advice for the enterprise on how to accommodate the apprentice's needs and mediates in case of conflicts. It further provides tutoring or other school-related support to the apprentice. An early review of the programme in 2006 finds mixed results on its success, with concerns raised in particular by apprentices about the inaccessibility of the programme and issues with being admitted (Heckl et al., 2006<sup>[20]</sup>).

In Switzerland, apprentices enrolled in a two-year apprenticeship programme are offered individual coaching to support their academic, technical and social skills. A qualitative evaluation of the programme showed that the main actors involved are generally happy with the delivered effects of the programme and it is thought to reduce apprenticeship dropout among young people at risk, although no quantitative evidence is provided (Stern and von Dach, 2018<sup>[21]</sup>).

Overall, despite their widespread use, few apprenticeship support programmes have been evaluated and evidence on their effectiveness is sparse (Kis, 2016<sup>[15]</sup>). The present evaluation of the JOBLINGE basecamp work-based learning programme therefore adds new evidence on their effectiveness, complementing reviews of programmes in Austria and Switzerland.

# 2 The JOBLINGE and basecamp programmes

## 2.1. The JOBLINGE initiative

JOBLINGE is a Germany-wide initiative that aims to facilitate the integration of young people in disadvantaged situation into the workforce by supporting them in the transition into an apprenticeship as well as during their apprenticeship. Founded in 2008 by the Boston Consulting Group and the Eberhard von Kuenheim Foundation of BMW AG, JOBLINGE is a foundation composed of nine regional non-profit corporations (gAGs), which work directly with young people in over 30 locations across Germany (JOBLINGE, 2024<sup>[22]</sup>). The nine non-profit corporations each cover a specific geographic area – Berlin, Hamburg-Hanse, Ruhr, Rhineland, Leipzig, Frankfurt-Rhine-Main, Rhine-Neckar, Southwest and Munich.

The implementation of the JOBLINGE approach is directed by the JOBLINGE e.V. umbrella organisation (in German *eingetragener Verein*), a social franchise system composed of private and public sector partners, including companies, foundations, organisations, municipalities and districts, which contribute as stockholders. The difference with shareholding contributions lies in the fact that returns from investment are nonmaterial – they come in the form of positions in the supervisory and advisory boards that are tasked with the development of the JOBLINGE initiative, or in volunteering and mentoring positions in one of the locations. The JOBLINGE foundation itself is also a stockholder of the umbrella organisation and is composed of nine regional centres (Figure 6). The legal nature of JOBLINGE as a social franchise system allows for the collaborative participation of supporters from all areas of society, toward the goal of facilitating the transition into the workforce for disadvantaged young people. The headquarters of the umbrella organisation are in Munich.

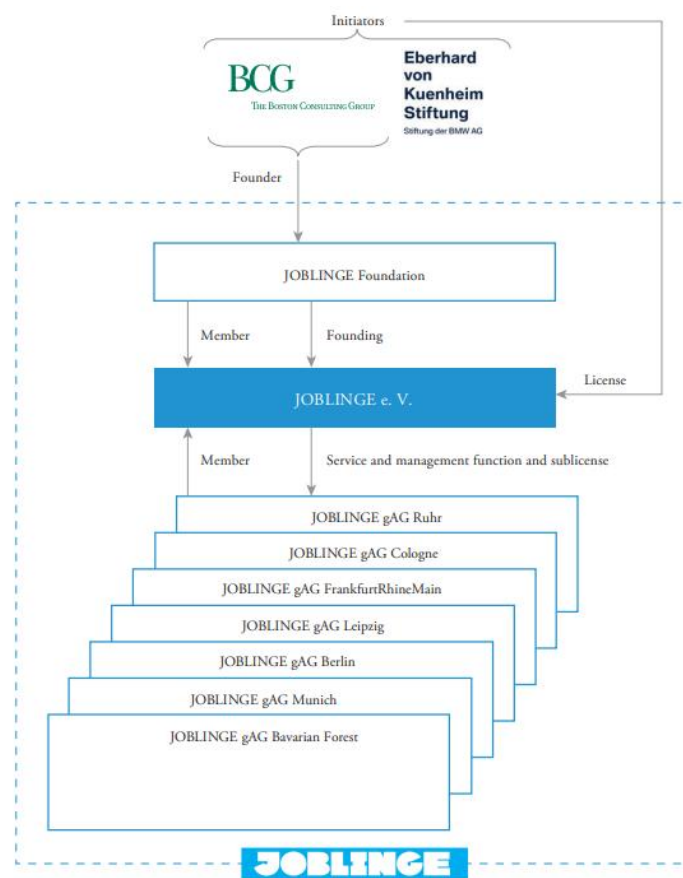
JOBLINGE's objective is to reduce youth unemployment and apprenticeship dropout by supporting young people in their journey from school into working life. They offer support to young people when they are choosing an occupation and applying for an apprenticeship position as well as during the apprenticeship until its successful completion. Support is available to all young people but specifically targeted at disadvantaged individuals with multiple placement obstacles.

JOBLINGE organises its offers into four separate programmes. The PLAN A track focuses on activating young people who are currently neither in employment nor education by reaching out to them via social media, workshops or in the street and motivating, inspiring and supporting them individually to find an apprenticeship position. If a young person has been activated successfully, they move into the “Klassik” or “Kompass” programme or once they found an apprenticeship, into the “basecamp” programme. The Klassik and Kompass programmes provide support in choosing an occupation and securing an apprenticeship position. The two programmes only differ in their target group, where Kompass is specifically aimed at refugees and provides additional support with the German language. After finding a training positions, young people may move into the basecamp programme, the fourth programme, which provides support with all issues that might occur during an apprenticeship. Its main goal is to back young people with any potential problems occurring during their apprenticeship in order for them to be able to

graduate successfully. The basecamp programme further aims to equip young people with skills necessary for a successful career later on, such as conflict resolution skills or digital skills.

In all four programmes, the JOBLINGE approach rests on three principles. The first principle is learning in practice – in Kompass or Klassik for example, young people first access training within the space of JOBLINGE locations, and then through supervised internships in partner companies. The second principle is one-on-one support, through intensive coaching from full-time employees and volunteer mentors. The third principle is multistakeholder social commitment, as professional integration is best pursued by closely integrating partner companies, volunteers and the public sector, notably the Federal Employment Agency and job centres. The social franchising system of the JOBLINGE initiative facilitates the involvement and collaboration of all partners, and ensures that funding comes from different sources, both public and private.

Figure 6. The organisational structure of the JOBLINGE initiative



Source: (JOBLINGE Foundation, 2014<sup>[23]</sup>).

## 2.2. The JOBLINGE Klassik and Kompass programmes

JOBLINGE Klassik and Kompass are six-month programmes designed to assist young people in successfully securing a training position. The programmes focus on allowing young people to discover their interests, developing necessary skills, and supporting them through the application process. The programmes run in multiple cycles per year (OECD, 2021<sup>[13]</sup>). The Kompass programme is an extension of the Klassik programme specifically tailored to refugees, with the belief that a profession is at the root of

integration in a society. The Kompass programme has some additional features that vary based on the needs of the specific cohort. The most important elements of the additional training are job-specific language qualifications, intercultural sensibilisation, as well as additional competence training and thorough follow-ups during the apprenticeship (JOBBLINGE, 2024<sup>[24]</sup>). Since its inception, 2 700 refugees have taken part in the Kompass programme, with transitions to professional life happening successfully for 65% of participants cumulatively (JOBBLINGE, 2023<sup>[25]</sup>). In the school year 2022-2023, this figure was 80% (JOBBLINGE, 2023<sup>[26]</sup>).

Generally, JOBBLINGE Klassik or Kompass participants are young people who are looking for an apprenticeship and have usually been referred to the programme by the local job centre or sometimes joined through PLAN A. The programme comprises an admission phase, an orientation phase, and a practice phase. Prior to the admission phase, interested participants visit a JOBBLINGE location for an information event and are then asked to formally apply if the programme is of interest to them. During the admission phase, participants engage in a three-day volunteering programme (e.g., cleaning a local park, or repainting outdoor playgrounds for children) as a prerequisite for enrolment. This phase serves as an opportunity for young people to showcase motivation, commitment, and enhances their social competencies through group work. The objective of this phase is not that of a selection, but rather to ensure that participation in JOBBLINGE is preceded by a conscious decision to actively engage. On average, this approach results in about 15 to 20 individuals starting the JOBBLINGE Klassik programme in each cycle, leading to about 60-80 JOBBLINGE participants per year in each location. At the time of writing, JOBBLINGE was able to admit all interested applicants who pass the admission phase.

In the subsequent orientation phase, participants receive intensive group training, are assigned a mentor, partake in cultural and athletic activities, and are provided with a space for independent work. Orientation lasts six weeks, during which participants receive training at one of the JOBBLINGE locations for at least seven hours a day, five days a week. During this phase, participants are paired with a mentor, who helps them find an apprenticeship in a profession that suits their interest, supports them with applying to it and preparing for the interviews. JOBBLINGE employees help participants discover the possibilities of the world of work and find the occupation that most suits them. Identifying a professional vocation is a milestone in the preparation for an apprenticeship.

Orientation is also the phase in which participants can improve their skills in different dimensions. They for example participate in group projects (e.g., making a movie together) to foster social skills and team working abilities or attend workshops with professional trainers who assist their learning. One-on-one training also offers personal support in addressing challenges such as problems at home, debts, lawsuits, or other obstacles that might have made it more difficult to take up an apprenticeship in the first place. Participants are also invited to partake in cultural and athletic programmes, including theatre workshops or visits to the climbing gym.

During the practice phase, JOBBLINGE participants intern at one or more partner companies as job candidates to gain practical experience and to determine their compatibility with the occupation they have chosen. In this step of the programme, participants are supervised and closely supported, and the goal is to secure an apprenticeship position. Once a candidate finds an apprenticeship position, the programme officially ends; but the connection between mentors and candidates as well as been JOBBLINGE and candidates often extends beyond the JOBBLINGE programme and many move into the basecamp programme (OECD, 2021<sup>[13]</sup>).

The main target group are young people between the ages of 15-27, with multiple placement obstacles. These are the individuals that have not successfully made the transition between school and work, or vocational training, and find themselves in a lengthy transition period. Typically, they are long-term unemployed, with lower levels of education or no education qualifications at all. Often, they are from economically or socially disadvantaged families. On average, the participants have been in the school-to-work transition for about two years before they join JOBBLINGE (OECD, 2021<sup>[13]</sup>).

### 2.3. The basecamp programme<sup>6</sup>

The basecamp programme was launched in 2019-2020 as a pilot project within the gAG FrankfurtRheinMain, aiming to provide structured support to participants throughout their apprenticeships. Prior to basecamp's creation, most participants had already remained connected to the JOBLINGE programme during their apprenticeships. However, as the number of JOBLINGE graduates grew, the organisation increasingly struggled to provide assistance during the apprenticeship without additional staff and financial resources. To address this challenge, the idea for a dedicated programme focusing specifically on apprenticeship support was realised through basecamp, with funding from JP Morgan. The programme began in Frankfurt in 2019 and expanded to Berlin, Mannheim, and Essen in 2022-2023, and a new location opened in Munich in 2024 at the time of writing this report. In the third quarter of 2023, Essen reported 80 participants, followed by 69 in Frankfurt, 57 in Mannheim and 14 in Berlin. All locations have since grown considerably to 175 participants in Essen, 93 in Mannheim and 52 in Berlin in the third quarter of 2024.

The basecamp programme provides all-encompassing support going beyond what schools and companies provide, aiming to ensure successful completion of apprenticeships. This aspect is particularly important in light of increasing rates of apprenticeship dropout with a record of 30% of apprenticeship contracts terminated prematurely in 2022 (Bundesinstitut für Berufsbildung, 2024<sup>[6]</sup>). The programme aims to do so by combining three key pillars of support: a dedicated space for apprentices to study and connect with each other; tailored and individual assistance in case of problems at VET school, at the training enterprise or with private challenges; and workshops designed to enhance apprentices' skills and increase the likelihood of success. Although every basecamp location follows these three key pillars, the specific implementation often varies as three locations have chosen a specific focus area. For example, Essen concentrates on climate change and future jobs related to mitigating its effect, while Berlin and Frankfurt emphasize the development of digital skills, and Mannheim emphasizes the PLAN A initiative (a track focused on activation and outreach to young people not in education or employment) through strong partnerships with regional partners.

#### ***Pillar I: basecamp facilities***

Attractive facilities offering a dedicated space to apprentices are a core element of all basecamps. Locations are carefully selected to ensure easy access for apprentices, typically near main train stations or other key public transport hubs. Each basecamp is designed to be as inviting as possible, featuring modern furniture and design elements that create a comfortable environment where apprentices feel welcome to spend time. While the specific setup varies by location, all basecamps provide essential amenities such as workspaces for quiet study or group projects, office supplies (paper, pens, printers, etc.), technical equipment (laptops, computers, big screens to practice presentations, etc.), and private meeting rooms for conversations with basecamp staff. In addition, Frankfurt and Berlin feature small libraries with books used in VET school and other books and study material to support apprentices in VET education. Locations also provide spaces to hold workshops with big screens for presentations and couch corners as areas where apprentices can hang out and chat. Most also provide a small kitchen where participants can get coffee or snacks.

Participants can access the facilities during regular opening hours, Monday to Friday from 8 or 9 am to 6 pm, except in Essen where reduced hours are currently in place (Monday and Tuesday, from 4 pm – 6

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<sup>6</sup> Information in this section is based on observations from interviews conducted during the study visit to the basecamp locations in Essen and Frankfurt as well as from a questionnaire sent to all locations in March 2024. See Section 3.2 for more details on the study visit and the survey sent to locations.

pm). Essen was unable to hire additional staff after the launch of basecamp, and existing JOBLINGE employees took on the extra responsibilities. As a result, it is currently not possible to extend basecamp opening hours, as staff are also required at other JOBLINGE locations in Essen. Consequently, while apprentices in Frankfurt and Mannheim can drop by spontaneously, those in Essen and Berlin are asked to schedule their visit via WhatsApp to ensure staff availability. Opening hours are extended for workshops or special events, which are typically scheduled in the evening to accommodate basecamp participants busy work schedule.

All basecamp locations are shared by both basecamp participants and those who participate in the JOBLINGE Klassik or Kompass programme as well as PLAN A. However, JOBLINGE Klassik or Kompass naturally use the spaces more frequently as basecamp participants usually spend their day at work or school, leaving less time visit the basecamp premises. For this reason, locations so far report relatively few basecamp participants who come by simply to study in the basecamp premises.

### ***Pillar II: Individual support***

Tailored, individualised support is available at all locations, though the specific approaches vary. While Frankfurt requires weekly in-person meetings with basecamp participants, other locations check in with participants regularly via WhatsApp, with in-person meetings occurring only when issues arise. In such cases, it is typically the apprentice who initiates contact with basecamp staff, often leading to multiple in-person meetings per week until the issue is resolved. Consistent with regular meetings set up by basecamp staff in Frankfurt, this location reports that about 75% of their meetings with basecamp participants are initiated by basecamp staff. On the contrary in Berlin, where staff does not schedule regular meetings with participants, about 60% of all contact is established by basecamp participants in case they encounter problems. All locations except Frankfurt report that the frequency of contact with basecamp participants fluctuates and is usually intense and regular during acute problem phases but disappearing for long periods otherwise.

basecamp staff encourages participants to seek support for any issue, not just those related to their apprenticeship. In fact, participants often turn to basecamp for help with personal matters or administrative tasks, such as finding housing, filing taxes, or completing official forms. In addition, basecamp staff provides assistance with work- or school-related challenges. For school matters, this support might include individual tutoring, helping apprentices practice presentations, creating study plans, or offering advice in case of conflicts with teachers. Related to work, staff frequently advises apprentices in handling workplace conflicts and supports them when their training enterprise fails to provide adequate training or a proper work environment with fair treatment of the apprentice. In some cases, staff may also intervene with the training enterprise and act as a mediator between the apprentice and the training company.

### ***Pillar III: Workshops and social events***

Workshops and other academic support are offered by all basecamp locations, with a common overlap in topics, although each location has its own focus topics and offers workshops accordingly. Offered workshops in 2023/2024 can be grouped into four main categories. The first category focuses on VET school and is designed to support apprentices to succeed in school, with workshops focused on exam preparation, learning strategies, and compilation of the Berichtsheft, a booklet where all apprentices are required to track their progress during the apprenticeship. All locations except Essen also provide tutoring on various school subjects where apprentices may need extra help, either one-on-one or in groups. For instance, Frankfurt offers group workshops specifically aimed at improving math skills. Additionally, all locations offer digital tools to support apprentices in VET school, such as subscriptions to the learning app SimpleClub, which helps apprentices understand and practice material from VET school, or access to exam simulations for test preparation. The second category focuses on essential workplace skills like time management, stress management, conflict resolution, and conscientiousness. The third category

addresses administrative tasks apprentices often find challenging, such as managing finances, or filing taxes. The final category includes workshops related to each location's specialised focus. For example, Essen offers workshops on climate change or Berlin on democracy. All workshops that were offered in 2023/2024 are shown in Table 3.

**Table 3. Workshops and events offered in 2023/24 by basecamp locations**

	<b>Mannheim</b>	<b>Berlin</b>	<b>Essen</b>	<b>Frankfurt</b>
<b>Category I: academic workshops</b>	Compilation of the Berichtsheft	Exam preparation	Compilation of the Berichtsheft	Exam preparation
	Learning to learn		Exam preparation	Improvement of Math grades
<b>Category II: social and behavioral skills workshops</b>	Conflict resolution	Conflict resolution	Conflict resolution	Conflict resolution
	Mobbing and discrimination	Mental health		Communication in the workplace
		Celebrating successes		Feedback processing and elaboration
			Motivation	
<b>Category III: administrative workshops</b>	Rights and duties as an apprentice	Rights and duties as an apprentice		Managing finances and money
	Managing finances and money			
<b>Category IV: focus topic workshops</b>		Democracy in practice and in the digital age	Activity on climate worlds	
<b>Social events</b>	Pizza nights	Game nights	Mario-Kart tournament	Starter day
		Movie nights	Apprentices' get-together	Summer party
		Halloween event	Starter day	
		End-of-the-year gathering		
		Table football tournament		
		Diploma event		

Source: OECD tabulation based on information from basecamp locations.

Workshops are typically scheduled in the early evenings to accommodate participants after their workday though current plans also foresee workshops during daytime hours. Participants are informed about upcoming workshops in advance, primarily through via WhatsApp, and are usually asked to confirm attendance. In all locations, basecamp staff will work through slides during the workshops together with the participants. Active participation is strongly encouraged, allowing participants to learn not only from the material but also from their peers' experiences. Most locations report that workshop attendants are focused and engaged, with minimal distractions. After the workshop, slides are generally shared with participants, and two locations also include comments and insights collected from participants during the workshop before sending the slides. However, currently no centralised online repository is available to store presentations for participants for future reference. Instead, slides are sent to attendees via WhatsApp or E-mail after the workshop. Feedback and suggestions for future topics are collected right after the workshop, either in person or through WhatsApp. Further, participants are continuously encouraged to suggest additional workshop topics they would find helpful.

All locations also organize social events for apprentices, such as Mario Kart tournaments, summer parties, pizza nights or starter days where apprentices get to know each other and connect with their peers. Additionally, apprentices are encouraged to stay and socialize after workshops with food and drinks usually provided to foster a relaxed atmosphere. These efforts are part of basecamp's goal to create a community

space where apprentices can build relationships and network, much like the social opportunities students often experience at universities.

The popularity of workshops varies by location, although certain topics attracted high participation across all sites during the first half of the basecamp year. Workshops on compiling the Berichtsheft, exam preparation, and understanding the rights and duties as an apprentice were especially well-attended in many locations. In Frankfurt also the workshop on mobbing and discrimination proved particularly popular while in Essen the workshop on climate change drew significant interest. Where data on attendance at social events was available, these events often attracted even larger crowds than the workshops, indicating that participants place high value on social opportunities provided by basecamp.

### ***basecamp participants***

In summer 2023, 220 apprentices participated in basecamp across Germany. The location with the highest number of participants was Essen with 80 participants, followed by 69 in Frankfurt, 57 in Mannheim and 14 in Berlin. Between 31-38% of basecamp participants were women, corresponding well to the overall share of female apprentices in Germany (36%) (Section 1.1). While in Essen, Berlin and Frankfurt the vast majority of new basecamp participants are former JOBLINGE Klassik or Kompass graduates, Mannheim recruits close to 75% of its participants from outside JOBLINGE, either through referrals from the local Jobcenter, through advertisement on social media or in VET schools or through referrals from other basecamp participants or partner companies. At the time of writing, each location had been able to admit all interested young people to the basecamp programme.

Dropout from basecamp is relatively low in most locations, with Berlin, Essen and Mannheim reporting no dropout cases between August 2023 - February 2024. Frankfurt recorded 7 dropouts of the 69 over the same period.

### ***Resources of basecamp***

basecamp was in part created due to a lack of financial resources to support apprentices beyond securing an apprenticeship. While initial funding for the pilot location in Frankfurt, as well as the other three locations, was provided by JP Morgan, additional funding sources are now being actively pursued, although sources vary by location. For instance, Frankfurt is partially funding its basecamp through the local Jobcenter and receives additional support from their federal state. Similarly, Mannheim and Berlin receive funds from their respective federal states, and, aside from Frankfurt, all locations benefit from contributions from local companies and partners. Looking ahead, securing funding from companies and local partners is seen as increasingly crucial for sustaining the programme. Additionally, two locations have applied for tenders to offer AsAFlex, a nation-wide programme funded by the German Federal Employment Agency, which focuses on providing tutoring and support to apprentices and training companies.

