

# Assessment of Economic & Social Benefits of DFN Project SEARCH

*Report by Frontier Economics*

18 October 2022

# Overview

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# Executive Summary



**DFN Project SEARCH** is an international transition to work programme committed to transforming the lives of young people with learning disabilities and autism.

## Target audience

- Young people (16-32) with a learning disability, autism or both<sup>a</sup>
  - 50% of programme participants have a learning disability as their primary disability
  - Around 40% have autism as their primary disability
  - Majority are between the ages 18-24
  - Around a third are women
- England, Scotland and Wales

DFN Project SEARCH has asked Frontier to assess the **impact** of the programme on participants, carers and the society. Given data constraints, the scope of work was limited to **gross benefits** – where feasible, in monetary terms and otherwise, illustrating qualitatively.

## Expected Impact

### Benefits to programme participants

- Improved employment prospects and ability to find a job
- Improved earnings
- Exposure to multiple industries
- Improved health and well-being

### Benefits to family / carers

- Reduction in care-givers fatigue
- Increased opportunity to join the workforce and add potential earnings
- Improved health and well-being of carers

### Benefits to society

- Lower welfare payments for employed graduates of the programme
- Expanded labour force

## Gross benefits

*Note that the benefits listed are non-exhaustive.*

- **Improved employment opportunity and earnings.**
  - Internal DFN Project SEARCH assessment shows that **65% of programme participants find a job<sup>a</sup>** – much higher than the average of 5.1% for individuals with a learning disability<sup>b</sup>.
  - Employed graduates of the programme had an **average earning of £7.92/h** in 2016-17 **to £8.83/h** in 2020-21.
  - The average hourly pay for employed graduates of the programme was between **22-33% higher** than the National Minimum Wage or National Living Wage<sup>c</sup> depending on the age & year of comparison.
- **Improved well-being in self-reported measures among programme participants.**
  - **56% happier** after the programme
  - **60%** feel more **independent**
  - **69%** have higher **self-esteem**  
...after the programme compared to before
- **Increased opportunity to join the workforce and add potential earnings among carers of programme participants.**
  - **25h per week** potentially freed from care work for use in other work

All analysis based on DFN Project SEARCH data, other quoted sources and Frontier calculations.

<sup>a</sup> The figure is slightly lower at 60% if considering programme participants who find a job working at least 16h per week. Note that this includes cohorts that joined during the pandemic, who would drive down the overall impact. .

<sup>b</sup> 'Employment Rates for People with Disabilities 2020-21.' Available at: <https://www.base-uk.org/employment-rates> [accessed on: 26 September 2022]

<sup>c</sup> See Annex C for details. Wage comparisons are based on age group and cohort.

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# DFN Project SEARCH aims to provide individuals with learning disabilities an opportunity for competitive employment



DFN Project SEARCH is an international transition to work programme committed to transforming the lives of young people with learning disabilities and autism.

DFN Project SEARCH is a franchise of the most successful transition to work programmes in the world from the United States, and has been recognised by the UK government as a model of good practice within the national learning disability strategy “Preparing for Adulthood pathways”.

The programme provides real-life work experience combined with training in employability and independent-living skills to help young people make successful transitions to productive adult life.

## Target audience

- Young people (16-32) with disabilities<sup>a</sup>
  - 50% of programme participants have a learning disability as their primary disability
  - Around 40% have autism.
  - Majority are between the ages 18-24
  - Around a third are women
- England, Scotland and Wales

## Programme structure

Focus is placed on intern induction, hands-on skill assessment, and familiarisation with the business environment. Interns develop a career plan, which guides the selection process and individualised job search.

## At a glance

- 3 targeted internships
- Instructor and job coach on-site
- Training on further employability skills

## Key Statistics on Project SEARCH

2,122

Participants from **2016/17** to **2019/20**, around 1/3 women, and over half are 18 to 20 years old

94%

participants **complete** the programme

60%

of graduates achieve **employment** of above 16h per week, paid at prevailing non-seasonal wage

££+

Average salaries for employed graduates are **above National Minimum Wage or National Living Wage**

# The expected impact of the project is wide-ranging, affecting participants, their families and carers, & wider society



## PARTICIPANT

- **Improved employment prospects and ability to find a job.** DFN Project SEARCH participants have improved chances of finding employment following their participation in the programme.
- **Better work and social skills.** Programme participants take part in training to first develop their employability and functional skills, and move to additional skills, including social skills.
- **Enhanced earnings.** Employed graduates of the programme have additional earnings from employment.
- **Exposure to multiple industries.** Employed graduates of the programme have had placements across the labour market, e.g. aviation, pharmaceuticals, social care, etc.
- **Improved well-being.** Participants of the programme reported increased levels of mental well-being on a post-programme survey conducted by DFN Project SEARCH .