Concrete numbers for the costs of the basecamp programme separate from JOBLINGE are difficult to estimate exactly as three out of four basecamp locations are still in the initial set up phase, and no location currently has staff solely dedicated to basecamp and all basecamp staff are also involved in the JOBLINGE Klassik or Kompass programmes. Further, all facilities tend to be used for both the basecamp and JOBLINGE programme. Thus, while JOBLINGE publishes yearly financial reports, these only report the total costs of all programmes (Klassik, Kompass, Plan A, basecamp) combined.<sup>7</sup> However, internal numbers show that basecamp currently calculates with costs of between 400 000-500 000 Euros per

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<sup>7</sup> JOBLINGE publishes yearly financial reports for the full JOBLINGE programme on their website. For example, the financial report for 2022 is available here: [https://www.joblinge.de/wp-content/uploads/2025/03/JOBLINGE\\_Jahresbericht\\_2023.pdf](https://www.joblinge.de/wp-content/uploads/2025/03/JOBLINGE_Jahresbericht_2023.pdf)

location and year, depending on the number of participants and corresponding staff needs. For example, as of March 2024, the staff resources allocated to basecamp in Essen and Berlin are estimated to be close to one full-time employee. In contrast, Mannheim reports staff time equivalent to 2.5 full-time employees dedicated to basecamp. It should be noted that while these numbers reflect total costs per location, three of the four locations were only recently established. As such, estimating costs per participant is less informative at this stage. Current budgets likely still cover initial setup costs, and participant numbers are expected to grow as cohorts remain in the programme for 2 to 3.5 years. Simply dividing current costs by the current number of participants results in a cost of around 8 000 Euros per participant and year but this number likely overstates the true costs per participant for the reasons above.

### ***basecamp in development***

The basecamp programme is still evolving, with new offerings being added regularly. Starting in 2024/2025, a digital basecamp will be introduced, giving participants access to a variety of digital learning materials, including short videos that guide them through standard administrative tasks (e.g., tax filing) and pre-courses to help them prepare for their apprenticeships. Additionally, online seminars and workshops will be available, enabling participants to join events across different locations. The digital platform will streamline communication, allowing participants to stay informed about workshops and events, register online, and schedule one-on-one meetings or video calls with basecamp staff.

Additionally, basecamp aims to better coordinate the offer across different locations, by defining core workshops and their key content elements, by establishing a consistent structure for how often staff reach out to participants and for how tutoring and one-on-one support are organised. This effort will help unify the offerings across locations, create efficiency gains by enabling the sharing of materials, allowing workshops and other resources to be used across multiple sites, and guarantee the same level of quality across locations.

The topics of the newly defined core workshops are conflict resolution, compilation of the Berichtsheft, exam preparation, mental health, managing finances and motivation. Locations are free to hold additional workshops with suggestions on topics provided by basecamp. Further, social and networking events such as pizza or game nights are also encouraged. basecamp also introduces a structure for regular meetings with participants: basecamp staff reach out to participants monthly during the probation period and after 6, 12 and 24 months thereafter, followed by a final meeting at the end of the apprenticeship. As is already practiced, ad-hoc meetings can be scheduled anytime by participants.

A peer-to-peer approach is also considered where older basecamp apprentices support younger peers who just started with the programme, for example with schoolwork or occupation-related tasks.

basecamp further aims to increasingly involve training companies in the programme. One approach to do so is organizing roundtables that bring together various stakeholders in the apprenticeship system, such as VET schools, employees responsible for apprentice training at companies (trainers), and other key figures from training companies, to discuss current topics and challenges related to apprenticeships. Additionally, basecamp is exploring options to offer training and development programmes for company trainers and stakeholders to continuously improve apprenticeship quality.

Furthermore, basecamp plans to further expand the use of its space by hosting events that engage multiple stakeholders in the apprenticeship system as is already done in Frankfurt and Essen. These events include apprenticeship fairs, where companies present training opportunities and meet prospective apprentices, as well as expert lectures and symposiums for professionals to share knowledge and insights. Career orientation events currently in planning would also provide lower secondary students with valuable information about different professions and training pathways. Additionally, collaboration projects with educational institutions, businesses, and organisations could foster youth development, while research

projects could use basecamp as a hub for exploring apprenticeship-related topics and improving training processes.

# 3 Evaluation of basecamp

## 3.1. Theoretical expectations and considerations

To understand whether the basecamp programme is successful, an evaluation via a quantitative survey complemented with qualitative evidence from a study visit to the basecamp locations in Frankfurt and Essen are undertaken<sup>8</sup>. Both the survey and in particular the study visit also focus on identifying areas where basecamp apprentices require additional support and where the basecamp programme could be further improved.

The evaluation focuses on the following areas where basecamp is expected to improve outcomes for apprentices.

Firstly, through pillar I, the basecamp programme should implicitly affect participant's success in VET school, as participants are offered a quiet place to study, equipped with the necessary material such as paper, pen, laptops, and a library of books used in VET school. Further, by providing a space where participants can meet and socialize with others, this should also influence networking opportunities and contact between apprentices.

Secondly, the individualised support of pillar II should ensure that participants feel more secure and satisfied with their apprenticeship as they know that they can rely on support from basecamp if potential issues arise. Further, any problems that occur should be solved more swiftly, leading to less stress for participants, lower dropout and higher chances of successfully completing the apprenticeship.

Thirdly, pillar III is expected to positively affect participants in various dimensions. Through tutoring, and attending workshops on learning strategies and exam preparation, participants should feel less overwhelmed at VET school. Through tutoring one could further expect apprentices' occupation specific skills as well as their literacy and numeracy skills to improve accordingly. By taking advantage of workshops on conflict resolutions and one-on-one support, frictions with employers should be limited. Further, attending workshops should also directly improve skills in the topics of the workshops such as learning approaches, time management skills, digital skills, financial literacy, or conscientiousness.

Lastly, if basecamp efforts to promote networking among apprentices by organising social events and providing a space for participants to meet are successful, one would expect an increase in basecamp participants' self-assessed networking skills and an increase in the number of apprentices that participants regularly exchange about their apprenticeship with.

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<sup>8</sup> This evaluation focuses on an initial evaluation of the basecamp programme as the programme is still in development and learnings from this evaluation will feed into the future scale up of the programme across locations. Additionally, parts of the JOBLINGE Klassik and Kompass programmes have previously been evaluated (OECD, 2021<sup>[13]</sup>).

## 3.2. Evaluation design

Impact evaluations aim to assess the degree to which a programme or intervention caused a change in outcomes. To determine whether the programme or intervention was the actual cause of these changes, a so-called counterfactual is required. The counterfactual informs about what would have happened to participants if they had not taken part in the programme. Since this counterfactual scenario is not directly observable (as one cannot observe something that did not happen), a suitable comparison group exhibiting the same characteristics on average as the group of participants in the programme is required (Gertler et al., 2016<sup>[27]</sup>). In this evaluation, the treatment group comprises the participants from the basecamp programme in the four locations (Berlin, Essen, Frankfurt, and Mannheim) who began the basecamp programme in summer or fall of 2023. This group primarily consists of apprentices who started their apprenticeship concurrently with the basecamp programme. The counterfactual chosen for this evaluation are young people who also initiated their apprenticeship in the summer or fall of 2023 but did not participate in the basecamp programme. These young people are recruited through vocational education and training (VET) schools situated near the basecamp facilities in all four locations. Henceforth, these young people are referred to as the “control group”.

For this evaluation, data was collected by administering two surveys, a baseline and a follow-up survey, to both the treatment and control group. The baseline survey was conducted at the beginning of the basecamp programme in fall 2023, and the follow-up survey was distributed at the end of the school year (May/June) in 2024.

A significant limitation of this study design arises from the non-random allocation of participants to the basecamp programme. Since basecamp participants are a specific subgroup of young people who often face multiple placement obstacles and since they voluntarily chose to participate in the basecamp programme, and the apprentices from the VET school did not, the two groups differ in many dimensions, observable and not. While some differences can be observed and accounted for by asking for them in the baseline survey, there are others that cannot be observed. For example, the underlying reason for why basecamp participants signed up for the programme but those in the control group did not, are difficult to observe. One explanation might be that control group participants simply did not know that basecamp existed and are therefore not participating. However, it could also be the case that basecamp participants are more motivated to improve their skills and have therefore chosen to participate in basecamp. This would also not be observable. Another unobservable reason might be that basecamp participants have more skill deficits and have therefore more need for the basecamp programme. In an ideal setting, one would compare participants who are ex-ante very similar, and all want to participate in basecamp, but some are randomly selected to participate in basecamp and others not.

To get closer to this ideal setting, this evaluation presents quantitative results from two estimation strategies. The first identification strategy limits the estimation sample to the respondents who took the follow-up survey and had also previously taken the baseline survey. While this reduces the sample size as it eliminates respondents who had taken either only the baseline or follow-up survey, restricting the sample size to those that took both surveys has the virtue of removing bias that may arise from unobservables that affect attrition from the survey. If we further assume that the observables that affect attrition are highly correlated with the unobservables that also affect attrition, then this method will get closer to an unbiased estimation of the treatment effect (Imbens and Rubin, 2015<sup>[28]</sup>).

The second estimation strategy takes advantage of the fact that all VET school participants receive a short introduction to the basecamp programme before they are asked to fill in the survey. Thereafter, one of the survey questions inquires whether the respondent is currently considering signing up for the basecamp programme. If the respondent answers yes (or maybe) to the question, one can assume that they might be relatively similar to the current basecamp participants in terms of unobservables which determine participation but have so far not participated because they did not know about the programme. These respondents hence might provide a control group which is more credibly similar to the treatment group in

terms of unobservables. The second estimation strategy therefore restricts attention to the subsample of control group respondents who reported to be considering signing up for basecamp<sup>9</sup>.

In each case, the following difference-in-difference regression is run:

$$outcome_{ilt} = \beta_0 + \beta_1 T_{il} + \beta_2 S_t + \beta_3 T_{il}S_t + X_{ilt} + \mu_l + \epsilon_{ilt}$$

where  $i$  denotes an individual,  $l$  denotes the location an individual attends basecamp in or goes to VET school, and  $t$  denotes the survey time (either baseline or follow-up).  $S_t$  is a dummy for the survey time,  $T_i$  is a dummy for whether an individual attends basecamp or not,  $X_{ilt}$  is a vector of control variables, including background characteristics and the value of the outcome considered at baseline. To account for the fact that data is collected across four rather different Länder of Germany, with various differences in their apprenticeship market (Chapter 1), each regression includes location fixed effects  $\mu_l$ <sup>10</sup>.  $\epsilon_{ilt}$  is a robust error term. The coefficient of interest is  $\beta_3$ , which measures the effect of attending the basecamp programme.

None of the estimation methods eliminates all concerns, making the argument for an unbiased and consistent difference-in-differences estimator of the average treatment effect on the treated less convincing. The unbiasedness of the estimator cannot be ascertained, as treatment and control are self-assigned, just as participation in the survey – and the analysed sample is not representative of the two groups in question. The results of the evaluation can therefore not be interpreted as causal, and conclusions are only suggestive and valid for the subgroup who took part in both surveys. To address this limitation, the findings from the quantitative evaluation are supported with qualitative evidence. In the qualitative evaluation, one-on-one interviews and focus groups with various stakeholders including basecamp participants, basecamp staff, representatives from training enterprises whose apprentices attend basecamp, and representatives from job centres were conducted. Furthermore, the survey includes a range of qualitative, feedback-related questions in which basecamp apprentices have the chance to share their ideas and positions in words. This qualitative component allows for deeper insights and perspectives into the details of the programme, and in particular into what works well and where the programme could still improve.

### 3.3. Quantitative evaluation

#### **Survey design and data collection**

Data is collected using a baseline and a follow-up survey distributed to both treatment and control group via the online survey tool LimeSurvey<sup>11</sup>. The baseline survey was administered between mid-October to November 2023 and the follow-up survey at the end of the school year in May-July 2024 (Table 4). The baseline survey was distributed to basecamp participants at the launch event that three basecamp locations organised in early to mid-October 2023 and via e-mail for the location without a launch event. The event marked the official start of the basecamp programme for the new participants, even though most locations had already conducted workshops at that point. To take this into account, the baseline survey

<sup>9</sup> A description of this sample at baseline and a baseline comparison with the treatment group can be found in Table A.1.

<sup>10</sup> Using individual fixed effects instead leads to very similar results for most outcomes.

<sup>11</sup> See the online appendix found here ([https://www.oecd.org/en/publications/oecd-social-employment-and-migration-working-papers\\_1815199x.html](https://www.oecd.org/en/publications/oecd-social-employment-and-migration-working-papers_1815199x.html)) for an example questionnaire used in the Frankfurt location. Questionnaires only differed by location for the follow-up survey to reflect the differences in programme offering across locations. The baseline and follow-up survey differ in the background characteristics asked (more extensive in the baseline survey) and the detailed questions on the programmes attended included only in the follow-up survey.

asked participants to list all workshops they had already attended. The control group was asked to fill in the baseline survey around the same time by a member of the basecamp team who visited one or more VET schools in the proximity of their basecamp location to both promote the programme and ask apprentices to fill in the survey. The staff would first give a brief presentation introducing the basecamp programme, and then asked participants to fill in the survey to help evaluate the programme. The apprentices were given time during normal VET school hours to fill in the questionnaire. To motivate participation in the survey, participants were informed that vouchers of EUR 20 would be distributed after the second survey to all young people who filled in both the baseline and the follow-up survey.

**Table 4. Survey timing across locations and surveys**

	basecamp participants		Participants from VET schools	
	Baseline survey 2023	Follow-up survey 2024	Baseline survey 2023	Follow-up survey 2024
Berlin	23 October – 09 November	08 May – 05 July	13 October and 13 November	17 May and 30 May
Essen	07 November	08 July - 17 July	07 November	26 June
Frankfurt	-	07 May – 22 May	06 November	16 May
Mannheim	22 November – 15 December	10 May – 24 May	21 November	07 May

Source: OECD tabulation based on timing of survey responses.

### *Survey content*

#### **Baseline survey**

The baseline survey was distributed to basecamp participants at the launch event that three basecamp locations organised in early to mid-October 2023 and via e-mail for the location without a launch event. The event marked the official start of the basecamp programme for the new participants, even though most locations had already conducted workshops at that point. To take this into account, the baseline survey asked participants to list all workshops they had already attended. The control group was asked to fill in the baseline survey around the same time by a member of the basecamp team who visited one or more VET schools in the proximity of their basecamp location to both promote the programme and ask apprentices to fill in the survey. The apprentices were given time during normal VET school hours to fill in the questionnaire. To motivate participation in the survey, participants were informed that vouchers would be distributed after the second survey to all who filled in both the baseline and the follow-up survey.

The baseline survey consists of five main parts (Table 5). The first set of questions asks about participants' background characteristics, such as gender, age, immigrant background, etc. These are characteristics which the treatment (being part of basecamp) will not influence. The second part targets only the treatment group and seeks to evaluate how the treatment group came to participate in basecamp and what they hope and expect to gain from participating in the programme. The third part asks about the participants' occupation and evaluates their occupation-specific skills. The fourth part relates to participants' satisfaction and experiences with their apprenticeship. This includes overall satisfaction levels with VET school and training enterprise as well as more detailed questions about conflict and stress management during the apprenticeship. The fifth and last set of questions assesses various other outcomes that might be affected by the basecamp programme as discussed in Section 3.1. These include networking skills, digital skills, skills related to learning strategies, literacy and numeracy skills, a subset of questions on financial literacy, self-management skills and time management skills.

The questions in part III record various self-assessed aspects related to apprentices' satisfaction levels with their apprenticeship. As discussed in Section 3.1, one might expect the basecamp programme to influence overall levels of satisfaction with the apprenticeship. To empirically evaluate this hypothesis, the survey inquires about apprentices' levels of contentment and state of mind on various aspects of their

apprenticeship. The questions on job satisfaction level were designed by the OECD team in consultation with a team from basecamp and use input from the TREE survey by the University of Bern in Switzerland (University of Bern<sup>[29]</sup>). More specifically, this part includes questions on overall satisfaction levels with VET school and training enterprise as well as more detailed questions about conflict and stress management during the apprenticeship. It further assesses who participants turn to if they encounter issues in their apprenticeship and inquires about different aspects where participants currently lack support.

**Table 5. Content of the baseline survey**

<b>Part I: Background characteristics</b>	<b>Part II: Participation in basecamp</b>	<b>Part III: Satisfaction with apprenticeship</b>	<b>Part IV: Occupation-specific outcomes</b>	<b>Part V: Other outcomes</b>
gender	basecamp location	overall satisfaction with VET school	occupation	networking skills
age	participation in JOBLINGE	overall satisfaction with training enterprise	start month of apprenticeship	digital skills
highest level of education	start months of participation in basecamp	conflict management strategies	previous apprenticeship	learning strategies
year of completion of highest level of education	previously attended workshops	stress management	occupation-specific skills	literacy and numeracy skills
born abroad (0/1)	expectations for basecamp	contact persons in case of problems at VET school		conscientiousness
German nationality (0/1)		contact persons in case of problems at enterprise		time-management skills
parents born abroad (0/1)		areas where more support needed		financial budgeting
has children (0/1)		exam preparedness		
living situation				
ownership of digital devices				

Source: OECD tabulation based on baseline survey distributed for the basecamp programme evaluation.

The remaining questions in part V address various other outcomes that basecamp aims to improve for apprentices. One declared goal of the basecamp programme is to promote the professional networking opportunities of apprentices, akin to what tertiary students often experience at university. To understand whether the basecamp programme succeeds in doing so, various networking concepts are assessed both at baseline and in the follow-up survey. Questions include the number of apprentices with whom participants share information about their apprenticeship on a monthly basis as well as four questions on networking skills proposed and verified in Lee and Chen (2017<sup>[30]</sup>) and translated to German in Ferris et al. (2005<sup>[31]</sup>).

JOBLINGE has also a focus on improving digital skills with Berlin and Frankfurt locations having set a particular focus on improving digital abilities. While this is not reflected directly through a basecamp workshop on digital skills, knowledge on digital skills is transferred implicitly through helping participants with various digital tasks required for VET school or work (such as preparing power point presentations for example) or pointing them to digital learning tools such as SimpleClub which implicitly strengthen participants digital abilities. To assess to which extent basecamp participants are confident regarding their digital skills a subset of the survey questions developed in Waechter et al. (2021<sup>[32]</sup>) are asked both at baseline and follow-up. Each question asks about the self-assessed level of a digital skill on a Likert scale ranging from 0 for “I do not know what is meant by this question”, to “This does not apply at all (=1) to “This applies fully” (=5).

The next section of part V assesses the learning behaviour of apprentices. The first set of questions are based on the questions on learning strategies from the OECD Survey on the Adult skills (PIAAC) survey

(OECD<sub>[33]</sub>). The second set of questions is a subset chosen from the Learning and Study Strategies (LASSI) questionnaire developed by Weinstein and Palmer (2002<sub>[34]</sub>) and adapted to the German-speaking context by Fehrer (2018<sub>[35]</sub>). A subset of six questions was chosen in collaboration with a team from basecamp to assess participants' ability to motivate themselves to study, their learning patterns as well as their exam behaviour.

The assessment of literacy and numeracy skills relies on questions from the OECD skills profiling tool (Tuccio et al., 2023<sub>[36]</sub>). Following recommendations from the basecamp team, two questions predominantly relevant to individuals with tertiary education were omitted. To calculate literacy and numeracy, responses to relevant questions are summed up separately for each score. The response scale for each question ranges from 1 to 5, where 1 denotes poorer skills and 5 indicates higher proficiency.

To measure financial literacy, a subset of the questions related to financial behaviour from the OECD/INFE Toolkit (OECD, 2018<sub>[37]</sub>) was selected. To ensure the questionnaire remained tractable and relevant for apprentices just starting to earn their first (still rather low) salaries, only a subset of the questions was included. After consulting with the basecamp team, the focus was narrowed to questions about budgeting, as other aspects were considered less pertinent for this particular target group.

The set of questions on motivation are also based on the OECD skills profiling tool (Tuccio et al., 2023<sub>[36]</sub>). The questions ask participants to evaluate whether a given statement related to motivation describes them more or less accurately (ranging from 1 "Not like me at all" to 5 "Very much like me").

The last skill assessed by the questionnaire is time management. As above, the questions on time management are taken from the OECD skill profiling tool (Tuccio et al., 2023<sub>[36]</sub>). Participants evaluate each statement on a scale from 1-5 ranging from "Not like me at all" to "Very much like me".

### **Follow-up survey**

While the baseline survey only differs between treatment and control, the follow-up survey also differs within the treatment group, to allow for variation in workshops and initiatives offered across the four basecamp locations. The content of the follow-up survey differs from the baseline survey in two ways. Firstly, it omits the background characteristics questions that are likely to not have changed since the baseline survey. Secondly, while the questions from parts III, IV and V are repeated, an additional part is added to the follow-up survey for basecamp participants. This part inquires about their basecamp experience, including questions on the facilities and activities that were taken advantage of, workshops attended, as well as a series of open questions to gather the comments and suggestions of basecamp participants regarding what they like and dislike about basecamp and to collect ideas on how basecamp can further improve.

The follow-up survey therefore informs both the quantitative and the qualitative evaluation. By comparing self-reported skill and satisfaction levels at baseline and follow-up, it is possible to establish whether participation in basecamp is associated with an improvement in the self-assessment of the skills that basecamp aims at improving, such as networking and conflict management, and whether participants in basecamp are less likely to consider dropping out of their apprenticeship or feel overwhelmed by it. On the other hand, the follow-up survey gathers feedback and thoughts from a larger number of basecamp participants on the programme to complement the information gathered through interviews and focus groups with a small number of participants.

### *Survey participants and attrition*

Participation by basecamp participants varied across the four locations (Table 6). While in Berlin all except for one basecamp participant filled in the baseline survey, the response rate was lower in Mannheim and Essen, with 18% and 16% of all basecamp participants answering the baseline survey (the baseline survey was not distributed in the Frankfurt location). Both Mannheim and Essen asked basecamp participants to

fill-in the survey at their opening event, hence reaching mainly those that attended the event. While emails with the survey link were sent to all other participants, staff expected response rates to this email to be low, resulting in an overall relatively low response rate of 16-18%. The response rate in Berlin is much higher since basecamp staff individually followed-up with each participant, an effort that was feasible as overall participant numbers are by far lowest in Berlin with a total of 14 basecamp participants. After cleaning out three unreliable control group responses<sup>12</sup>, this leaves a total of 36 responses from basecamp participants and 111 control group responses for the baseline survey. For the follow-up survey, fewer responses of basecamp participants were recorded in three of the four locations, except in Frankfurt (Table 6). Among control group participants, the follow-up survey was more successful in two out of the four locations. After cleaning out seven unreliable responses from the control group a total of 34 follow-up responses were recorded from basecamp participants and 110 from the control group.

**Table 6. More than 150 respondents took the baseline survey**

<b>Baseline survey</b>				
	Absolute number of basecamp participants who filled in the survey	Share of all basecamp participants who filled in the survey	Absolute number of VET students who filled in the survey	Total
Berlin	13	93%	32	45
Essen	13	16%	27	40
Frankfurt	0	0%	22	22
Mannheim	10	18%	30	40
<b>Total</b>	<b>36</b>	<b>32%</b>	<b>111</b>	<b>151</b>

<b>Follow-up survey</b>				
	Absolute number of basecamp participants who filled in the survey		Absolute number of VET students who filled in the survey	Total
Berlin	10	71%	24	34
Essen	10	13%	30	40
Frankfurt	9	13%	33	42
Mannheim	5	9%	23	28
<b>Total</b>	<b>34</b>	<b>15%</b>	<b>110</b>	<b>144</b>

Source: OECD tabulation based on survey results.

<sup>12</sup> Survey responses were discarded based on several criteria. A survey response was discarded if the survey response time for this participant was below the bottom 5<sup>th</sup> percentile of response times to the survey. These response times were unusually short, suggesting that the respondent likely did not even have time to read the questions nor take the time to thoughtfully complete the survey. A very short response time implies that the responses may not be reliable, as the survey was not filled out with sufficient care or attention. On the basis of this criteria, three responses from the control group were discarded at baseline and seven control group responses from the follow-up survey. Further checks included potential contradictory responses provided by a participant (for example a reported graduation year making a participant less than 10 years old at graduation or reporting a wrong location). Several contradictions were possible throughout the survey and a response was discarded if a respondent reported three or more contradictions. This exclusion was not the case for any respondent except for those discarded already through the short survey response time.

While the total number of responses in the baseline and follow-up survey are very similar, less than 60% of participants in the baseline survey also filled in the follow-up survey (Table 7). The remaining responses in the follow-up survey are responses from new participants who did not take part in the baseline survey. This leaves a total of 103 responses that filled in both baseline and follow-up survey, among which 24 are basecamp participants.

**Table 7. Seven out of ten baseline survey respondents also took the follow-up survey**

	Share of baseline basecamp participants who answered both surveys	Share of baseline control group respondents who answered both surveys	Total number of basecamp participants answering both surveys	Total number of control group participants answering both surveys	Total
Berlin	77%	69%	10	22	32
Essen	69%	78%	9	21	30
Frankfurt	-	64%	0	14	14
Mannheim	50%	73%	5	22	27
<b>Total</b>	<b>67%</b>	<b>72%</b>	<b>24</b>	<b>79</b>	<b>103</b>

Source: OECD tabulations based on baseline and follow-up survey responses.

Attrition is a potential concern for the evaluation since 31.8% of those who filled in the baseline survey, did not complete the follow-up. Attrition is likely less problematic for the control group because it is largely driven by absentee patterns in VET school. Generally, basecamp employees reported that almost all of the students were present in VET school on the day of the survey, filled in the survey. Attrition is hence mostly driven by students who filled in the baseline survey being absent in school on the day of the follow-up survey.<sup>13</sup> On the other hand, many students present on the day of the follow-up survey were not attending class the day of the baseline survey and it is unlikely that these absences are driven by the survey as students generally did not know about the date the survey would be conducted beforehand. This observation is underlined by the fact that almost the same number of responses were recorded from VET school participants at baseline and follow-up.

Attrition is a much bigger concern for basecamp participants. If only those who were particularly successful and happy with the basecamp programme filled in the follow-up survey in the basecamp group, the evaluation will overstate the success of the basecamp programme as the opinions of those less happy with the programme are not recorded at follow-up. To assess the extent to which this might be a concern, one can test whether any of the baseline variables predict attrition. This is not the case for any of the baseline characteristics age, gender, citizenship, education level, immigrant status, or mother tongue. However, the outcome scores measured at baseline jointly predict attrition, with those with higher self-assessed scores at baseline more likely to also fill-in the follow-up survey. This fact is to be taken into account when interpreting the quantitative evaluation as positive results apply only to those particularly happy with the basecamp programme and less likely to self-report low outcome scores at baseline. The quantitative results are therefore likely to overstate the true effect of the basecamp programme.

### **Comparison at baseline**

Comparing the participants of basecamp with those from the VET schools reveals that treatment and control group differ in core characteristics. Table 8 presents summary statistics for all background variables

<sup>13</sup> According to a VET school teacher, school absence is a phenomenon that many VET schools in Germany currently struggle with.

collected at baseline for treatment and control group for all those who filled in both baseline and follow-up survey. The table shows that basecamp participants are significantly older than the participants from the control group with an average of 21.6 versus 19.3 years of age. Further, they have completed their education more than one year earlier compared to the control group. These differences are consistent with the basecamp programme taking over a large share of JOBLINGE participants who have often been out of employment, education or training for a few years before finding an apprenticeship with the help of JOBLINGE. They therefore tend to be older, and their graduation date lies further in the past. basecamp participants are also more likely to have an immigrant background. They are more likely to be born abroad themselves, with the share born abroad at 50% for basecamp participants and 16.5% for the control group, but basecamp participants are in particular much more likely to have at least one parent born abroad with 91.7% of cases compared to only 48.7% of the control group. This also translates to a much larger share of the control group having German citizenship (85%) compared to only 54% among basecamp participants. This is in line with the structure of the basecamp and JOBLINGE programmes who have a strand specifically aimed at refugees. basecamp participants are also significantly less likely to own an electronic device such as a tablet or laptop.

**Table 8. Summary statistics for basecamp and VET school participants**

Variable		basecamp			VET school			Mean difference	Normalised difference	p-value
		Obs	Mean (SD)	Min/max	Obs	Mean (SD)	Min/max			
Gender (0 male, 1 female, 2 div)		24	0.458 (0.509)	0/1	79	0.456 (0.526)	0/1	0.003	0.004	0.597
Age		24	21.625 (3.386)	17/31	79	19.266 (3.558)	15/37	2.359	1.266	0.018
Education:	Secondary school (Hauptschule)	24	8.3% (0.282)	0/1	79	15.2% (0.361)	0/1	-0.009	-0.122	0.892
	Intermediate secondary school (Realschule)	24	58.3% (0.504)	0/1	79	45.6% (0.501)	0/1	0.128	0.181	0.192
	Higher secondary school (Fachabitur/Abitur)	24	33.3% (0.482)	0/1	79	39.2% (0.491)	0/1	-0.059	-0.085	0.103
Year finished education		24	2019.250 (3.326)	2009/2023	79	2020.907 (3.39)	2003/2023	-1.915	-1.037	0.032
Born abroad (0/1)		24	50% (0.511)	0/1	79	16.5% (0.373)	0/1	0.335	0.504	0.001
Parent born abroad (0/1)		24	91.7% (0.282)	0/1	78	48.7% (0.503)	0/1	0.429	0.685	0.000
German citizenship (0/1)		24	54.2% (0.509)	0/1	79	84.8% (0.361)	0/1	-0.306	-0.464	0.001
Has kids (0/1)		24	0% (0)	0/1	79	2.5% (0.158)	0/1	-0.025	-0.089	0.167
Mother tongue is German (0/1)		24	37.5% (0.495)	0/1	79	73.4% (0.445)	0/1	-0.359	-0.524	0.000
Owns electronic device (0/1)		24	66.7% (0.482)	0/1	79	86.1% (0.362)	0/1	-0.194	-0.301	0.084
Year started apprenticeship		24	2022.583 (1.06)	2019/2023	79	2023 (0)	2023/2023	-0.417	-0.573	0.029
Second apprenticeship (0/1)		24	29.2% (0.464)	0/1	79	16.5% (0.373)	0/1	0.127	0.196	0.223
Is dream job (0/1)		24	29.2% (0.464)	0/1	79	32.9% (0.473)	0/1	-0.037	-0.054	0.240

Lives with parents (0/1)	24	70.8% (0.464)	0/1	79	78.5% (0.414)	0/1	-0.076	-0.115	0.370
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Note: The table shows the number of observations recorded from basecamp participants in column 1 (Obs) while the second column shows the mean of the responses for each variable from basecamp participants and the standard deviation in brackets below. Column 3 details the number of responses from participants from VET schools, whereas column 4 shows the mean of their responses. Column 5 computes the difference in the mean of basecamp participants and participants from VET schools (mean basecamp – mean VET schools). A positive number indicates that basecamp participants on average have a higher value for the given variable than participants from the control group. The p-value in column 5 is the p-value of a t-test of a regression including fixed effects to account for the different locations. Values below 0.1 indicate that the mean difference between treatment and control group are significant at the 10% level, values below 0.05 indicate a significant difference at the 5% level and values below 0.001 a significant difference at the 1% level. The normalised difference is computed as the mean difference divided by the root of half the sum of the standard deviations of the two mean values (Imbens and Rubin, 2015<sup>[28]</sup>). Absolute values above 1 indicate a large difference between treatment and control group which should be addressed. Absolute values below 0.25 indicate good balance between treatment and control group. The rows marked in blue indicate a significant difference between treatment and control group according to both the t-test statistic and the normalised difference.

Source: OECD tabulation based on replies to baseline survey.

All these significant differences are included as controls in the regressions to assess the effect of basecamp on various outcomes to account for the potential effect of those differences on the outcomes of interest. Similarly to background characteristics, there are also significant differences in outcomes at baseline for almost all outcomes considered. To account for these, each estimation controls for the baseline level of the outcome variable and the baseline differences can be found in the regression tables in 4.3. Annex A.

### ***Representativeness of the survey sample***

In order for the quantitative evaluation to provide a plausible average treatment effect, the sample participating in the survey should be representative of the population in the programme under evaluation. However, this is unlikely to be the case for the present evaluation. First, despite basecamp staff asking all basecamp participants to fill in the baseline survey (with the exception of Frankfurt, making it 151 participants who received the survey link), only 36 replied to the baseline survey – likely the most motivated ones. Second, Table 8 shows that women are over-represented among those who answered the survey. While basecamp locations in Essen, Mannheim and Berlin report a share of 32.6% women among their participants, the share of women who filled in the survey is considerably larger with 45.8% (Table 8). While data on the full basecamp sample is only available on gender, the large discrepancy between the share of women in the survey sample and in the total basecamp sample suggests that the survey sample is likely not representative of the total basecamp population in general. The recovered estimate using the results from these surveys can hence not be transferred to the full population of basecamp participants and the effects recovered are only valid for the skewed sub-sample of participants who took part in the survey. Since survey participation suggests a higher level of satisfaction and is likely associated with higher skill levels, the recovered effects are very likely overstating the true effect of basecamp on its participants.

## **3.4. Qualitative evaluation**

Qualitative evidence was collected via three sources. The first source is information gathered during a study visit to basecamp locations in Essen and Frankfurt in February 2024. This visit involved a tour of the facilities, interviews with various basecamp stakeholders, including basecamp participants, as well as focus groups conducted with both basecamp and control group participants. Additionally, attending a workshop on exam preparation in Essen allowed for insights into how workshops are conducted and how participants interact with staff. Interviews were carried out with two basecamp trainers in Essen and one trainer in Frankfurt, with the leader of basecamp Essen, a VET school teacher from a VET school in Essen, and two basecamp participants in Frankfurt. Moreover, a brief conversation with a company trainer whose

apprentices attends basecamp provided insights into the vantage point of a training company on basecamp, and an in-depth discussion with the Jobcenter partially funding the basecamp programme in Frankfurt allowed to gather insights into how the programme fits within the broader landscape of support programmes for apprentices in the Frankfurt region. Focus groups were also conducted with a class of around 10 VET school students in Essen, and with about 15 basecamp participants following the exam preparation workshop in Essen.

Another source of data is a survey distributed to staff at all basecamp locations requesting detailed information about the execution and functioning of the basecamp at each site. The survey requested information about a given location, such as the number of basecamp participants, their gender composition, the workshops held including data on attendance of workshops, the available offerings, the number of basecamp staff, the opening hours, etc. It was filled in by one staff member at each location.

The last data source is the qualitative add-on to the follow-up survey sent to all basecamp participants (in addition to the quantitative survey mentioned in section 3.3). This add-on included various open-ended questions designed to collect feedback, praise, criticism, and suggestions for improvement for basecamp. Since these questions were only asked at follow-up, the evaluation of these answers considers all 34 basecamp responses from follow-up and does not restrict the analysis to those who answered both baseline and follow-up survey as in the quantitative evaluation (Table 7).

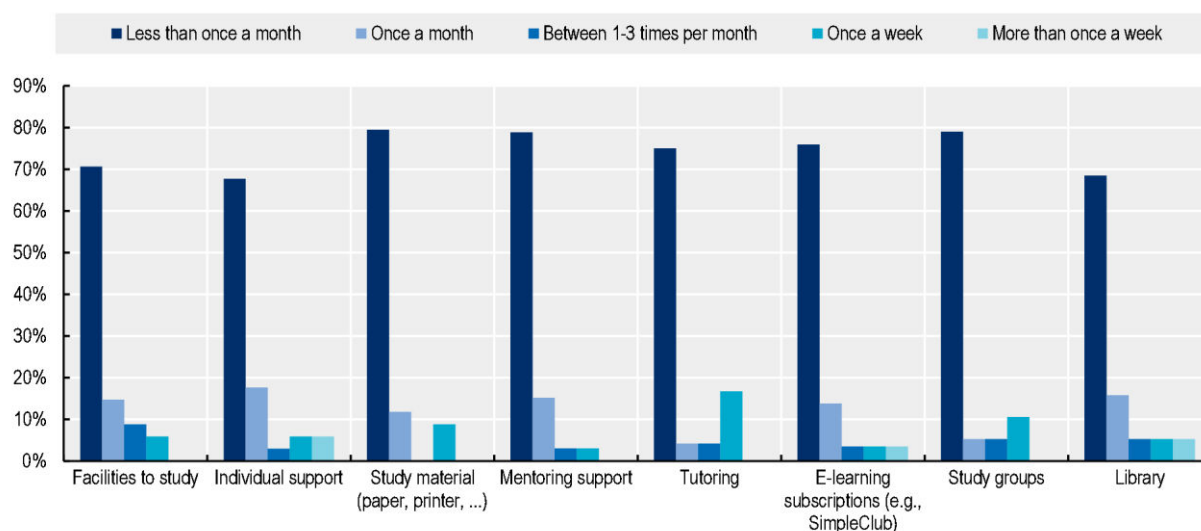
### 3.5. Results

This section details the results from both the quantitative and qualitative evaluation of the basecamp programme. To provide context for the findings, the section first details the usage patterns of basecamp services by participants.

On average, participants of the basecamp programme spend 3.7 hours per month engaging with basecamp offers, either digitally or in person, with the highest average time spent in the Frankfurt location (7.4 hours), followed by 3.25 hours in Berlin and less than 3 in both Essen and Mannheim. However, the average hours mask significant variation among participants: 53% report spending one hour or less per month with basecamp offer, while only 14.7% spend more than four hours per month, which corresponds to using basecamp offers roughly once per week. This is in line with feedback from basecamp staff who note that contact with participants is often infrequent over extended periods, becoming more intensive only when a specific issue arises and until the issue is resolved. This is further corroborated by evidence on the frequency of use of individual basecamp offers (Figure 7), showing that between 68%-79% of basecamp respondents use each individual offer less than once a month, depending on the offer. The most regularly used basecamp services are tutoring and study groups, followed by individual support through basecamp staff and access to the library. Mentoring is the least frequently used service, in line with basecamp's reported difficulties of finding enough mentors for their participants. Further, male and female participants report to use basecamp offers at very similar frequencies.

**Figure 7. Most frequently used basecamp offers are tutoring and study groups**

Share of participants who report to use a basecamp offering at a certain frequency.



Note: The figure shows how often participants use the various basecamp offers. The options displayed in the figure are not all available at every location and the questionnaire for each location only asked about offers available at the specific location.

Source: OECD compilation based on data from the follow-up survey

### Quantitative results

This section presents the results from the quantitative evaluation of Pillar II (individual support) and Pillar III (tutoring, workshops, and social events) of the basecamp programme, but not of Pillar I (basecamp facilities), since the impact of facilities is difficult to measure quantitatively. The qualitative evaluation in the next section complements the quantitative evaluation, and also covers Pillar I.

*basecamp is not associated with differences in satisfaction levels overall, but changes whom participants contact for support*

The individual support offered to basecamp participants can only effectively support participants if they actively seek help from basecamp when they encounter problem or report problems during check-ins from basecamp staff. To evaluate whether this is the case, a survey question asked participants whom they turn to when facing issues at VET school or with their training enterprise.

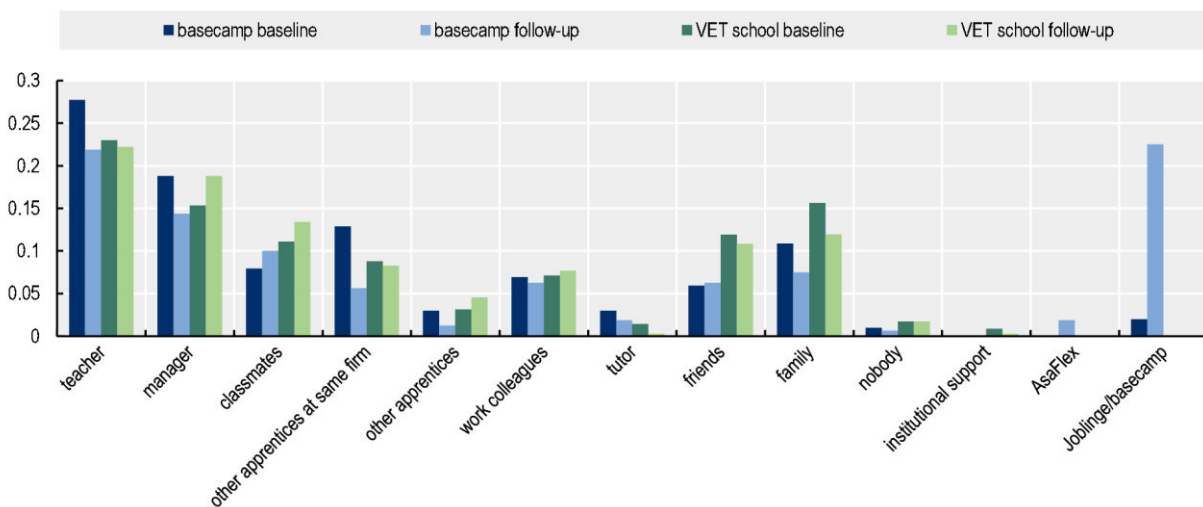
Analysing the answers confirms that basecamp has indeed established itself as the first point of contact in case of problems both at VET school and the training enterprise. Figure 8 and Figure 9 illustrate who participants contact when they face issues at either VET school or at their training company, both at baseline and at follow-up. At baseline, basecamp was not listed as an option, but it was included in the follow-up survey for basecamp participants. As a result, basecamp was selected far more frequently at follow-up, since participants had to manually add it in the baseline survey. The difference in baseline and follow-up is hence very likely driven by simply adding basecamp as an option. However, when basecamp is added as an option, it is the most frequently chosen answer by basecamp participants, both for problems at VET school and the training enterprise, indicating that basecamp has become the primary point of contact for participants.

The control group reports to most frequently consult either teachers or their managers when they encounter problems. While these are also popular points of contact for basecamp participants, a significant difference

emerges between treatment and control group in terms of seeking help from friends or family: VET school participants are notably more likely to reach out to family or friends at both baseline and follow-up compared to basecamp participants. This difference may be attributed to the fact that basecamp participants are more likely to have at least one parent born abroad, making their parents less familiar with the German apprenticeship system and less able to provide relevant assistance. This highlights the importance of basecamp as a key resource for participants, particularly those with a migration background.

**Figure 8. In case of issues with VET school, basecamp participants reach out to basecamp and teachers**

Share of times an answer was picked by either the treatment or control group as an answer to the question “Who do you turn to in case of problems at VET school?”



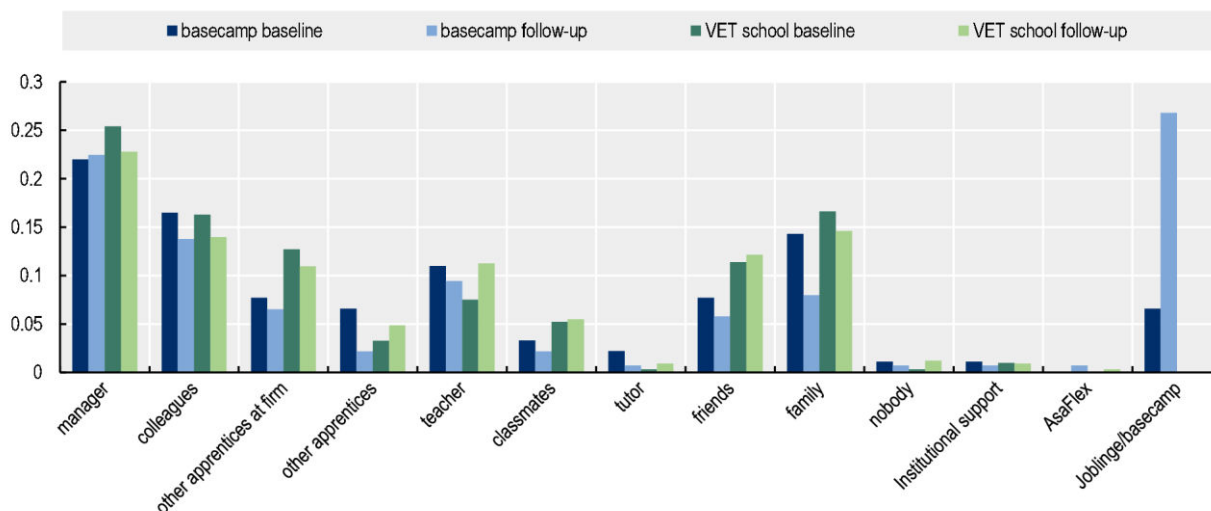
Note: The bars show the share of times an answer was picked by either the treatment or control group as an answer to the question “Who do you turn to in case of problems at VET school?”. Participants could select multiple options. Institutional support refers to social workers or workers at job centres. Institutional support, AsaFlex and Joblinge/basecamp was added as an answer option only at the follow-up survey. The answers for basecamp in the baseline survey were manually added to the list by some respondents.

Source: OECD visualisation based on data from the baseline and follow-up survey.

Although basecamp has successfully established itself as the primary point of contact for many basecamp participants, it is not associated with an effect on more security of having a point of contact in case of problems. Most participants reported that they had a point of contact case of problems already at baseline, suggesting that most participants had someone in mind for support beforehand, and basecamp has simply taken the place of the individuals they would have otherwise turned to. This is measured in the survey via a question asking participants whether they know who to turn to in case of problems at VET school, at work or with their colleagues on a scale from 1-5. Most survey participants report to have someone to talk to in case of problems at VET school or work, with an average score of 4 out of 5 reported for problems at school, 4.3 for problems at work and 4.1 for problems with colleagues at baseline. While basecamp participants reported slightly higher average scores across the three categories at baseline, the differences compared to the control group were not statistically significant. Additionally, the difference-in-difference estimate was positive for two out of three outcomes but not statistically significant. Therefore, an association of basecamp with knowing who to turn to for support cannot be statistically confirmed. The coefficients of the difference-in-difference estimation are presented in Table A.2 of the appendix, with robustness tests restricting the sample to control group participants interested in joining basecamp shown in Table A.3 confirming these results.

**Figure 9. In case of problems at their training company, basecamp participants turn to basecamp**

Share of times an answer was picked by either the treatment or control group as an answer to the question “Who do you turn to in case of problems at your training enterprise?”



Note: The bars show the share of times an answer was picked by either the treatment or control group as an answer to the question “Who do you turn to in case of problems at your training enterprise?”. Participants could select multiple options. Institutional support refers to social workers or workers at job centres. Institutional support, AsaFlex and Joblinge/basecamp was added as an answer option only at the follow-up survey. The answers for basecamp in the baseline survey were manually added to the list by some respondents.

Source: OECD visualisation based on data from the baseline and follow-up survey.

Since participants are confirmed to turn to basecamp for support, the fundamental conditions for basecamp to positively influence participants are in place. For example, as discussed in Section 3.1, attending basecamp may improve participants' overall satisfaction with their apprenticeship. To assess this element, the survey included several relevant questions, measuring satisfaction with their VET school, training enterprise, manager, and the work they do at their company. Participants provided responses on a Likert scale ranging from 1 – not at all satisfied to 5 – very satisfied.

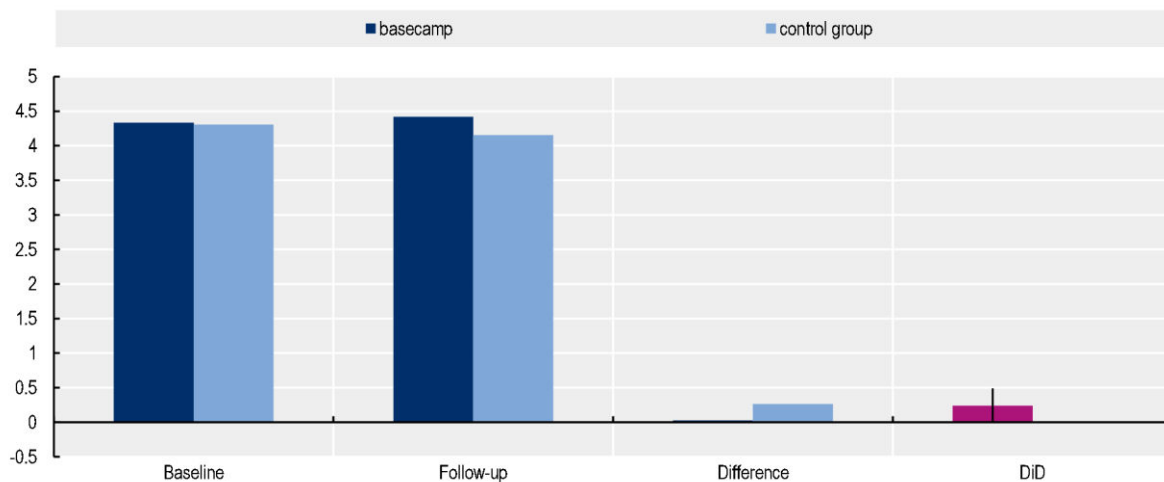
The survey reveals that most apprentices are relatively satisfied with the various dimensions of their apprenticeship. Satisfaction with the training enterprise is highest with an average score at baseline of 4.4, and satisfaction with VET school is lowest with an average score of 3.9 at baseline. There are no significant differences between basecamp and VET school participants in satisfaction levels at baseline. Further, against expectations, the difference-in-difference estimation reveals that attending basecamp for the time between baseline and follow-up survey did not have a significant positive association with satisfaction levels for basecamp participants (Table A.4). This result could be a consequence of relatively high satisfaction levels already at baseline, making further improvements difficult to achieve.

The survey further assessed whether participants feel pride in their occupation. As with the questions on satisfaction levels, participants were asked to rate their answers on a Likert scale ranging from 1 to 5. Most participants reported high levels of pride in their occupation, with scores exceeding 4.1 out of 5, depending on the group considered (left column in Figure 10). At baseline, there was no significant difference in pride between basecamp participants and VET school respondents (left column in Figure 10). However, attending basecamp appears to be associated with slightly positive effect on occupational pride, as pride levels increased for basecamp participants in the follow-up survey, while they slightly decreased for VET school respondents (second column in Figure 10). The pink column on the right in Figure 10 depicts the difference-in-difference estimate, calculated as the difference between the treatment and control groups at follow-up minus the difference between the two groups at baseline, accounting for control variables and

location fixed effects. This difference-in-difference can be attributed to attending the basecamp programme, assuming that both groups would have shown similar pride levels at follow-up if basecamp participants had not attended. The effect indicates that attending basecamp is associated with an increase in pride in one's occupation by 5.5% compared to the baseline average, significant at the 10% level (Table A.4). However, this result is not confirmed by robustness estimations, potentially due to the small sample size making the detection of such a small effect difficult at statistically significant levels. (Table A.5).

**Figure 10. basecamp is associated with a slight increase in pride in one's occupation**

Predicted shares for treatment and control group and treatment periods, differences (grey) and difference-in-difference (pink)



Note: The underlying question asks respondents to rate the statement "I am proud of the occupation in which I am pursuing my VET education" on a Likert scale from 1 to 5. Difference-in-difference estimation with location fixed effects. Shares are not comparable to simple averages calculated. How to read this figure: The first two columns show the predicted values of treatment and control group in the baseline survey, accounting for location fixed effects and background characteristics. The second two columns show the predicted values of treatment and control group in the follow-up survey, again accounting for location fixed effects and background characteristics. The third column shows the difference between predicted values at baseline and follow-up between treatment and control groups and the last column shows the difference-in-difference estimate, i.e. the difference between the discrepancy between treatment and control between baseline and follow-up survey. The vertical line shows the 95% confidence interval. The estimation coefficients are reported in Table A.4.

Source: OECD visualisation based on data from the baseline and follow-up survey.

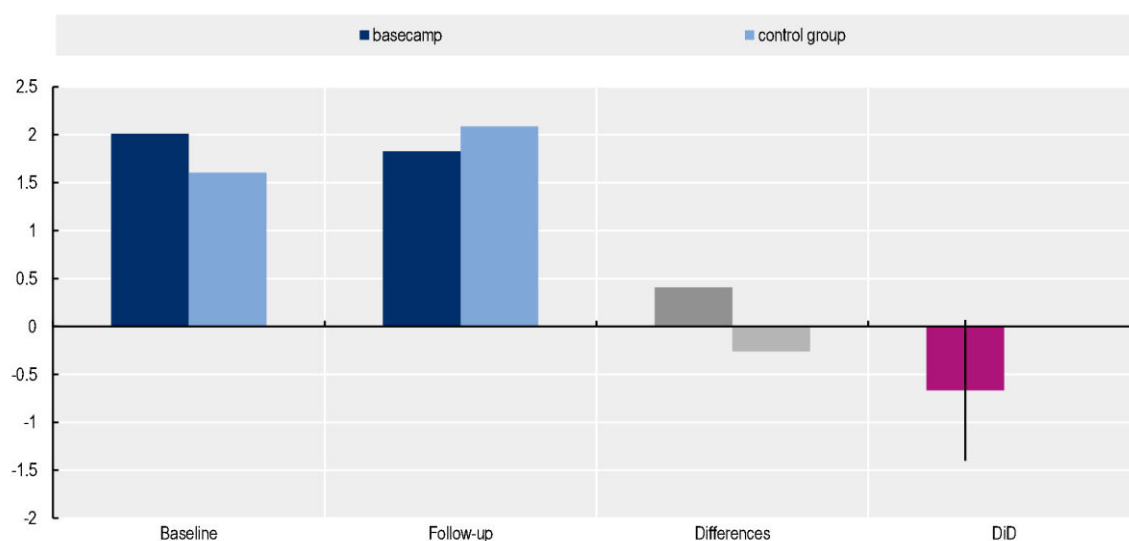
Section 3.1 hypothesises that individual support from basecamp could help reduce stress levels for participants by offering both academic tutoring and the reassurance of having a reliable point of contact for issues, as well as providing direct guidance on managing stress. To assess stress, the survey included three questions, all to be rated on a Likert scale from 1 to 5. The first question asked whether participants feel stressed due to their apprenticeship, the second question whether they often feel overwhelmed by stress, and the third question whether they have difficulty disconnecting at home due to apprenticeship-related stress. At baseline, participants reported moderate stress levels, with averages of 2.4, 2.3, and 2.5, respectively, for the three questions. In the follow-up survey, stress levels increased slightly and similarly for both groups across all three questions. Since similar increases are observed across both groups, basecamp is not found to be associated with a significant reduction in participant's stress levels (Table A.6).

Lastly, individual support could also help reduce apprenticeship dropout. The survey assessed this by asking to which extent participants are considering quitting their apprenticeship on a scale from 1 to 5. While generally only few had considered quitting at baseline with an average score of 1.64 out of 5, basecamp women were more likely to have thought about it with a baseline average of 2. However,

attending basecamp is related to a significant reduction in the number of female participants considering quitting, with a 32% decrease in their score compared to the baseline average (Figure 11 and Table A.6). This reduction is significant at the 10% level (Table A.6), but no such association is observed for male basecamp participants. This result is confirmed by robustness estimations (Table A.7).

### Figure 11. Attending basecamp is associated with a decrease in considerations to quit among female participants

Predicted shares for treatment and control group and treatment periods for variable “Considers dropping out (1-5)”, differences (grey) and difference-in-difference (pink), female respondents only.



Note: The underlying question asks respondents to rate the statement “I often consider quitting my apprenticeship” on a Likert scale from 1 – not at all to 5 – applies fully. Difference-in-difference estimation with location fixed effects. Shares are not comparable to simple averages calculated. How to read this figure: The first two columns show the predicted values of treatment and control group in the baseline survey, accounting for location fixed effects and background characteristics. The second two columns show the predicted values of treatment and control group in the follow-up survey, again accounting for location fixed effects and background characteristics. The third column shows the difference between predicted values at baseline and follow-up between treatment and control groups and the last column shows the difference-in-difference estimate, i.e. the difference between the discrepancy between treatment and control between baseline and follow-up survey. The vertical line shows the 95% confidence interval. The estimation coefficients are reported in Table A.6.

Source: OECD visualisation based on data from the baseline and follow-up survey.

### *Tutoring, workshops and social events are successful, with a few exceptions*

In addition to individual support, basecamp offers workshops, tutoring/study groups, and social events designed to help participants succeed in both VET school and their training enterprises. Section 3.1 hypothesises that this Pillar III support should reduce the feeling of being overwhelmed by one’s apprenticeship overall and improve the specific skills targeted by the tutoring and workshops.

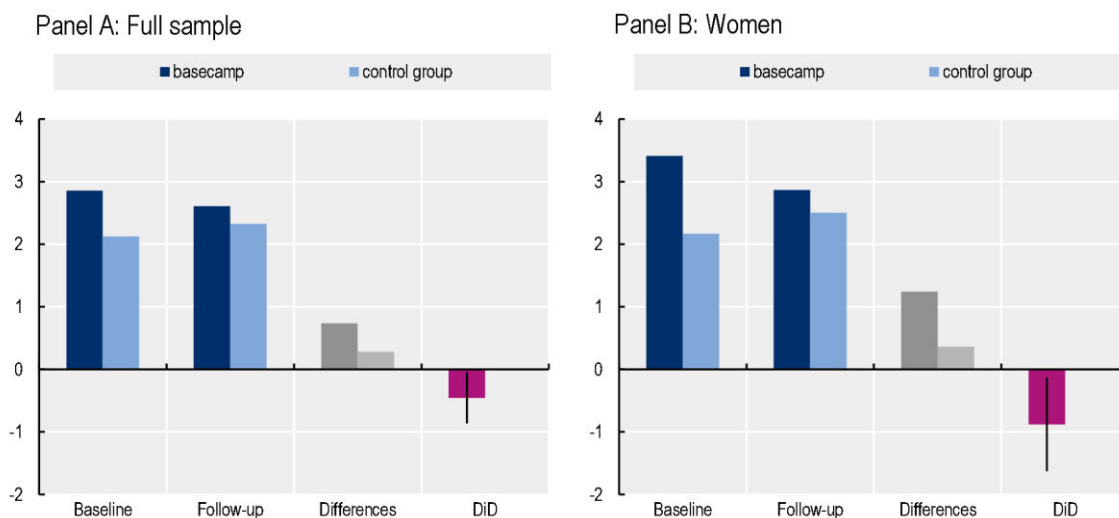
To test this assumption, respondents are asked to report how overwhelmed they felt by VET school or their work in their training company on a Likert scale from 1 to 5. Most participants reported feeling only slightly overwhelmed in both school and work, with averages of 2.29 and 2.21, respectively. However, basecamp participants, particularly at baseline, reported higher levels of feeling overwhelmed, with an average of 2.89 (Table A.8).

basecamp is associated with a reduction in being overwhelmed, decreasing self-reported levels of feeling overwhelmed by VET school by 20% compared to the baseline mean, as indicated by the pink difference-in-difference estimate in Figure 12, Panel A (Table A.8). This effect was primarily driven by female

basecamp participants, who reported considerably higher levels of feeling overwhelmed at baseline (mean of 3.5, compared to 2.2 for control group women and 2.4 for basecamp men, as shown in Figure 12, Panel B, Table A.8). Attending basecamp is associated with a reduction of these feelings by 35.5% compared to baseline averages for female participants, bringing their mean down to 2.9 at follow-up, while all other groups saw an increase over the same period (Table A.8). The estimation coefficients are confirmed by the robustness estimations in Table A.9, although standard errors are larger due to the smaller sample size.

**Figure 12. Attending basecamp is associated with a reduction in feeling overwhelmed at school, particularly among female participants**

Predicted shares for treatment and control group and treatment periods, differences (grey) and difference-in-difference (pink).



Note: The underlying question asks respondents to rate the statement “I often feel overwhelmed in VET school.” on a Likert scale from 1 – does not apply at all to 5 – applies fully. Difference-in-difference estimation with controls and location fixed effects. Shares are not comparable to simple averages calculated. How to read this figure: The first two columns show the predicted values of treatment and control group in the baseline survey, accounting for location fixed effects and background characteristics. The second two columns show the predicted values of treatment and control group in the follow-up survey, again accounting for location fixed effects and background characteristics. The third column shows the difference between predicted values at baseline and follow-up between treatment and control groups and the last column shows the difference-in-difference estimate, i.e. the difference between the discrepancy between treatment and control between baseline and follow-up survey. The vertical line shows the 95% confidence interval. The estimation coefficients upon which the predicted shares are based are reported in Table A.8.

Source: OECD calculations based on data from baseline and follow-up survey.

Through tutoring and study groups, basecamp is also expected to impact apprentices’ performance at work and in school, particularly their occupation-specific skills as well as their reading, and writing skills. To assess occupation-specific skills, participants were first asked to report their occupation and then respond to 10 questions about skills relevant to their specific occupation. Apprentices self-assessed their proficiency in these tasks on a Likert scale ranging from 1–very bad to 5–very good.

To evaluate whether self-assessed occupation-specific skills improved for basecamp participants, responses to the 10 questions were summed to compute an occupation-specific skills score. The score ranges from 10, representing the lowest possible skill level across all tasks, to 50 for participants who rated their skills as very good for all tasks. At baseline, participants rated their skills relatively low, with an average score of 21. There were no significant differences between the treatment and control groups, and

the scores remained mostly unchanged at follow-up. Therefore, basecamp participation is not found to be associated with either an increase or decrease of self-assessed occupation-specific skills (Table A.10).

One concern with relying on self-assessed skills is that systematic over- or underestimation of certain groups may impact the results. If basecamp participants systematically underestimate their skills compared to VET group respondents, a self-assessed measure might suggest skill differences that are in fact related exclusively to differences in self-esteem or ability to self-evaluate rather than actual differences in skills. This may also impact the reliability of absolute skill scores and caution needs to be applied when interpreting results on skills throughout the report.

Reading and writing skills were assessed using nine questions from the OECD skills profiling tool (Tuccio et al., 2023<sup>[36]</sup>), where participants were asked to report how often they perform specific tasks related to these skills. Six questions assessed reading-related activities, and three covered writing skills. Participants rated the frequency with which they perform each of these activities on a scale from 1—never to 5—every day. Scores for reading and writing skills were computed by summing responses to the relevant questions for each skill area.

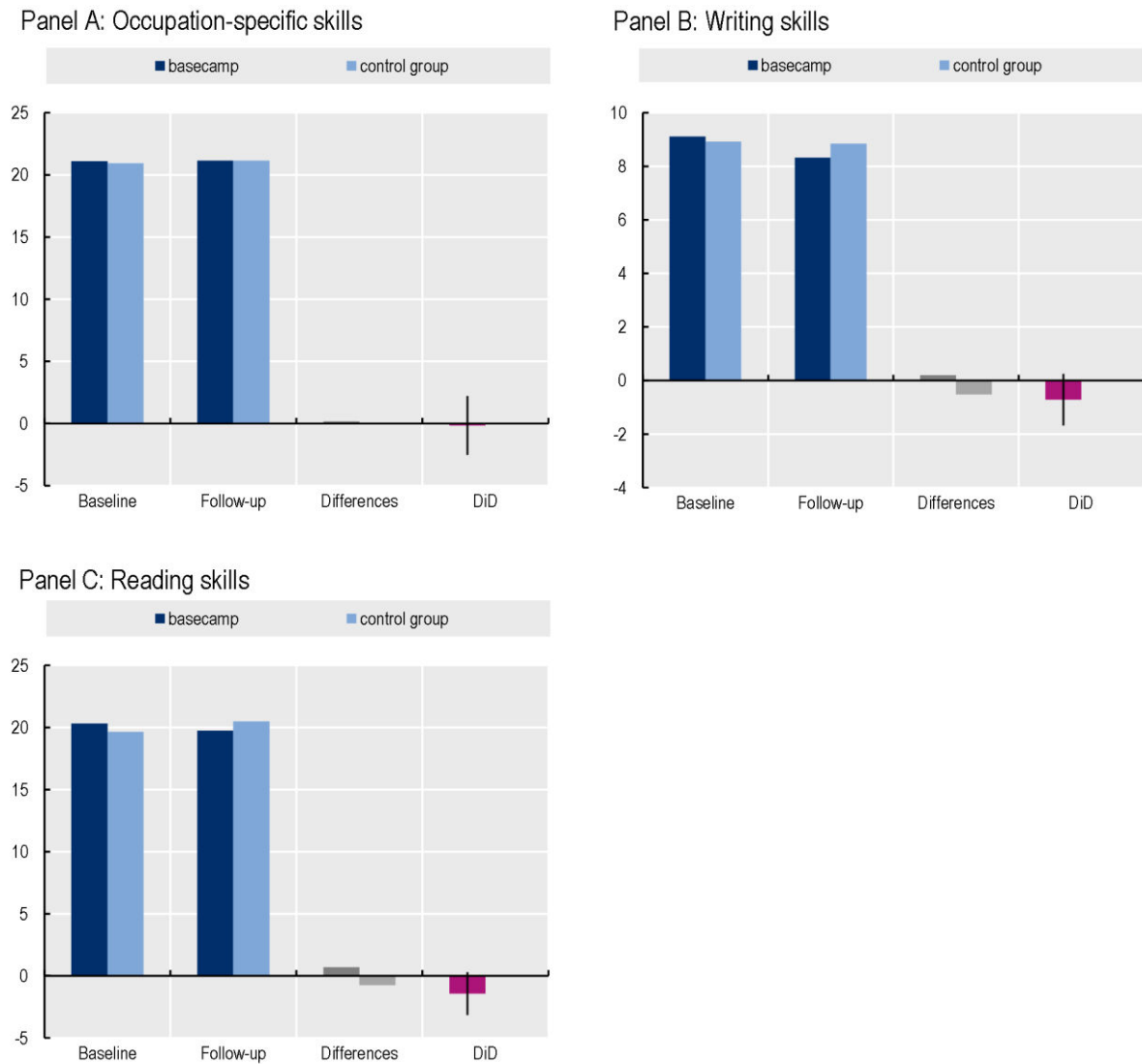
At baseline, basecamp participants had higher scores across both skill areas compared to the control group. Although these differences were not statistically significant at conventional levels, the normalised difference, recommended by Imbens and Rubin (2015<sup>[28]</sup>), indicated a meaningful disparity between the two groups at baseline. While the control group's scores remained similar at follow-up, basecamp participants' scores decreased across both skill areas. Consequently, the difference-in-difference estimate for the impact of basecamp attendance on these scores was negative for all three measures (Table A.10), although the effect was not statistically significant for reading and writing scores and no conclusion on the how basecamp relates to either skill can be drawn (Figure 13 and Table A.10). The coefficients of these results are confirmed by the robustness estimations in Table A.11.

The absence of a clear effect on either skill is somewhat surprising as basecamp does offer tutoring. One potential explanation is the fact that these scores measure the frequency with which a certain task is performed rather than abilities. If basecamp participants have less time available one year into their apprenticeship, this could drive the observed results. Many basecamp participants reportedly struggle to fit basecamp into their busy schedules, balancing an apprenticeship, VET school, and personal life. It is hence plausible that basecamp participants, a year into their apprenticeship, simply have less time to engage in reading and writing tasks. However, it is unclear why basecamp participants would have had more time available than VET school participants at baseline.

Another potential explanation is overconfidence among basecamp participants compared to VET school participants. Overconfidence in one's abilities was observed in both the treatment and control groups during the study visit to basecamp locations in February 2024 and has been identified as a characteristic of young people who are not in education, employment, or training in Germany, according to a study by the Rheingold Institute (Rheingold Institut, 2023<sup>[38]</sup>). If basecamp participants were more overconfident at baseline but learned to better assess their abilities through the basecamp programme, this pattern would make sense. However, since the scores measure the frequency of tasks rather than abilities, it is unclear if overconfidence would also affect how often participants report performing certain tasks.

**Figure 13. Attending basecamp is not associated with a change in participants skills**

Predicted shares for treatment and control group and treatment periods, differences (grey) and difference-in-difference (pink). Note that all scores are measured on a different scale and values on the y-axis are not comparable to each other.



Note: Reading and writing skills were assessed using nine questions from the OECD skills profiling tool (Tuccio et al., 2023<sub>[36]</sub>), where participants were asked to report how often they perform specific tasks related to these skills. Six questions assessed reading-related activities, and three covered writing skills. Participants rated the frequency with which they perform each of these activities on a scale from 1—never to 5—every day. Scores for reading and writing skills were computed by summing responses to the relevant questions for each skill area. The figure reports difference-in-difference estimations with location fixed effects. Shares are not comparable to simple averages calculated. How to read this figure: The first two columns show the predicted values of treatment and control group in the baseline survey, accounting for location fixed effects and background characteristics. The second two columns show the predicted values of treatment and control group in the follow-up survey, again accounting for location fixed effects and background characteristics. The third column shows the difference between predicted values at baseline and follow-up between treatment and control groups and the last column shows the difference-in-difference estimate, i.e. the difference between the discrepancy between treatment and control between baseline and follow-up survey. The vertical bars show the 95% confidence interval. The estimation coefficients are reported in Table A.10.

Source: OECD visualisation based on data from the baseline and follow-up survey

basecamp also aims to improve participants skills necessary for a successful completion of their apprenticeship and their career. As discussed in Section 2.3, basecamp locations offer a variety of workshops aimed at improving both VET school performance as well as at equipping participants with valuable behavioural and social skills for a successful career. These workshops include topics such as exam preparation, learning strategies, conflict resolution, and communication skills.

To evaluate whether these workshops affect participants skills in these dimensions, both the baseline and follow-up survey asked participant to self-assess their skills in conflict management, learning strategies, time management, and motivation. Given the emphasis on digital skills at two locations, the survey also assessed participants' digital abilities. Finally, since most sites offer workshops on financial literacy, participants' financial knowledge was also evaluated.

For conflict management, participants were asked to rate their approach to conflict resolution based on three statements, on a scale from 1 to 5. A conflict management score was calculated by summing the responses, inverting scores where needed for negatively framed questions, so that 5 always represented the best possible outcome and 1 the worst. This produced a conflict resolution score ranging from 3 to 15.

Survey responses indicate that participants were relatively confident in their conflict resolution skills at baseline, with an average score of 12.2 out of 15. Both the treatment and control groups reported similar scores, and while both groups showed slight improvements at follow-up, the increase was larger for basecamp participants, suggesting a positive effect. However, estimates show that the effect is not statistically significant (Table A.12, Column 1). Despite all locations offering at least one conflict resolution workshop during the study period, the workshop is hence not associated with a significant improvement of participants' self-assessed conflict resolution skills. Qualitative feedback from the survey supported this, with many participants continuing to report that workplace conflicts remain a significant challenge.

Learning strategies were evaluated through 12 questions related to learning behaviours. Participants rated the extent to which each behaviour applied to them, with options ranging from 1—not at all to 5—very much. As with the conflict resolution score, responses were summed, reversing scores for negatively framed questions to ensure consistency, with the final learning strategy score ranging from 12 to 60. At baseline, participants rated their learning strategies at mid-level, with an average score of 34.5. basecamp participants rated their learning behaviour higher than control group participants at both baseline and follow-up, with averages of 36.6 versus 33.9. However, basecamp attendance is not found to be associated with a change in learning behaviour in the difference-in-difference analysis (Table A.12, Column 2).

One possible explanation for the absence of a significant effect on learning behaviour is that only one location offered a workshop on learning strategies during the study period, hence the effect might be limited to this one location. Restricting the sample to Mannheim indeed reveals a positive association, however again statistically indistinguishable from zero. This is likely due to the small sample size, as only five Mannheim participants completed both the baseline and follow-up surveys (Table A.12, Column 3).

Effective time management and motivation are important skills for successfully completing an apprenticeship. To assess time management, participants rated themselves on nine statements using a 1 to 5 scale. Scores were summed, with adjustments for negatively framed questions, producing a total time management score ranging from 9 to 45. At baseline, participants reported moderate to high time management skills, with an average score of 34.7. No significant differences were observed between the treatment and control groups at either baseline or follow-up, and scores did not change between the two surveys (Table A.12, Column 4). Therefore, attending basecamp does not have a measurable relation with time management skills, a finding that aligns with expectations, as no location offered workshops specifically focused on time management.

The final section of the survey focused on participants' motivation levels, measured through eight statements. Participants rated how well each applied to them on a scale from 1 to 5. Responses were summed and inverted as needed to calculate a motivation score, ranging from 8 to 40. At baseline,

participants reported an average score of 30.5, indicating relatively high motivation. Similar to time management, no significant differences were found between the treatment and control groups at baseline or follow-up, and attending basecamp is therefore not associated with a significant change in motivation (Table A.12, Column 5). Since only the Frankfurt location offered a workshop on motivation during the study period, the lack of an overall effect is not surprising. Unfortunately, it was not possible to assess the association in Frankfurt specifically, as no basecamp participants from this location completed the baseline survey.

Given the focus on digital skills at two basecamp locations, it was expected that attending basecamp might positively influence participants' digital abilities. To evaluate this, respondents were asked to self-assess 21 digital skills, with an additional option of "I do not know what this question means" for unfamiliar concepts. Responses were summed to compute a digital skills score, with "I do not know what is meant by this question" scoring as 0. To compute an overall digital skills score, the answers to the 21 questions on digital skills are summed up, counting answers of "I do not know what is meant by this question" as 0. Therefore, the minimum attainable score for this question group is 0 while the maximum score is 105.

At baseline, participants had an average digital skills score of 76.6, with no significant differences between the treatment and control groups. This was somewhat surprising, given that basecamp participants were less likely to own electronic devices and displayed a greater need for digital skills support at baseline. Contrary to other skill areas, basecamp attendance was associated with a significant improvement in digital skills. Participation increased the digital skills score by 3.86 points, a 5% increase from the baseline mean, significant at the 5% level (Figure 14, Panel A, and Table A.14, Column 1). Restricting attention to the two locations who set their focus on digital skills (Frankfurt and Berlin), reveals that the relation is indeed driven by these two locations with a 4.8 point increase (Figure 14, Panel B and Table A.14, Column 2). Additionally, women again see a stronger association with their digital skills compared to men, with an increase of 6.7 points in Frankfurt and Berlin (Table A.14, Column 3). Results on digital skills are confirmed by robustness estimations in Table A.15.

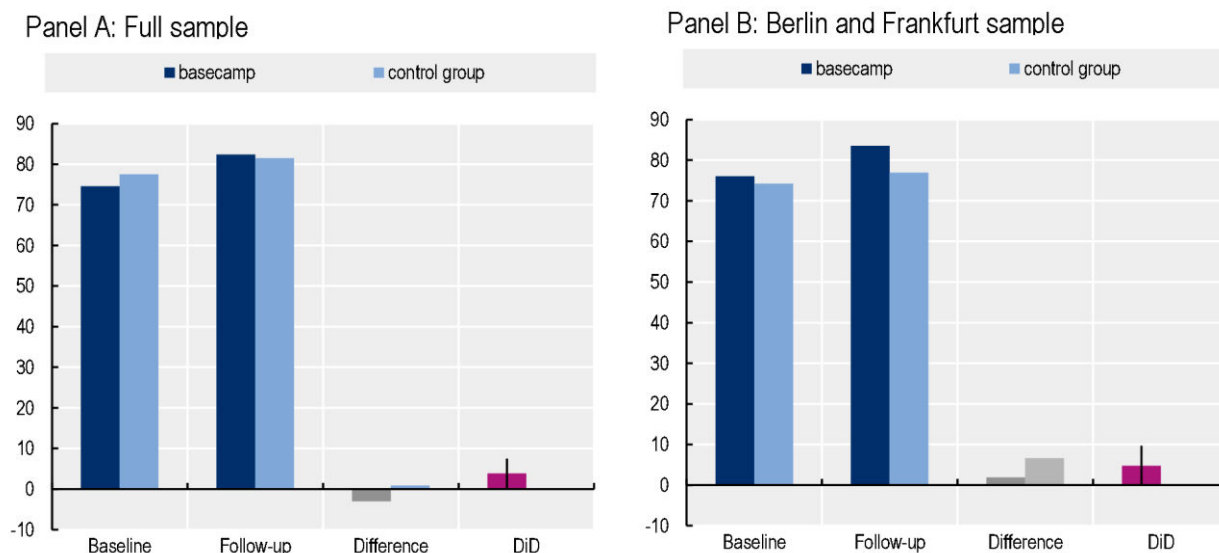
Lastly, two locations also held workshops on financial literacy. To assess financial literacy, the survey included 7 questions on financial literacy from the PISA supplement and additionally asked participants whether they know how to apply for financial support. The financial literacy score was calculated by totalling the responses to all the chosen questions. These were structured as yes/no-questions, with affirmative responses scored as one and negative responses as zero. By this measure, a perfectly financially literate apprentice would have a score of 8.

Respondents record an average of 4 on the financial literacy score at baseline with no statistically significant differences between the treatment and control group. Overall, there is also no significant association of attending basecamp with financial literacy (Figure 15, Panel A and Table A.14, Column 4).

However, restricting the sample to those locations who have offered workshops on financial literacy reveals steep improvements in financial literacy among basecamp participants from these locations: overall, attending basecamp in one of the locations who had a workshop on financial literacy is associated with an increase of 31.9% in the financial literacy score compared to the baseline mean, significant at the 1% level (Figure 15, Panel B and Table A.14, Column 5). Similar to digital skills, women show a larger association compared to men, with an increase of 34.2% compared to the baseline mean, versus a 22.8% increase for men (Table A.14, column 6). Results on financial literacy are confirmed by robustness estimations in Table A.15.

**Figure 14. Attending basecamp is associated with higher digital skills**

Predicted shares for treatment and control group and treatment periods, differences (grey) and difference-in-difference (pink)



Note: The digital skills score was computed by summing up the answers for each respondent to 21 questions asking them to self-assess 21 digital skills on a scale from 0 – I do not know what is meant by this to 5 – Applies fully. The figure shows the difference-in-difference estimation with location fixed effects. Shares are not comparable to simple averages calculated. How to read this figure: The first two columns show the predicted values of treatment and control group in the baseline survey, accounting for location fixed effects and background characteristics. The second two columns show the predicted values of treatment and control group in the follow-up survey, again accounting for location fixed effects and background characteristics. The third column shows the difference between predicted values at baseline and follow-up between treatment and control groups and the last column shows the difference-in-difference estimate, i.e. the difference between the discrepancy between treatment and control between baseline and follow-up survey. The vertical line shows the 95% confidence interval. The estimation coefficients are reported in Table A.14.

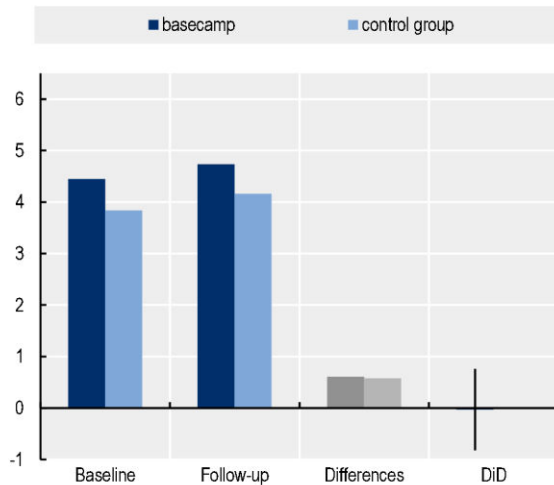
Source: OECD calculations based on data from baseline and follow-up survey.

Taken together, these results suggest that basecamp workshops are highly effective at improving participants' skills in the areas targeted by the workshops. Moreover, since some workshops took place several months before the follow-up survey, the observed skill improvements were not only immediate but persisted over time, indicating that participants found the content useful and were able to apply what they learned. This result is reflected in participants' positive assessments of the workshops, with more than two-thirds reporting that the workshops were highly useful. Most participants also confirmed that they had applied the knowledge gained in the workshops to their apprenticeship or daily life. For example, while passing exams was the most significant concern for both treatment and control groups at baseline (Figure 16), attending basecamp is associated with a significant decline in worries about passing exams at follow-up, particularly in locations that offered exam preparation workshops. In contrast, control group participants showed increased concern about passing exams at follow-up. This led to a significant difference-in-difference effect, with basecamp associated with a 30 percentage point reduction in the proportion of participants who were significantly worried about passing exams compared to baseline (Figure , Panel A and Table A.18). Despite this improvement, passing exams remains the top concern for both groups at follow-up (Figure 16). A similar, albeit less pronounced, reduction of 20 percentage points was observed for concerns related to filling in the Berichtsheft, another topic covered in basecamp workshops (Figure 17, Panel B and Table A.18). On the other hand, the evaluation shows that skills that were not specifically targeted by a basecamp workshop did not improve.

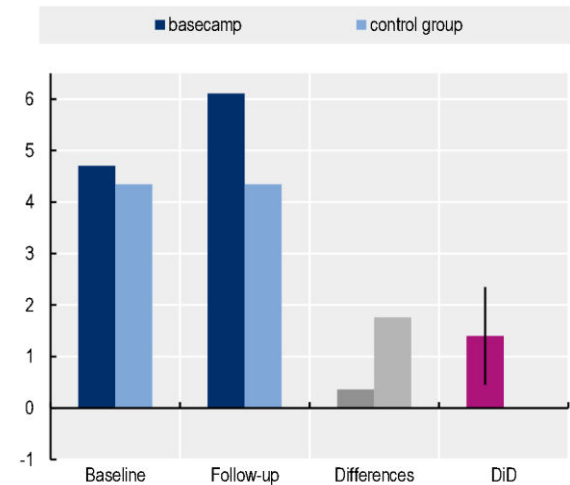
**Figure 15. Workshops on financial literacy are associated with significant increases in financial scores**

Predicted shares for treatment and control group and treatment periods, differences (grey) and difference-in-difference (pink).

Panel A: Full sample



Panel B: Mannheim and Frankfurt



Note: The financial literacy score is computed by summing yes/no answers to six questions on financial literacy from the PISA supplement and one additional question asking respondents whether they know how to apply for financial support. The figure shows the difference-in-difference estimation with location fixed effects. Shares are not comparable to simple averages calculated. How to read this figure: The first two columns show the predicted values of treatment and control group in the baseline survey, accounting for location fixed effects and background characteristics. The second two columns show the predicted values of treatment and control group in the follow-up survey, again accounting for location fixed effects and background characteristics. The third column shows the difference between predicted values at baseline and follow-up between treatment and control groups and the last column shows the difference-in-difference estimate, i.e. the difference between the discrepancy between treatment and control between baseline and follow-up survey. The vertical line shows the 95% confidence interval. The estimation coefficients are reported in Table A.14.

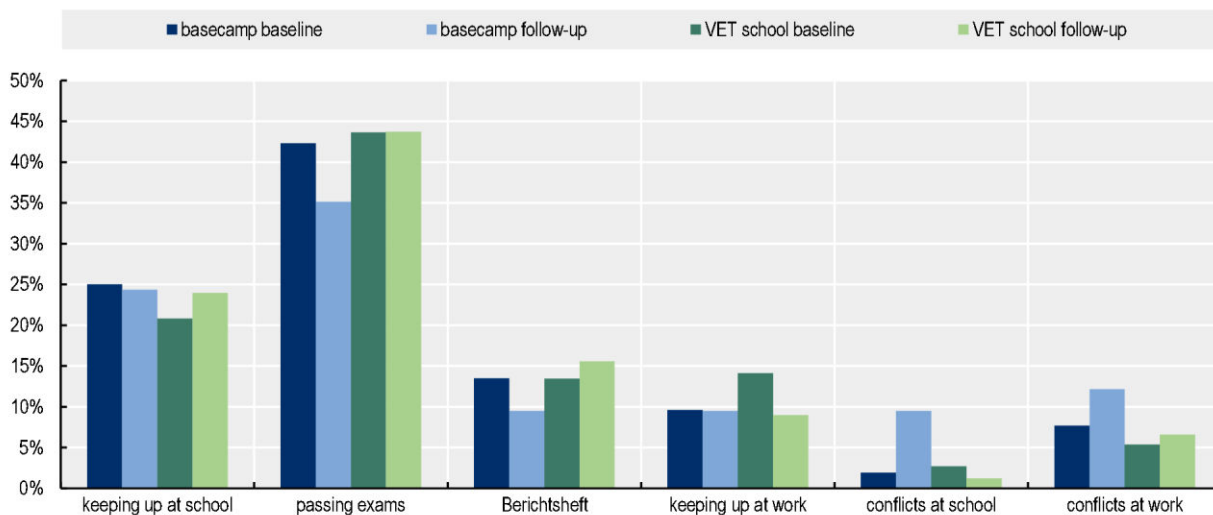
Source: OECD calculations based on data from the baseline and follow-up survey

*basecamp does not yet increase participants peer network and more social events would be welcome*

Another key objective of basecamp is to encourage social connections and networking among apprentices. To this end, basecamp provides support through both Pillar I and Pillar III. The basecamp location is designed to invite participants to spend time and socialise, with regular social events organised to foster opportunities for participants to meet and exchange ideas. To evaluate the success of these measures, respondents were asked to assess their networking skills through four questions on networking. Additionally, the survey asked participants to report the average number of fellow apprentices with whom they regularly discuss their apprenticeship. A networking score, ranging from 4 to 16, was calculated by summing the self-reported answers to these questions. At baseline, respondents rated their networking abilities relatively high, with an average score of 12.5 out of 16, with no significant difference between the treatment and control groups (Table A.16, Column 1).

**Figure 16. Worries about passing exams and writing the Berichtsheft decrease among basecamp participants at follow-up**

Share of respondents who list a certain concern among their biggest challenges for successfully completing their apprenticeship



Note: The underlying question asks respondents to select among the answer options on the x-axis as a reply to the question “Where do you see the greatest challenges in your apprenticeship?”. Respondents could select multiple answer options. Berichtsheft is a booklet where apprentices are required to track progress during their apprenticeship.

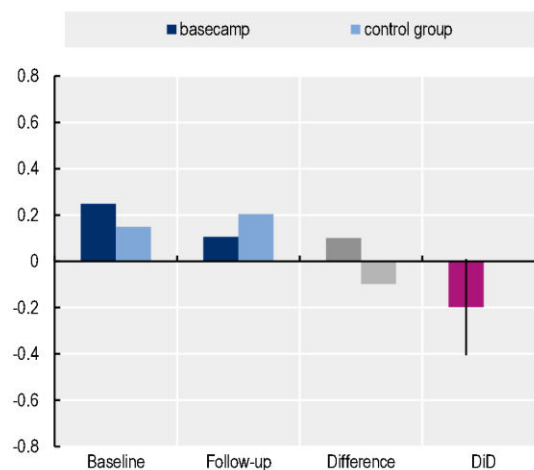
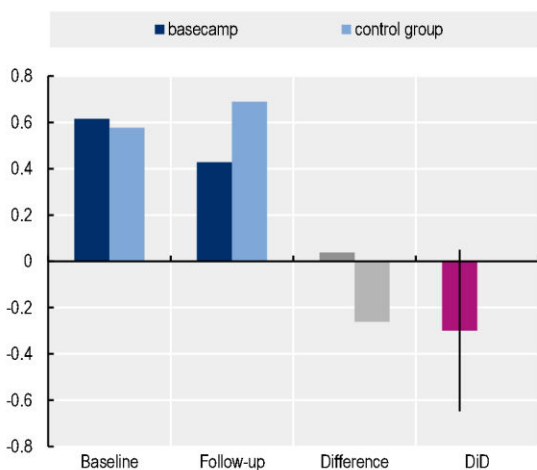
Source: OECD visualisation based on data from the baseline and follow-up survey.

**Figure 17. Attending basecamp workshops is associated with fewer concerns about passing exams and filling in the Berichtsheft**

Predicted shares for treatment and control group and treatment periods, differences (grey) and difference-in-difference (pink)

Panel A: Passing exams is major challenge, sample excluding Mannheim

Panel B: Berichtsheft is major challenge



Note: The outcome is a dummy equal to one if an individual chooses passing exams or filling the Berichtsheft as a major challenge they face in their apprenticeship. Berichtsheft is a booklet where apprentices are required to track progress during their apprenticeship. Difference-in-difference estimation with location fixed effects. Shares are not comparable to simple averages calculated. How to read this figure: The first two columns show the predicted values of treatment and control group in the baseline survey, accounting for location fixed effects and background characteristics. The second two columns show the predicted values of treatment and control group in the follow-up survey, again accounting for location fixed effects and background characteristics. The third column shows the difference between predicted values at baseline and follow-up between treatment and control groups and the last column shows the difference-in-difference estimate, i.e. the difference between the discrepancy between treatment and control between baseline and follow-up survey. The estimation coefficients are reported in Table A.18 and Table A.19.

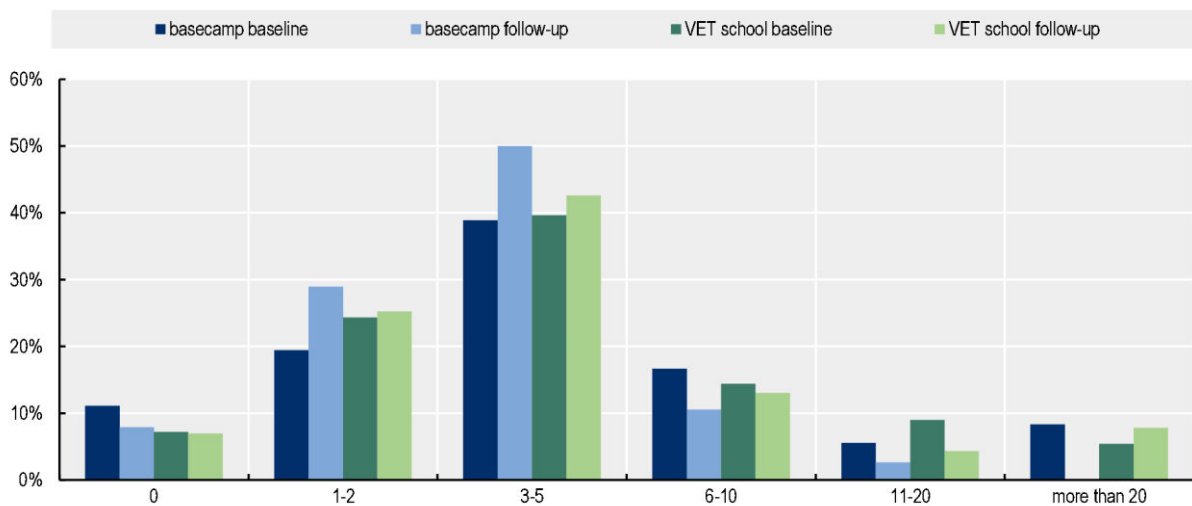
Source: OECD calculations based on data from baseline and follow-up survey.

Contrary to expectations, attending basecamp was not significantly associated with participants' networking abilities. Moreover, while basecamp participants initially reported a similar number of peer contacts as their VET school counterparts, they reported a noticeable decline in contacts by the follow-up survey (Figure 18). The average number of apprentices that basecamp participants regularly exchanged with decreased by 2.95, whereas the control group experienced a slight increase over the same period. Thus, attending basecamp is associated with a statistically significant decline in regular peer contacts, significant at the 5% level (Table A.16, Column 2).

Despite basecamp apprentices reporting fewer contacts at follow-up, basecamp has been able to connect at least some apprentices, with at least 40% of all basecamp respondents reporting to have met other apprentices in the basecamp programme also outside basecamp at follow-up (Figure 19).

**Figure 18. basecamp participants have fewer contacts with other apprentices after attending basecamp**

Percent of respondents who report to have a certain number of apprentices they regularly exchange with on their apprenticeship.

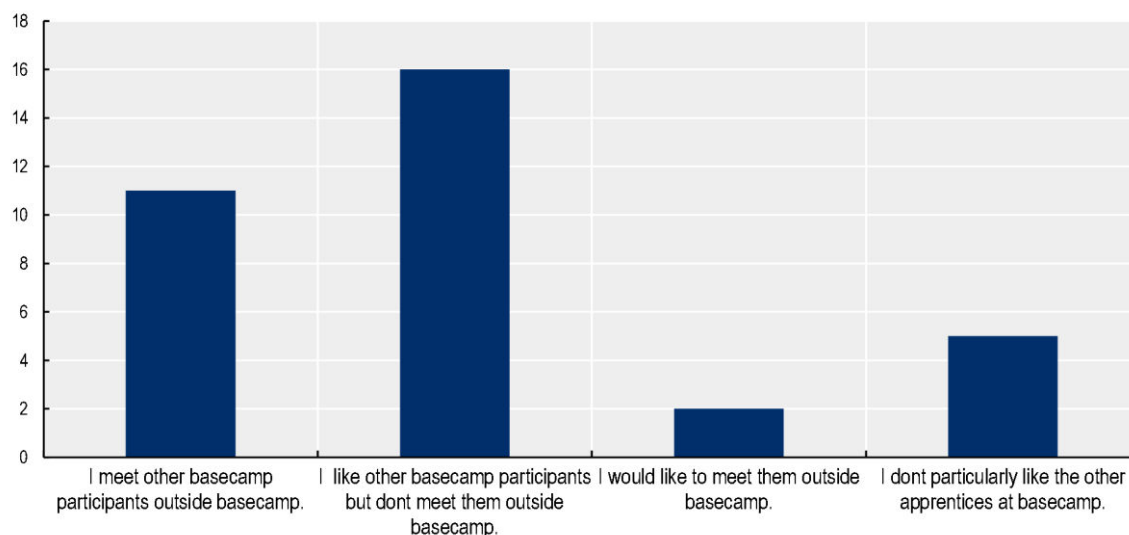


Note: The underlying question asks respondents to choose how many other apprentices they exchange with on their apprenticeship per month. Answer options provided to respondents are on the x-axis.

Source: OECD visualisation based on data from the baseline and follow-up survey.

**Figure 19. Four in ten basecamp participants meet other basecamp apprentices also outside basecamp**

Number of basecamp participants who agree with a given statement, follow-up survey.



Source: OECD visualisation based on the follow-up survey.

### **Qualitative evaluation**

The qualitative evaluation draws on insights from the study visit and feedback provided by basecamp participants in the surveys. It complements quantitative evidence wherever relevant and begins by detailing participants' experience with the current basecamp offerings. The section concludes with participants' suggestions for improvements and their ideas for future programme enhancements.

#### *Facilities are attractive but not yet used by participants as intended by basecamp*

The two locations visited during the study visit in February 2024 (Frankfurt and Essen), while distinctly different in style, are both attractively designed. The Frankfurt location features second-hand furniture and carpets, creating a cozy atmosphere, while the Essen location adopts a modern industrial design. Both spaces offer inviting areas for work and socializing, with desks and lounge areas. However, despite the appealing design, both basecamp participants and staff report that few apprentices currently visit the facilities spontaneously to study or meet. The average monthly drop-in ranges from 4-12 participants in Essen (Essen had a total number of 80 participants) and 10 in Frankfurt (Frankfurt had a total of 69 participants), and 24 in Mannheim (Mannheim had a total of 57 participants and was not visited by the OECD team). This limited usage is further supported by the follow-up survey, where over 70% of participants stated they use basecamp locations to study less than once a month—the lowest frequency option available. Interviews and focus groups with participants also confirm this pattern: most respondents only visit basecamp for pre-scheduled appointments or workshops, rarely dropping in spontaneously to study. Many prefer studying at home or in local libraries, which offer longer evening and weekend hours. Some also mention that the basecamp location is sometimes too loud with staff working in the same spaces, potentially holding meetings with other apprentices. This is also expressed as a concern by some respondents regarding private talks. A few individuals shared that they would often prefer meeting basecamp staff outside the location, such as in a park, as discussing private issues might feel more comfortable when not sitting directly face-to-face. This also has the additional benefit of reducing the likelihood of being overheard by other participants or staff.

basecamp staff in Essen are aware of these challenges and attribute the limited drop-in partly to the restricted opening hours. Since the basecamp location follows standard opening hours, it is often closed by the time participants finish work and would arrive at the location. The location is also closed on weekends, a time when participants report to study most. Due to staffing limitations, extending hours is not currently feasible, but the Essen location plans to expand its opening times in the future to better accommodate participants' needs.

*basecamp participants highly value basecamp staff and the individual support they provide*

The qualitative evaluation shows that basecamp participants highly value basecamp staff and the individual support they provide. Statements from basecamp participants both during the study visit and in the follow-up survey highlight the high regard that basecamp participants have for basecamp staff. When asked what they appreciate most about basecamp, participants across all locations consistently mentioned basecamp staff and their readiness to help with any problem. In fact, derivatives of the words help and support – helpful, ready to help – appear in 21 of the 34 comments on the positives of basecamp, and figure 25 times in total, showing that some respondents even look for synonyms to reinforce the language of their appreciation, and mention these words more than once. The eight other answers use different words but are in the same tone – basecamp participants indicate and reiterate their appreciation for the work of basecamp employees. Many also emphasised that one of the standout features of the programme is the empathy and respect they receive from basecamp staff – qualities they often feel are lacking from other services, schools, or training companies.

This appreciation was evident during the study visit as well. Both participants interviewed in Frankfurt highlighted how much they appreciate the support of basecamp staff, both in private matters as well as in work-related issues. They both greatly valued the personal relationship they had developed with their basecamp advisor, citing that they felt that they had become friends over time. Both participants stressed the importance of these close connections, explaining that it gave them confidence to know they had someone in their corner who would support them through any challenge and help them correct any mistake without judgment. This sentiment was particularly strong in Frankfurt, where participants meet basecamp staff very regularly in person, allowing them to develop a more personal connection.

In contrast, such close personal relationships seem to be formed less in Essen as participants tend to meet with basecamp staff only when facing specific problems. Nonetheless, all participants interviewed expressed a high regard for basecamp staff and emphasised that they felt secure knowing the staff would always be there to help in times of need.

The impression of basecamp staff was also confirmed in conversations with basecamp employees. All employees encountered were highly motivated by their work and strongly believed in the mission of JOBLINGE and basecamp. Notably, some staff members are former JOBLINGE graduates who, after completing their apprenticeships, actively sought to work for JOBLINGE. They expressed a strong desire to give back, sharing how much the programme had helped them and wanting to help other young people in similar situations. Moreover, many employees go above and beyond to support participants, often being available outside of basecamp's regular hours during times of crisis. Their dedication extends to personal efforts, such as enlisting private friends to assist apprentices, for instance, by providing legal advice through friends who are lawyers or similar support. This level of commitment underscores the staff's deep investment in the success and well-being of the participants.

Due to their positive experiences with basecamp staff, participants express high levels of satisfaction with the individual support they received. Those who have received intensive assistance during a crisis are particularly grateful, noting that the support was instrumental in helping them successfully resolve their issues. Even among those who have not yet taken advantage of the individual support, many emphasize that simply knowing the option is available gives them a sense of security and reassurance, even if they rarely need to use it. However, some participants also mention that it can sometimes be challenging to

schedule an appointment with basecamp staff due to high demand and limited staff availability. Additionally, the available time slots are restricted to basecamp's opening hours, which often conflict with their work or school schedules, making it harder for them to access support when needed. Interestingly, concerns about restricted opening hours were mentioned equally across locations, despite the variation in hours. This suggests that the primary issue may not be the regular full-day closures, but rather that the evening hours are too limited for participants' needs.

*basecamp participants find workshops and other offers useful but struggle to fit them in their busy schedule*

The follow-up survey shows that more than two-thirds of participants who attended a workshop found it interesting, useful, and 84.8% found the topics relevant for their apprenticeships. Most were able to apply at least some of the learnings to their apprenticeships or personal lives. Additionally, nearly all participants (96.8%) reported that they could follow along easily during the workshops, with the few exceptions citing the fast pace as the reason for difficulties in understanding.

This aligns with observations from the study visit. During the workshop in Essen, all attendants followed the workshop attentively, regularly asking questions and actively engaging. Notably, nearly every participant contributed to the discussion at least once, many seemingly eager to share their own experiences and to provide insights and tips for the others. Further, all attendants kept their phones in their bag during the whole workshop, only checking them once the workshop concluded. However, when asked about the more complex material afterwards, only a few participants were able to recall what had been discussed.

Both in the discussion with participants after the workshop as well as in the survey, many participants mentioned that – while useful – attending workshops or tutoring events can be challenging due to their busy schedules. While workshops are held in the evenings and rarely conflict with work hours, they often interfere with participants' personal lives. Attendees of the workshop in Essen highlighted that having food and drinks provided, along with the opportunity to mingle afterward, made it more worthwhile to attend. This arrangement allowed participants to not only benefit from the workshop itself but also to connect with other apprentices they know through basecamp and ask staff smaller questions—ones that wouldn't typically require a full appointment. This setup ensured that, for most participants, the trip to basecamp to attend the workshop was worthwhile after all.

Fitting basecamp offerings into their schedules is an even greater challenge for activities such as German classes, tutoring or study groups that are more frequently held during basecamp's regular opening hours, making it even harder for some apprentices to attend offers they are keen to participate in. This concern was raised by participants across locations and extending opening hours in the evenings was one of the suggestions to improve basecamp left by a respondent in the follow-up survey.

However, a selected few also noted that the numerous basecamp offerings they are invited to attend can sometimes be a source of stress. They expressed that there are too many offers for them to attend all, and the frequent invitations and follow-ups can feel like pressure to attend. This is especially challenging when the offerings interfere with their personal lives, and they don't always want or feel able to comply with the expectations of basecamp staff to attend.

*Communication with the employer is a point of tension for many basecamp participants*

Several participants report having difficulties in the communication with their employer. This challenge also appears to be one of the primary reasons for which participants consider quitting – or ultimately quit – their apprenticeship. One participant shared that they had contemplated dropping out after an instance where their employer shouted at them, but thanks to the advice and intervention of basecamp staff the issue could be resolved and the relationship with the employer improved as a consequence. Further, others

mention that they often feel treated unfairly or poorly by their employers and since they do not know how to address these concerns with their employer, they instead consider quitting.

In line with this, an increasing share of respondents lists conflicts with their employers as a major challenge in their apprenticeship in the follow-up survey (Figure 16) and many respondents report conflict management and communication workshops on their wish list for additional workshops at basecamp (Figure 20).

Several participants also suggested that basecamp should increasingly involve employers (i.e., the companies that employ and train the basecamp participants) in their programme. One apprentice reports that their employer was initially sceptical about their participation in basecamp, fearing it would consume too much time. Convincing the employer of basecamp's benefits was difficult for the apprentice, but they eventually succeeded, and the employer is now very pleased with the support provided through the programme. Others proposed that regular check-ins of basecamp staff with employers could address some of the issues related to mistreatment of apprentices and improve working conditions for apprentices. They hypothesize that such check-ins would signal to employers that apprentices have someone looking out for them and encourage enterprises to maintain higher training standard.

Conversations with a company trainer who has an apprentice attending basecamp highlight that the basecamp programme can also be valuable for training companies. When apprentices struggle with personal problems or school subjects that a trainer may not be qualified or have the time to help with, training companies are grateful that apprentices nonetheless receive the necessary support through basecamp.

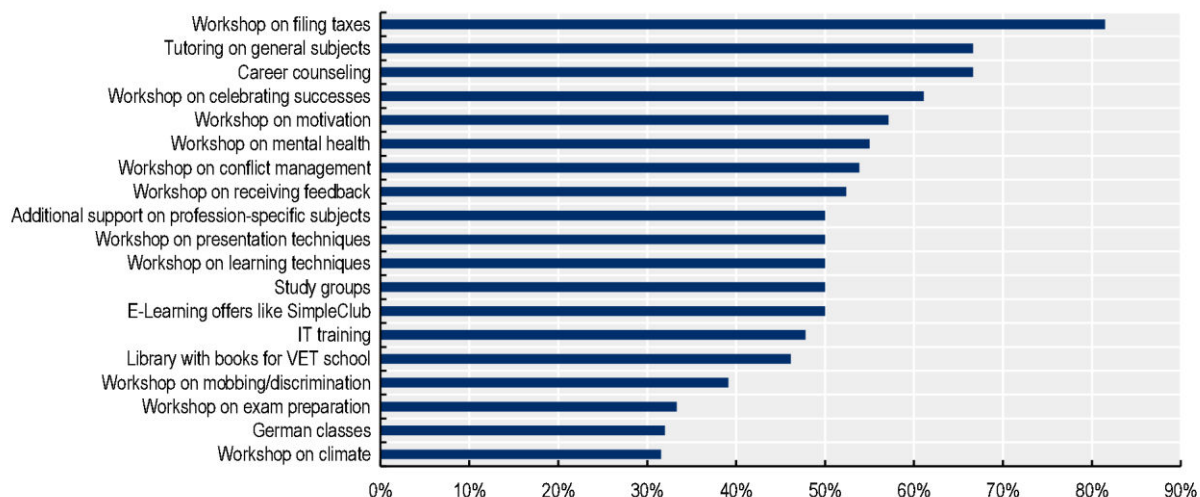
#### *Many apprentices express a wish for more social events, tutoring and workshops*

Asking participants about areas where they would appreciate more support reveals that basecamp support is already focusing on the key issues participants struggle with most, though these challenges remain significant at follow-up. As shown in Figure 21, support related to VET school – such as help with passing exams, understanding school material or training on learning strategies – was at the top of the wish list for more support for many basecamp and control group respondents at baseline. basecamp offerings hence align well with participants most pressing needs and the usefulness of this support is evident at follow-up: the number of participants requiring VET school assistance decreased notably across all dimensions for basecamp participants, while it remained relatively unchanged for VET school participants over the same period. The only exception to this pattern is support with filling in the Berichtsheft, which had increased by follow-up. However, despite this general decline, concerns related to VET school continue to be a priority for both basecamp and control group participants alike also at follow-up.

Nonetheless, basecamp participants change focus somewhat, showing more interest in areas like learning about their rights and obligations as an apprentice, career planning, and social skills. Additionally, a new answer option introduced at follow-up – support with admin tasks – received much interest from both treatment and control group. This suggests that both treatment and control group would benefit from more support with administrative tasks, such as filing taxes, or understanding key issues when signing rental or other contracts. This was also echoed by a VET school teacher during the study visit, who noted that apprentices would greatly benefit from having such knowledge included in the standard curriculum as increasingly fewer are able to receive this support at home. However, due to time constraints, it is currently not feasible to include these topics into VET classes, as doing so would make it difficult to cover the remaining standard curriculum.

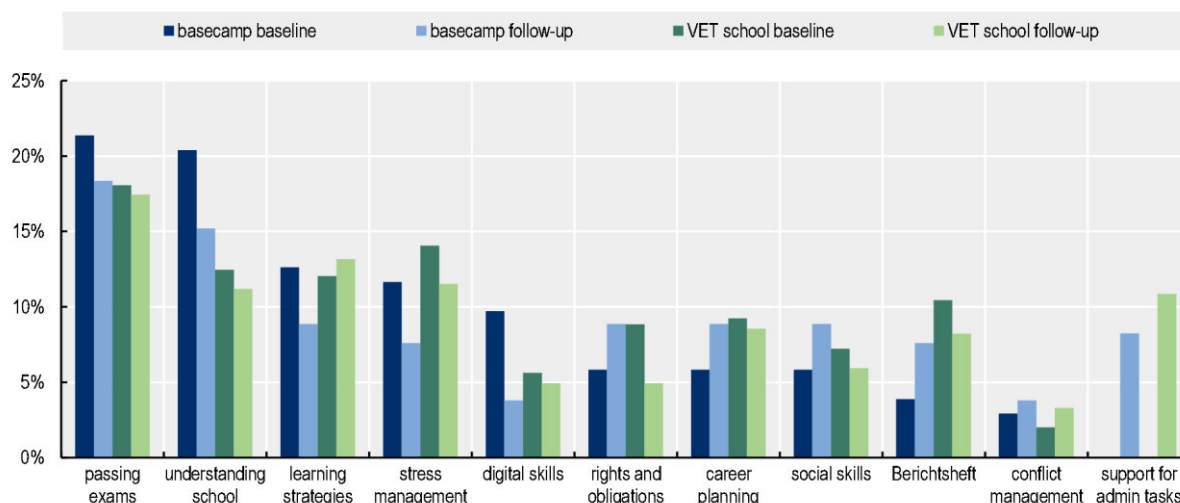
**Figure 20. Workshop and other offers participants would be interested in**

Share of participants who report to be interested in a certain additional basecamp offering among all participants who do not yet receive this offer, follow-up survey, 2023/24.



Note: The underlying question asks respondents to rate whether they would use an additional offer if it was available at basecamp. The offer list proposed to basecamp participants varied from location to location to avoid asking about workshops they already have on offer. The shares are computed using only respondents who do not yet have the possibility to attend such an offer also outside basecamp.  
Source: OECD tabulation based on data from the follow-up survey.

**Figure 21. Areas where more support would be appreciated**



Note: The bars show the share of times an answer was picked by either the treatment or control group to the question: “In which of the following areas would you appreciate more support?”. Participants could select multiple options among the options provided on the x-axis. Berichtsheft is a booklet where apprentices are required to track progress during their apprenticeship. Support for admin tasks refers to learning how to fill in a tax declaration form, what to consider when signing a rental contract or other administrative tasks that apprentices face. This answer option was only provided in the follow-up survey.  
Source: OECD visualisation based on data from the baseline and follow-up survey.

The difficulties with tax filing are underscored again by basecamp participants’ responses on additional offerings they would like to see at basecamp (Figure 20). Workshops on tax filing were by far the most

popular request, with 81% of participants expressing interest in attending such a workshop. Additionally, the responses highlight again that VET school remains a significant concern, as 67% of participants would appreciate more tutoring in general subjects such as math and languages. Career counselling ranks equally high, with 67% interested in taking advantage of this offer. Participants also had the option to add additional suggestions for other workshops or offers not listed. Among those, a workshop on managing finances, a workshop on German culture, and a workshop on dealing with aggressive behaviour in the workplace were listed once, and three participants noted that a workshop on Excel would be useful. Further, the introduction of a mentoring programme was suggested by two participants.

Lastly, basecamp participants across both locations expressed strong interest in more networking opportunities and social events, citing the Frankfurt summer party and social gatherings at the Essen location as their favourite basecamp activities. The popularity of these events is also supported by data: in locations where data is available, social events consistently attract the largest number of participants. Additionally, many attendees of the workshop in Essen mentioned that one of their main reasons for attending was the opportunity to reconnect with other basecamp participants and staff they hadn't seen in a while.

# 4 Conclusions and recommendations

The basecamp programme is a programme providing support to young people in Germany during their apprenticeship, with the goal of enabling them to graduate successfully and building skills for a successful career. First piloted in Frankfurt in 2019, the programme expanded to three new locations – Berlin, Essen and Mannheim – by the end of Q2 2023. The programme is structured around three main pillars of support: a dedicated space for apprentices to study and connect with each other; tailored and individual assistance in case of problems at VET school, at the training enterprise or with private challenges; and workshops designed to enhance apprentices' skills and increase the likelihood of success. The programme is described in detail in Chapter 2.

This report presents an evaluation of the basecamp programme undertaken over the course of Q3 2023-Q2 2024 using both quantitative and qualitative methods. Quantitative evidence was collected through two surveys: a baseline survey administered to basecamp participants and a control group selected from nearby VET schools at each location in Q3 2023, followed by a follow-up survey at the end of the school year in Q2 2024. Qualitative evidence stems from a study visit to the basecamp locations in Essen and Frankfurt in Q1 2024. The evaluation design and the results are detailed in Chapter 3.

Chapter 4 first summarises the main findings of both quantitative and qualitative evaluation in section 4.1 and then discusses the main limitations of the evaluation in Section 4.2. Lastly, Section 4.3 presents recommendations for further improvement of the basecamp programme building on the evaluation results.

## 4.1. Conclusions

### ***Participants turn to basecamp in times of need but rarely use the space otherwise***

basecamp has successfully established itself as the first point of contact for participants facing challenges both at VET school and at their training enterprises. However, participants currently primarily visit basecamp in emergency situations or for workshops, rather than using the space to study or socialize with other apprentices. A significant limitation for casual visits seems to be the opening hours: many basecamp locations close by the time participants finish work and are not open on weekends, when they have more time to study.

### ***Individual support by basecamp staff is highly valued by participants***

The individual support offered by basecamp is highly appreciated. Participants highly value basecamp staff, and their readiness to help them with any problem that arises. Those who have used individual support express high levels of satisfaction with the support they received, noting that it was crucial in helping them resolve their issues effectively. Participants who have not used the individual support offer emphasise that simply knowing the option is available provides a sense of security and reassurance. This finding is also reflected in the data: attending basecamp is associated with a significant reduction in thoughts of dropping out among female participants. However, basecamp does not appear to reduce overall stress levels nor increase general satisfaction with their apprenticeship. One concern with individual

support noted by participants is again the limited availability. Many report difficulties in scheduling appointments, due to both high demand and limited opening hours.

### ***Tutoring and workshops are successful – and expanding the offer would be valuable***

The third pillar of basecamp support – offerings such as tutoring, workshops or social events – are mostly successful. They are well targeted, focusing strongly on support with challenges in VET school, an area where participants reportedly struggle most. Further, both the quantitative and qualitative evaluation demonstrate that these measures are effective in helping participants: attending basecamp is associated with a notable reduction in feeling overwhelmed with VET school and the share of participants needing support with VET school related topics decreases significantly at follow-up. Workshops have been highly successful, and are typically associated with improvements in the specific skill they target in the locations that offer them. Participants also express high levels of satisfaction with workshops, describing them as useful, interesting, and relevant. However, basecamp tutoring does not seem to translate to measurable improvements in either occupation-specific skills or reading and writing skills. This may be due to the current offerings not being sufficiently available, partly because timing conflicts prevent participants from attending all offers they are interested in, and partly because participants express a desire for more offerings, such as expanded tutoring or workshops on administrative tasks as tax filing.

### ***Female participants may benefit more from basecamp***

Across a range of outcomes, female participants are found to benefit more from the basecamp offerings compared to men. For example, attending basecamp for women is associated with a larger decrease in feeling overwhelmed with their apprenticeship and they are less likely to think about dropping out from their apprenticeship, while no such association is observed for men. Similarly, their skill scores improve more compared to men's after attending workshops, for example on financial management. This result is in part driven by women reporting much lower skill levels at baseline compared to men, and catching up with men's after attending basecamp<sup>14</sup>.

However, the stronger effects for women may partly also be attributable to an additional boost in confidence that female participants experience through attending basecamp – next to an actual improvement in skills. Women are often found to be less confident in their abilities and skills than men in many different settings ((Dahlbom et al., 2011<sup>[39]</sup>; Bucher-Koenen et al., 2016<sup>[40]</sup>). Since skills are self-assessed in the survey, and women tend to report considerably lower levels across many dimensions at baseline, this could suggest that part of the larger basecamp effect for women is driven by additionally improving women's self-confidence in their own abilities as well as their actual skills.

While effects were often stronger for women, no other group is observed to benefit more strongly from attending basecamp. Results were similar for both young people irrespective of whether they are born in Germany or abroad, and irrespective of age. Due to the small sample size, it was not possible to distinguish effects by living situation.

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<sup>14</sup> While women were more likely to reply to the survey, the more positive effects for women are unlikely to be driven by women simply attending more basecamp offers as women and men report very similar frequencies of attending various basecamp offers overall and no differences in the offers used are recorded.

### ***A basecamp network between participants has not yet been established fully***

Lastly, basecamp is not found to improve neither networking nor social connections among participants, despite participants' interest in enhanced socializing opportunities. The quantitative evaluation finds no effect of attending basecamp on networking skills, and even a decrease in the number of contacts that basecamp participants regularly engage with. These results occur despite participants' strong interest in social activities, which are typically the most popular basecamp events. This observation suggests that participants believe they would benefit from additional and more regularly organised social events, which would allow them to expand their social networks and benefit from interactions with others.

## **4.2. Limitations of this study**

While combining quantitative and qualitative evidence paints a positive picture of the basecamp programme, several limitations need to be considered when interpreting the findings of the two evaluations. Firstly, the non-random assignment of treatment severely impairs the interpretation of the quantitative results as causal. The treatment and control groups in this study differ significantly in observable characteristics, making it likely that there are differences in unobservable traits. While differences in observable traits can be controlled for, differences in unobservable traits cannot. This setup raises the possibility that the positive quantitative findings may be a result of unmeasured factors instead of basecamp.

For example, if basecamp participants joined because they were more motivated to succeed, the positive outcomes attributed to basecamp may result from these participants working harder due to their higher motivation, meaning they may have achieved the same results even without attending basecamp. While this concern cannot be fully addressed, several considerations make it less prevalent.

First, almost all quantitative results are supported by robustness estimations, which rely on a restricted sample of control group participants who expressed interest in joining basecamp. This group serves as a more credible control group in terms of unobservable traits, as they would have joined basecamp if they had been aware of the programme, making them more comparable to the treatment group in terms of unobservables, such as motivation to join. Second, the quantitative results related to workshops reveal that improvements in skills occurred only in locations where workshops on specific skills were held, while no improvements were observed in other locations. This situation reduces the likelihood that the observed improvements are solely due to higher motivation among basecamp participants. If they were, improvements in skills should have been observed across all locations, regardless of workshop availability.

Another concern with the study design is that the basecamp participants who completed both surveys and took part in interviews during the study visit are not fully representative of all participants. Those who participated in the evaluation are likely more motivated and satisfied with basecamp than those who did not take part in the survey or interviews. Therefore, the findings of this study primarily reflect the experiences of the most successful participants and may overstate the programme's success among the broader group. Additionally, courtesy bias could be a factor, as participants were asked to complete the survey by basecamp staff, which may have prompted them to respond more favourably—especially regarding questions related to basecamp—in an effort to please the staff.

In summary, these limitations suggest that while relatively credible, this evaluation likely reflects the outcomes of only the most successful basecamp participants and is therefore unable to fully assess the programme's overall impact. It is likely that the programme's effect would be different if all participants had been included in the evaluation.

A further limitation of the study is the short time horizon: the study only evaluates the effects of attending basecamp for 6-8 months, and it is therefore unable to assess its longer-term effects. In particular, it does

not allow to study whether attending basecamp throughout the apprenticeship improves success overall, i.e. whether it increases the share of apprentices who successfully complete their training.

Lastly, since basecamp is relatively new and still developing in most locations, the available offerings at each location varied significantly, with some locations introducing one type of offer first while others started with different ones. While this provided unexpected benefits for the evaluation as it allowed to better test the effectiveness of workshops by comparing locations who had already introduced the workshop to those who had not, it also limits the conclusions on broader outcomes such as overall satisfaction with the apprenticeship which would be affected by a combination of basecamp offerings and not by an individual one. This variability in offers may hence potentially explain the limited effects found for those outcomes. As basecamp is currently working on guidelines to ensure a structured base offer is available at every location (Section 2.3), a future evaluation once this structure is in place may be better suited to assess the overall success of the basecamp programme.

### 4.3. Recommendations

The first set of recommendations discussed below follow directly from results of either the qualitative or quantitative evaluation. The last recommendation is not a direct consequence of the evaluation as it relates to a part of the basecamp programme, which was not in place yet during the evaluation period – the digital basecamp. However, various lessons from the evaluation can be addressed via the digital basecamp and these are therefore included in the last recommendation.

#### ***Improve accessibility of basecamp for participants***

To address concerns related to the limited availability of basecamp offerings, consider the following options:

- **Adjusting basecamp opening hours to better align with participants' schedules:** Adjusting the hours to better align with participants' needs, such as offering extended evening hours on certain days, or opening one day on the weekend could be considered. Since participants in locations open five days a week voiced similar concerns about opening hours to those in locations open only two days a week, closing a location for a full day to compensate the extended evening and weekend hours on others could be an option to ease the staff workload.
- **Increasing availabilities for individual meetings:** Few participants also reported difficulties in scheduling appointments due to high demand. To alleviate this, consider redistributing staff responsibilities to ensure shorter wait times for appointments, as problems are often easier to resolve when addressed early.

To address low usage of basecamp premises to study or meet with peers, consider the following options:

- **Collecting and implementing feedback to enhance attractiveness of basecamp premises to study:** Given basecamp participants' busy schedules, increasing the use of the space may prove difficult without extending opening hours to evenings and weekends. Even then, participants might need additional incentives to regularly use the facilities independently. A small number of respondents indicated they prefer studying in a library because it is quieter and offers more privacy, suggesting that more secluded study spaces could make the basecamp facilities more appealing for study purposes. Further, concepts like study afternoons where a dedicated basecamp staff member is constantly available to answer questions might also increase the attractiveness for study purposes. However, gathering more comprehensive feedback from participants would be beneficial to confirm what specific changes would enhance the space's overall attractiveness most for participants.

- **Using basecamp premises for events beyond basecamp:** basecamp's plans to increasingly use the space for events beyond just basecamp participants (Section 2.3) seem promising, as it may prove challenging to convince participants to use the facilities more frequently due to their schedules. This approach would also ensure that the well-designed premises are utilised effectively rather than going underused.

### ***Improve networking via social events***

To meet participants' desire for more social events and networking opportunities, consider the following:

- **Incorporating more regular social events into the standardised basecamp offer:** Participants highly value the social events organised by basecamp and express a wish for more such events. Consider additionally providing time and space for participants to mingle and socialise in other basecamp events such as workshops. This could include longer breaks during events and continuing to offer drinks and food after events to encourage participants to stay and connect.
- **Introducing an intra-JOBLINGE peer-to-peer mentoring programme:** In addition to expanding the existing mentoring programme for basecamp participants, explore introducing an intra-JOBLINGE mentoring programme, where basecamp participants and other JOBLINGE alumni serve as mentors for current participants, similar to the ROCK YOUR LIFE mentoring programme evaluated by Resnjansij et al. (2024<sup>[14]</sup>). Such a programme could benefit both mentors and mentees, as many basecamp participants expressed a desire to share their learnings, for example, as a key reason for attending workshops. It could also acknowledge the achievements of basecamp participants in securing an apprenticeship, boosting their confidence. However, due to the busy schedules of apprentices, this mentoring programme would need to be highly considerate of their time constraints.

### ***Increasingly involve training companies***

Consider involving training companies more in the basecamp programme to improve the programme along multiple dimensions:

- **Informing training companies about basecamp:** When apprentices join the basecamp programme, reaching out to their training companies to inform them about basecamp and its offerings, either directly or via material that apprentices may pass on to trainers, may prove valuable for apprentices. It could help apprentices gain support from their employers, making it easier for them to attend basecamp events. For example, employers might be more inclined to allow an apprentice to leave work earlier to attend a basecamp event or similar.
- **Regular check-ins with training companies:** Consider introducing regular check-ins also with training companies, provided both the company and the apprentice agree. This could give basecamp a more complete view of the apprentice's development and help anticipate potential issues by including the employer's perspective. This may be particularly useful in cases where apprentices overestimate or underestimate their performance. Additionally, regular check-ins might motivate training companies to maintain high-quality training and working conditions for apprentices and give them the opportunity to seek advice from basecamp staff who have extensive experience working with young people.
- **Pooling resources with companies:** Engaging with training companies could enable basecamp and companies that offer independent support, such as tutoring, to their apprentices to pool resources – for example, by combining tutoring sessions. Additionally, workshop topics could be coordinated with employers, to ensure that also skills valuable to employers – e-mail communication with clients for example – are reflected in the basecamp workshop offerings.

- **Expanding the basecamp network and recruit mentors:** By involving training companies more deeply in the programme, basecamp can expand its network of contacts, potentially recruiting more mentors for its mentoring programme or enlisting company experts for special workshops.

### ***Continue efforts to standardize the base offer of basecamp across locations***

To ensure a consistent offer and quality of the basecamp programme, consider the following:

- **Continuing efforts to standardise the base offer across locations:** This will ensure consistent quality of the basecamp programme for participants at all sites and allow basecamp staff to better leverage economies of scale by using materials, such as workshop slides, prepared at one location across multiple sites. Sharing these materials also serves as a quality check, as mistakes can be identified, or additional content can be added by other locations. Moreover, by reducing the time spent on developing the base offer, each location can focus more on creating location-specific offerings tailored to local labour market conditions and the specific needs of their participants.

### ***Continue feedback culture and data collection efforts for continuous monitoring***

To ensure that the basecamp programme remains useful for participants, consider the following:

- **Institutionalising feedback culture:** Collecting and institutionalising feedback regularly (as is already observed at many locations) is useful to consistently gather and implement participants' insights on the existing offerings and co-develop new ones, such as suggested workshops on tax filing or career planning at basecamp. This ongoing dialogue with participants will ensure that the programme remains relevant and responsive to participants' evolving needs.
- **Intensifying data collection:** Data collection via an easy-to-use system along with standardised guidelines on data collection for all locations may prove helpful to continuously track the programme's success (monitoring). Opportunities to streamline this process by leveraging the planned booking tool for appointments and workshops on the new digital basecamp should be explored, as this might allow for a partial automation of the data collection and hence reduce the burden on staff. Building a comprehensive database tracking participants' development will enable basecamp staff to monitor individual apprentices' progress more effectively and make it easier to identify participants who may be falling behind. This will also allow for better assessment of whether the participants in the survey for this study are representative of the broader programme or if they are positive outliers, helping to contextualise the results of this evaluation. Lastly, it will be an invaluable asset for future evaluations of the basecamp programme, assessing individual parts of the programme as well as overall long-term success.

### ***Leverage the full benefits of a digital basecamp***

The introduction of a digital basecamp as currently planned by basecamp presents numerous opportunities to enhance the basecamp programme and significantly expand its offerings without adding to the workload of staff. To fully capitalise on the benefits of a digital basecamp, several key aspects should be considered:

- **Creating a comprehensive online repository:** This repository would serve as a comprehensive, 24/7 resource where participants from all locations can easily access materials. It could include a collection of presentations from workshops for participants to consult at a later stage, video recordings of workshops for those who were unable to attend, and a curated list of useful links such as YouTube learning videos or other digital resources like SimpleClub. Additionally, a participant-driven board could be implemented, allowing apprentices to share helpful materials with peers. However, the potential need for staff to monitor such a board to ensure the quality and relevance of shared content needs to be taken into account.

- **Expanding programme offerings through digital solutions:** By using digital tools, participants from various locations can attend the same offerings, thereby leveraging economies of scale for basecamp. This could be especially beneficial for tutoring sessions on specialised subjects where only a few participants from each location are interested. Pooling participants across locations could create larger, more viable groups, making these sessions more efficient for basecamp staff. Additionally, following workshops online allows participants who are unable to attend in-person workshops at their location due to scheduling conflicts to join virtually at another. It is essential, however, to maintain a balance between digital and in-person offerings, as participants highly value the face-to-face interaction and social elements of in-person events. A blended approach that combines online and offline activities will increase opportunities without diminishing the benefits of in-person events at each location.
- **User-centred platform development:** The digital platform should be built with a strong focus on user needs, incorporating feedback and suggestions from participants on an ongoing basis. This will help ensure that the platform is actively used and adds value for participants. Training sessions on how to navigate and make the most of the platform may also be considered to increase adoption and engagement.

By addressing these considerations, a digital basecamp can enhance the overall offer for participants without adding to the workload of staff.

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## Annex A. Supplementary tables

This Annex presents supplementary tables from the quantitative evaluation.

**Table A.1. Baseline comparison treatment and control group, control group sample restricted to those who report to be interested in joining basecamp**

Variable	basecamp			VET school			Mean difference	Normalised difference	p-value
	Obs	Mean (SD)	min/max	Obs	Mean (SD)	min/max			
Gender (0 male, 1 female, 2 div)	24	0.458 (0.509)	0/1	21	0.619 (0.498)	0/1	-0.161	-0.227	0.541
Age	24	21.625 (3.386)	17/31	21	19.762 (4.493)	16/37	1.863	0.939	0.500
Education:									
secondary school (Hauptschule)	24	0.083 (0.282)	0/1	21	0.190 (0.402)	0/1	-0.107	-0.183	0.554
intermediate secondary school (Realschule)	24	0.583 (0.504)	0/1	21	0.190 (0.402)	0/1	0.393	0.584	0.003
higher secondary school (Fachabitur/Abitur)	24	0.333 (0.482)	0/1	21	0.619 (0.498)	0/1	-0.286	-0.409	0.017
Year finished education	24	2019.250 (3.326)	2009/2023	21	2020.667 (4.619)	2004/2023	-1.417	-0.711	0.607
Born abroad (0/1)	24	0.500 (0.511)	0/1	21	0.095 (0.301)	0/1	0.405	0.636	0.018
Parent born abroad (0/1)	24	0.917 (0.282)	0/1	20	0.350 (0.489)	0/1	0.567	0.913	0.000
German citizenship (0/1)	24	0.542 (0.509)	0/1	21	0.857 (0.359)	0/1	-0.315	-0.478	0.032
Has kids (0/1)	24	0.000 (0)	0/1	21	0.048 (0.218)	0/1	-0.048	-0.145	0.299
Mother tongue is German (0/1)	24	0.375 (0.495)	0/1	21	0.875 (0.359)	0/1	-0.435	-0.650	0.001
Owens electronic device (0/1)	24	0.667 (0.482)	0/1	21	0.810 (0.402)	0/1	-0.143	-0.215	0.403
Year started apprenticeship	24	2022.583 (1.06)	2019/2023	21	2023 (0)	2023/2023	-0.417	-0.573	0.056
Second apprenticeship (0/1)	24	0.292 (0.464)	0/1	21	0.190 (0.402)	0/1	0.101	0.153	0.403
Is dream job (0/1)	24	0.292 (0.464)	0/1	21	0.381 (0.498)	0/1	-0.089	-0.128	0.645
Lives with parents (0/1)	24	0.708 (0.464)	0/1	21	0.810 (0.402)	0/1	-0.101	-0.154	0.966

Note: The first number column shows the number of observations (Obs) recorded from basecamp participants while the second column shows the mean of the responses for each variable from basecamp participants and the standard deviation in brackets below. Column 3 details the number of responses from participants from VET schools, whereas column 4 shows the mean of their responses. Column 5 computes the difference in the mean of basecamp participants and participants from VET schools (mean basecamp – mean VET schools). A positive number indicates that basecamp participants on average have a higher value for the given variable than participants from the control group. The p-value in column 5 is the p-value of a t-test of a regression including fixed effects to account for the different locations. Values below 0.1 indicate that the mean difference between treatment and control group are significant at the 10% level, values below 0.05 indicate a significant difference at the 5% level and values below 0.001 a significant difference at the 1% level. The normalised difference is computed as the mean difference divided by the root of half the sum of the standard deviations of the two mean values (Imbens and Rubin, 2015<sub>[26]</sub>). Absolute values above 1 indicate a large difference between treatment and control group which should be addressed. Absolute values below 0.25 indicate good balance between treatment and control group. The rows marked in blue indicate a significant difference between treatment and control group according to both the t-test statistic and the normalised difference.

Source: OECD tabulation based on replies to baseline survey.

**Table A.2. Attending basecamp does not increase score of knowing who to turn to in case of problems**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers

	Knows who to talk to about problems at school (1-5)	Knows who to talk to about problems at job (1-5)	Knows who to talk to about problems with colleagues (1-5)
basecamp	0.111 (0.163)	0.00330 (0.158)	0.0877 (0.144)
follow-up survey	-0.0385 (0.126)	-0.0769 (0.113)	0.115 (0.110)
diff-in-diff	0.205 (0.252)	0.160 (0.193)	-0.199 (0.194)
baseline score	0.628*** (0.0859)	0.658*** (0.0760)	0.646*** (0.0812)
Baseline mean basecamp	4.250	4.458	4.458
Baseline mean control	4.026	4.231	4.038
Follow-up mean basecamp	4.417	4.542	4.375
Follow-up mean control	3.987	4.154	4.154
Adjusted R-squared	0.400	0.440	0.497
Observations	204	204	204

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.3. Restricting the sample to control group participants interested in joining confirms results on knowing who to turn to in case of problems**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers, sample restricted to those who would like to join basecamp from the control group

	Knows who to talk to about problems at school (1-5)	Knows who to talk to about problems at job (1-5)	Knows who to talk to about problems with colleagues (1-5)
basecamp	-0.0322 (0.277)	0.122 (0.296)	0.170 (0.204)
follow-up survey	-2.36e-17	0.550**	-0.0500

	(0.306)	(0.214)	(0.182)
diff-in-diff	0.167 (0.380)	-0.467* (0.272)	-0.0333 (0.249)
baseline score	0.569*** (0.159)	0.748*** (0.104)	0.780*** (0.125)
Baseline mean basecamp	4.250	4.458	4.458
Baseline mean control	3.900	3.700	3.900
Follow-up mean basecamp	4.417	4.542	4.375
Follow-up mean control	3.900	4.250	3.850
Adjusted R-squared	0.237	0.532	0.542
Observations	88	88	88

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient "diff-in-diff". Each regression includes the sample who responded to both baseline and follow-up survey and restricts the control group to those who report to be interested in joining basecamp. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.4. Attending basecamp does not affect overall satisfaction levels but increases pride in one's occupation**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers

	Satisfaction VET school (1-5)	Satisfaction training enterprise (1-5)	Satisfaction with boss (1-5)	Satisfaction with job (1-5)	Proud of occupation (1-5)
basecamp	-0.0464 (0.145)	0.0181 (0.0902)	-0.190 (0.137)	-0.0663 (0.104)	-0.0608 (0.0822)
follow-up survey	-0.103 (0.105)	-0.333*** (0.0873)	-0.295*** (0.0951)	-0.115 (0.0776)	-0.154* (0.0890)
diff-in-diff	0.311 (0.230)	0.208 (0.137)	0.170 (0.233)	0.157 (0.138)	0.237* (0.128)
baseline score	0.662*** (0.0714)	0.825*** (0.0611)	0.755*** (0.0829)	0.749*** (0.0523)	0.857*** (0.0450)
Baseline mean basecamp	3.792	4.250	4.167	4.417	4.375
Baseline mean control	3.949	4.462	4.462	4.218	4.295
Follow-up mean basecamp	4	4.125	4.042	4.458	4.458
Follow-up mean control	3.846	4.128	4.167	4.103	4.141
Adjusted R-squared	0.513	0.626	0.488	0.681	0.678
Observations	204	204	204	204	204

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .  
Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.5. Restricting the sample to control group participants interested in joining confirms results on satisfaction but finds no effect on pride in occupation**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers, sample restricted to those who would like to join basecamp from the control group

	Satisfaction VET school (1-5)	Satisfaction training enterprise (1-5)	Satisfaction with boss (1-5)	Satisfaction with job (1-5)	Proud of occupation (1-5)
basecamp	-0.0851 (-0.30)	-0.163 (-0.85)	0.00285 (0.01)	-0.175 (-1.02)	0.139 (1.08)
follow-up survey	-0.1000 (-0.36)	-0.150 (-0.86)	-0.150 (-0.96)	-0.100 (-0.64)	0.200 (1.40)
diff-in-diff	0.308 (0.89)	0.0250 (0.12)	0.0250 (0.09)	0.142 (0.73)	-0.117 (-0.68)
baseline score	0.605*** (4.11)	0.820*** (10.88)	0.696*** (5.34)	0.780*** (9.19)	0.854*** (14.64)
Baseline mean basecamp	3.792	4.250	4.167	4.417	4.375
Baseline mean control	3.850	4.550	4.500	4.350	4.300
Follow-up mean basecamp	4	4.125	4.042	4.458	4.458
Follow-up mean control	3.750	4.400	4.350	4.250	4.500
Adjusted R-squared	0.417	0.684	0.493	0.642	0.780
Observations	88	88	88	88	88

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey and restricts the control group to those who report to be interested in joining basecamp. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .  
Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.6. basecamp does not affect stress levels but reduces thoughts of quitting for female participants**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers

	Stress due to apprenticeship (1-5)	Often overwhelmed due to stress (1-5)	Difficulties to disconnect due to stress (1-5)	Considers quitting (1-5)	Considers quitting (1-5), female subsample

basecamp	0.103 (0.177)	0.0872 (0.132)	0.150 (0.131)	0.0686 (0.164)	0.0762 (0.326)
follow-up survey	0.385*** (0.118)	0.154 (0.117)	0.282** (0.143)	0.333*** (0.119)	0.485** (0.203)
diff-in-diff	-0.176 (0.264)	-0.0705 (0.257)	-0.157 (0.256)	-0.333 (0.220)	-0.667* (0.375)
baseline score	0.752*** (0.0553)	0.728*** (0.0674)	0.723*** (0.0673)	0.695*** (0.0842)	0.740*** (0.107)
Baseline mean basecamp	2.583	2.292	2.833	1.750	2
Baseline mean control	2.385	2.256	2.423	1.603	1.606
Follow-up mean basecamp	2.792	2.375	2.958	1.750	1.818
Follow-up mean control	2.769	2.410	2.705	1.936	2.091
Adjusted R- squared	0.561	0.534	0.511	0.484	0.441
Observations	204	204	204	204	88

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient "diff-in-diff". Each regression includes the sample who responded to both baseline and follow-up survey. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.7. Restricting the sample to control group participants who consider joining basecamp confirms results on stress and thoughts of quitting**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers, sample restricted to those who would like to join basecamp from the control group

	Stress due to apprenticeship (1-5)	Often overwhelmed due to stress (1-5)	Difficulties to disconnect due to stress (1-5)	Considers quitting (1-5)	Considers quitting (1-5), women
basecamp	0.154 (0.315)	0.0512 (0.344)	0.531* (0.300)	0.252 (0.332)	0.178 (0.470)
follow-up survey	0.400 (0.269)	1.59e-16 (0.268)	0.250 (0.303)	0.250 (0.252)	0.583* (0.289)
diff-in-diff	-0.192 (0.363)	0.0833 (0.357)	-0.125 (0.376)	-0.250 (0.316)	-0.765* (0.446)
baseline score	0.740*** (0.0825)	0.659*** (0.119)	0.667*** (0.144)	0.677*** (0.134)	0.857*** (0.155)
Baseline mean basecamp	2.583	2.292	2.833	1.750	2
Baseline mean control	2.500	2.400	2.350	1.400	1.250
Follow-up mean basecamp	2.792	2.375	2.958	1.750	1.818
Follow-up mean control	2.900	2.400	2.600	1.650	1.833
Adjusted R- squared	0.492	0.402	0.447	0.414	0.385
Observations	88	88	88	88	46

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey and restricts the control group to those who report to be interested in joining basecamp. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.8. basecamp participants feel less overwhelmed in school thanks to basecamp**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers

	Overwhelmed in school (1-5)	Overwhelmed in school (1-5), women	Overwhelmed at work (1-5)	Overwhelmed at work (1-5), women
basecamp	-0.108 (0.162)	0.154 (0.243)	0.0356 (0.109)	0.375 (0.240)
follow-up survey	0.205** (0.104)	0.333** (0.165)	0.154 (0.0975)	0.242 (0.171)
diff-in-diff	-0.455** (0.207)	-0.879** (0.381)	-0.112 (0.207)	-0.333 (0.374)
baseline score	0.806*** (0.0463)	0.875*** (0.0791)	0.781*** (0.0676)	0.684*** (0.121)
Baseline mean basecamp	2.875	3.455	2.625	2.818
Baseline mean control	2.115	2.152	2.077	2.061
Follow-up mean basecamp	2.625	2.909	2.667	2.727
Follow-up mean control	2.321	2.485	2.231	2.303
Adjusted R-squared	0.673	0.631	0.624	0.452
Observations	204	88	204	88

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.9. Restricting the sample to control group participants who consider joining basecamp confirms coefficients on feeling overwhelmed despite noisier estimates**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers, sample restricted to those who would like to join basecamp from the control group

	Overwhelmed in school (1-5)	Overwhelmed in school (1-5) female subsample	Overwhelmed at work (1-5)	Overwhelmed at work (1-5) female subsample
basecamp	0.0914 (0.285)	0.671 (0.512)	0.0222 (0.203)	0.261 (0.425)
follow-up survey	0.200 (0.233)	0.250 (0.306)	0.0500 (0.145)	0.0833 (0.243)

diff-in-diff	-0.450 (0.299)	-0.795 (0.477)	-0.00833 (0.229)	-0.174 (0.419)
baseline score	0.817*** (0.0716)	0.818*** (0.162)	0.934*** (0.0695)	0.862*** (0.166)
Baseline mean basecamp	2.875	3.455	2.625	2.818
Baseline mean control	2.500	2.500	2.150	2.167
Follow-up mean basecamp	2.625	2.909	2.667	2.727
Follow-up mean control	2.700	2.750	2.200	2.250
0.	0.632	0.485	0.693	0.409
Observations	88	46	88	46

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey and restricts the control group to those who report to be interested in joining basecamp. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.10. Attending basecamp is not associated with a significant effect on skills**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers

	Occupation-specific skills (10-50)	Reading skills (6-30)	Writing skills (3-15)
basecamp	0.171 (0.574)	0.684 (0.491)	0.197 (0.286)
follow-up survey	0.218 (0.457)	0.846* (0.433)	-0.0769 (0.256)
diff-in-diff	-0.156 (1.207)	-1.429 (0.878)	-0.715 (0.491)
baseline score	0.854*** (0.0364)	0.675*** (0.0720)	0.785*** (0.0439)
Baseline mean basecamp	20.36	21.17	10.17
Baseline mean control	21.05	19.36	8.590
Follow-up mean basecamp	20.84	20.58	9.375
Follow-up mean control	21.27	20.21	8.513
Adjusted R-squared	0.729	0.479	0.619
Observations	197	204	204

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.11. Restricting the sample to control group participants who consider joining basecamp confirms results on occupation-specific and reading and writing skills**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers, sample restricted to those who would like to join basecamp from the control group

	Occupation-specific skills (10-50)	Reading skills (6-30)	Writing skills (3-15)
basecamp	0.382 (1.355)	-0.0919 (0.855)	-0.0396 (0.519)
follow-up survey	-0.550 (0.872)	0.650 (0.573)	0.150 (0.471)
diff-in-diff	0.611 (1.436)	-1.233 (0.982)	-0.942 (0.653)
baseline score	0.873*** (0.0595)	0.734*** (0.0920)	0.740*** (0.0961)
Baseline mean basecamp	20.36	21.17	10.17
Baseline mean control	24.25	20.15	7.450
Follow-up mean basecamp	20.84	20.58	9.375
Follow-up mean control	23.70	20.80	7.600
Adjusted R-squared	0.718	0.611	0.664
Observations	81	88	88

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient "diff-in-diff". Each regression includes the sample who responded to both baseline and follow-up survey and restricts the control group to those who report to be interested in joining basecamp. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.12. Skills affected by workshops**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers

	Conflict resolution score (3-15)	Learning skills score (12-60)	Learning skills score (12-60) Mannheim sample	Time management skills score (19-95)	Motivation score (8-40)
basecamp	0.00686 (0.195)	-0.290 (0.537)	-0.569 (1.773)	-0.456 (0.418)	0.0220 (0.422)
follow-up survey	-0.231 (0.170)	-0.0641 (0.443)	-1.091 (0.871)	-0.167 (0.387)	-0.500 (0.339)
diff-in-diff	0.606 (0.392)	-0.311 (0.887)	1.691 (1.418)	0.500 (0.801)	-0.250 (0.722)
baseline score	0.688*** (0.0621)	0.813*** (0.0525)	0.788*** (0.114)	0.726*** (0.0559)	0.807*** (0.0481)
Baseline mean basecamp	12.12	36.54	36.80	34.54	31.08
Baseline mean control	12.23	33.87	35.55	34.77	30.27
Follow-up mean basecamp	12.50	36.17	37.40	34.88	30.33

Follow-up mean control	12	33.81	34.45	34.60	29.77
Adjusted R-squared	0.566	0.618	0.546	0.550	0.652
Observations	204	204	54	204	204

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.13. Restricting the sample to control group participants who consider joining basecamp mostly confirms results on workshops**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers, sample restricted to those who would like to join basecamp from the control group

	Conflict resolution score (3-15)	Learning skills score (12-60)	Time management skills score (19-95)	Motivation score (8-40)
basecamp	-0.121 (0.291)	0.130 (0.882)	-9.219 (4.822)	0.901 (0.889)
follow-up survey	-0.200 (0.329)	0.700 (0.825)	3.333** (1.133)	0.950 (0.678)
diff-in-diff	0.575 (0.497)	-1.075 (1.122)	-2.733 (1.717)	-0.617 (0.985)
baseline score	0.668*** (0.132)	0.824*** (0.0898)	1.451*** (0.323)	0.640*** (0.117)
Baseline mean basecamp	12.12	36.54	34.54	31.08
Baseline mean control	12.10	33.30	33.75	30.45
Follow-up mean basecamp	12.50	36.17	34.88	30.33
Follow-up mean control	11.90	34	34.70	29.90
Adjusted R-squared	0.109	0.599	0.411	0.475
Observations	88	88	88	88

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey and restricts the control group to those who report to be interested in joining basecamp. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. The estimation for learning scores including only the Mannheim location was not possible due to very small sample size in the reduced control group sample who wishes to join basecamp. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.14. Skills affected by workshops II**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers

	Digital skills score (0-105)	Digital skills score (0-105) Berlin and Frankfurt sample	Digital skills score (0-105) Berlin and Frankfurt sample of women	Financial literacy score (0-8)	Financial literacy score (0-8) Mannheim and Frankfurt sample	Financial literacy score (0-8) Mannheim and Frankfurt sample of women
basecamp	-0.162 (1.084)	-5.653** (2.344)	-5.717 (3.483)	0.0760 (0.201)	-0.114 (0.420)	-0.289 (1.280)
follow-up survey	3.974*** (1.211)	2.743 (1.749)	-0.455 (2.533)	0.321 (0.196)	-2.00e-16 (0.271)	-0.500 (0.364)
diff-in-diff	3.859** (1.856)	4.757* (2.511)	6.740** (3.035)	-0.0288 (0.403)	1.400*** (0.484)	1.500*** (0.364)
baseline score	0.933*** (0.0454)	1.080*** (0.0550)	1.072*** (0.101)	0.850*** (0.0550)	0.779*** (0.0941)	0.842*** (0.122)
Baseline mean basecamp	75.12	78.20	77.29	4.458	4.800	6
Baseline mean control	77.38	73.57	72.64	3.833	4.333	4.667
Follow-up mean basecamp	82.96	85.70	83.57	4.750	6.200	7
Follow-up mean control	81.36	76.31	72.18	4.154	4.333	4.167
Adjusted R-squared	0.820	0.856	0.828	0.663	0.708	0.728
Observations	204	90	58	204	82	38

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient "diff-in-diff". Each regression includes the sample who responded to both baseline and follow-up survey. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.15. Restricting the sample to control group participants who consider joining basecamp mostly confirms results on workshops II**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers, sample restricted to those who would like to join basecamp from the control group

	Digital skills score (0-105)	Digital skills score (0-105) Berlin and Frankfurt sample	Digital skills score (0-105) Berlin and Frankfurt sample of women	Financial literacy score (0-8)	Financial literacy score (0-8), Mannheim and Frankfurt sample
basecamp	-0.859 (1.996)	-2.396 (3.084)	-10.38 (6.457)	0.368 (0.369)	0.00909 (1.216)
follow-up survey	4.100* (2.387)	4.143 (2.850)	1.444 (4.188)	0.500 (0.347)	-0.400 (0.748)
diff-in-diff	3.733 (2.845)	3.357 (3.257)	4.841 (4.447)	-0.208 (0.498)	1.800* (0.906)

baseline score	0.948*** (0.0504)	1.029*** (0.0500)	0.960*** (0.0620)	0.954*** (0.0696)	1.159*** (0.181)
Baseline mean basecamp	75.12	78.20	77.29	4.458	4.800
Baseline mean control	73.95	73.14	71.44	3.450	3
Follow-up mean basecamp	82.96	85.70	83.57	4.750	6.200
Follow-up mean control	78.05	77.29	72.89	3.950	2.600
Adjusted R-squared	0.855	0.869	0.832	0.696	0.794
Observations	88	48	32	88	20

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey and restricts the control group to those who report to be interested in joining basecamp. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. The estimation for the financial literacy scores including only the Mannheim and Frankfurt location for women was not possible due to very small sample size in the reduced control group sample who wishes to join basecamp. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.16. Attending basecamp reduces average number of contacts**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers

	Networking score (4-16)	Average number of apprentices to exchange with regularly
basecamp	-0.0628 (0.284)	-0.373 (0.673)
follow-up survey	0.154 (0.366)	0.718 (0.691)
diff-in-diff	-0.404 (0.687)	-2.947** (1.160)
baseline score	0.752*** (0.0723)	0.680*** (0.0779)
Baseline mean basecamp	13.50	6.104
Baseline mean control	12.19	5.603
Follow-up mean basecamp	13.25	3.875
Follow-up mean control	12.35	6.321
Adjusted R-squared	0.599	0.438
Observations	204	204

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.17. Restricting the sample to control group participants who consider joining basecamp confirms results on networking**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers, sample restricted to those who would like to join basecamp from the control group

	Networking score (4-16)	Average number of apprentices to exchange with regularly
basecamp	-0.0819 (0.619)	-0.463 (0.976)
follow-up survey	-0.300 (0.680)	-0.950 (1.377)
diff-in-diff	0.0500 (0.893)	-1.279 (1.667)
baseline score	0.883*** (0.0745)	0.610*** (0.106)
Baseline mean basecamp	13.50	6.104
Baseline mean control	11.20	6.325
Follow-up mean basecamp	13.25	3.875
Follow-up mean control	10.90	5.375
Adjusted R-squared	0.663	0.472
Observations	88	88

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey and restricts the control group to those who report to be interested in joining basecamp. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.18. Attending basecamp is associated with a lower likelihood of mentioning the Berichtsheft or passing exams as major challenges in the apprenticeship**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers

	Berichtsheft is major challenge	Passing exams is major challenge	Passing exams is major challenge, sample excluding Mannheim
basecamp	0.0439 (0.0772)	0.00937 (0.0780)	0.0517 (0.0974)
follow-up survey	0.0548 (0.0581)	0.0959* (0.0575)	0.111 (0.0688)
diff-in-diff	-0.198* (0.106)	-0.191 (0.151)	-0.299* (0.178)
baseline score	0.493*** (0.103)	0.581*** (0.0710)	0.571*** (0.0870)
Baseline mean basecamp	0.238	0.571	0.625
Baseline mean control	0.151	0.603	0.574
Follow-up mean basecamp	0.0952	0.476	0.438
Follow-up mean control	0.205	0.699	0.685
Adjusted R-squared	0.215	0.409	0.384

Observations	188	188	140
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Note: Berichtsheft is a booklet where apprentices are required to track progress in their apprenticeship. The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey. Each regression includes controls for age, the year of graduation from school, the year the apprenticeship was started, a dummy for whether the individual was born abroad, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.

**Table A.19. Effects of attending basecamp on lower likelihood of mentioning the Berichtsheft or passing exams as major challenges in the apprenticeship confirmed with restricted sample**

Main coefficients of a diff-in-diff regression of attending basecamp on outcomes in column headers, sample restricted to those who would like to join basecamp from the control group

	Berichtsheft is major challenge	Passing exams is major challenge	Passing exams is major challenge excluding Mannheim
basecamp	0.0764 (0.0954)	-0.0518 (0.148)	0.117 (0.213)
follow-up survey	1.84e-16 (0.0967)	0.158 (0.118)	0.176 (0.133)
diff-in-diff	-0.143 (0.134)	-0.253 (0.184)	-0.364* (0.217)
baseline score	0.607*** (0.162)	0.445*** (0.134)	0.470*** (0.142)
Baseline mean basecamp	0.238	0.571	0.625
Baseline mean control	0.158	0.684	0.647
Follow-up mean basecamp	0.0952	0.476	0.438
Follow-up mean control	0.158	0.842	0.824
Adjusted R-squared	0.346	0.259	0.187
Observations	80	80	66

Note: The table presents the coefficients of interest of a diff-in-diff regression evaluating the effect of attending basecamp on various outcomes in the column headers. The effect of attending basecamp for the time between baseline and follow-up survey is given by the coefficient “diff-in-diff”. Each regression includes the sample who responded to both baseline and follow-up survey and restricts the control group to those who report to be interested in joining basecamp. Each regression includes controls for age, the year of graduation from school, a dummy for whether the individual was born abroad, the year the apprenticeship was started, a dummy for whether one of the parents was born abroad, a dummy for whether the individual has German citizenship, a dummy for whether German is their mother tongue, a dummy for whether they own an electronic device and a dummy for whether they have previously quit their apprenticeship. Standard errors are robust and location fixed effects are included. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: OECD calculations based on data from baseline and follow-up survey.