## FAMILY/CARER

- **Reduction in care-givers fatigue.** As participants engage with the programme or join the workforce, carers are able to cut down on the hours spent caring for the participants directly – reducing fatigue.
- **Increased opportunity to join the workforce and add potential earnings.** With care hours freed up, carers of programme participants could choose to re-join the labour market, and enjoy associated earnings.
- **Improved health and well-being of carers.** The freed up time can provide the much needed break for carers to recharge, or supplement their earnings. The variety in potential activities and reduced fatigue are likely to improve health and well-being of carers of the programme participants.



## ECONOMY

- **In alignment with the objectives of the New National Disability Strategy.** The government plans to increase the number of disabled people in employment, tackling the disability employment gap. The outcomes of this programme are in alignment with the government objectives.
- **Lower welfare payments for employed graduates of the programme.** Some welfare payments, such as the Universal Credit, are affected by earnings via employment. Programme participants who successively find employment will be less reliant on these forms of support.
- **Expanded labour force.** Programme participants who previously may not have joined the labour force, and some carers, will likely join the labour market, reducing the numbers of those inactive or unemployed.

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# Our approach to assessing the impact of the project

DFN Project SEARCH has asked Frontier to assess the **gross benefits** of the programme on participants, carers and the society – in monetary terms where feasible or illustrating qualitatively, given data constraints.

## Benefits to programme participants

- Improved employment prospects and ability to find a
- Better work and social skills
- Improved earnings
- Exposure to multiple industries
- Improved health and well-being

The main aim of this programme is to provide competitive employment opportunities to participants. To this end, we assess the outcomes for:

- The employment rate achieved by programme participants
- The number and types of industries participants are involved in

In addition, we provide monetary valuation for:

- The gross impact on earnings

We also illustrate the improvement in:

- The mental well-being of programme participants

## Benefits to family / carers

- Reduction in care-givers fatigue
- Increased opportunity to join the workforce and add potential earnings
- Improved health and well-being of carers

The qualitative outcomes are assessed for:

- The reduction in hours spent caring for participants directly
- Potential earnings from re-joining the labour force
- Increased peace of mind because their child is better prepared for the future
- Improved family relationships

## Benefits to society

- Lower welfare payments for employed graduates of the programme
- Expanded and more inclusive labour force

Due to the complex and individual nature of the welfare system, we only highlight that increasing earnings potential could imply a reduction in means-tested welfare payments, such as the Universal Credit.

The difference between gross benefits and additionality (or causal benefits) is explained illustratively in the Annex A. We also provide recommendations that will allow for an evaluation of the additionality of DFN Project SEARCH across all areas for future assessments.

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# Disabled people are lagging further behind those non-disabled in terms of work, and this is particularly true for those with learning disabilities.

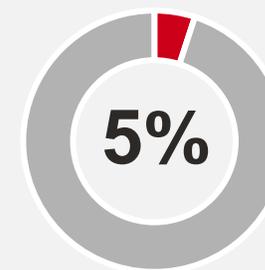
- Disabled\* people's **employment rate is well below that of non-disabled people** and they are more likely to be unemployed, in insecure employment, or economically inactive than non-disabled people.
  - Of the 8.4 million disabled people, only about half are currently in work. This compares to almost 82% of those who are not-disabled.<sup>a</sup>
  - Disabled people were around twice as likely as non-disabled people to not be in education, employment or training.<sup>a</sup>
  - Only around 20% of disabled people attended a learning activity in the past 3 months, compared to about 30% of non-disabled people – these activities are essential for an individual's employment prospects.<sup>c</sup>

\* The data above reflects individuals with any type of disability. While disabilities may not be comparable, the above data highlights the gap between those disabled and not-disabled. For further understanding of individuals with learning disabilities in particular, please consult the *Guidance on Learning Disabilities and Health*.

## How does DFN Project SEARCH affect employment?

- A key barrier that prevent adults with learning difficulties from *finding a job, keeping a job* and *progressing in that job* are gaps in skills and qualifications.<sup>c</sup> Note that, individuals with a learning disability
- **DFN's Project SEARCH addresses this barrier through the targeted internships and availability of coaches.** Internal assessment shows that 64% of programme participants gain competitive employment – this is much higher than the average of 5% for individuals with learning disabilities.
- We evaluate in the report the gross earnings benefit of these employment opportunities.

## % employed with learning disability, age 18-64, England, 2020-21



Employment situation has worsened over the last 5 years, falling from 5.7% in 2016-17 to only 5.1% in 2020-21.<sup>a</sup>

## % difference in average hourly pay of men with learning disability vs men non-disabled between 1997-2014



Men with learning difficulties or disabilities have a pay gap of around 60%.<sup>b</sup>

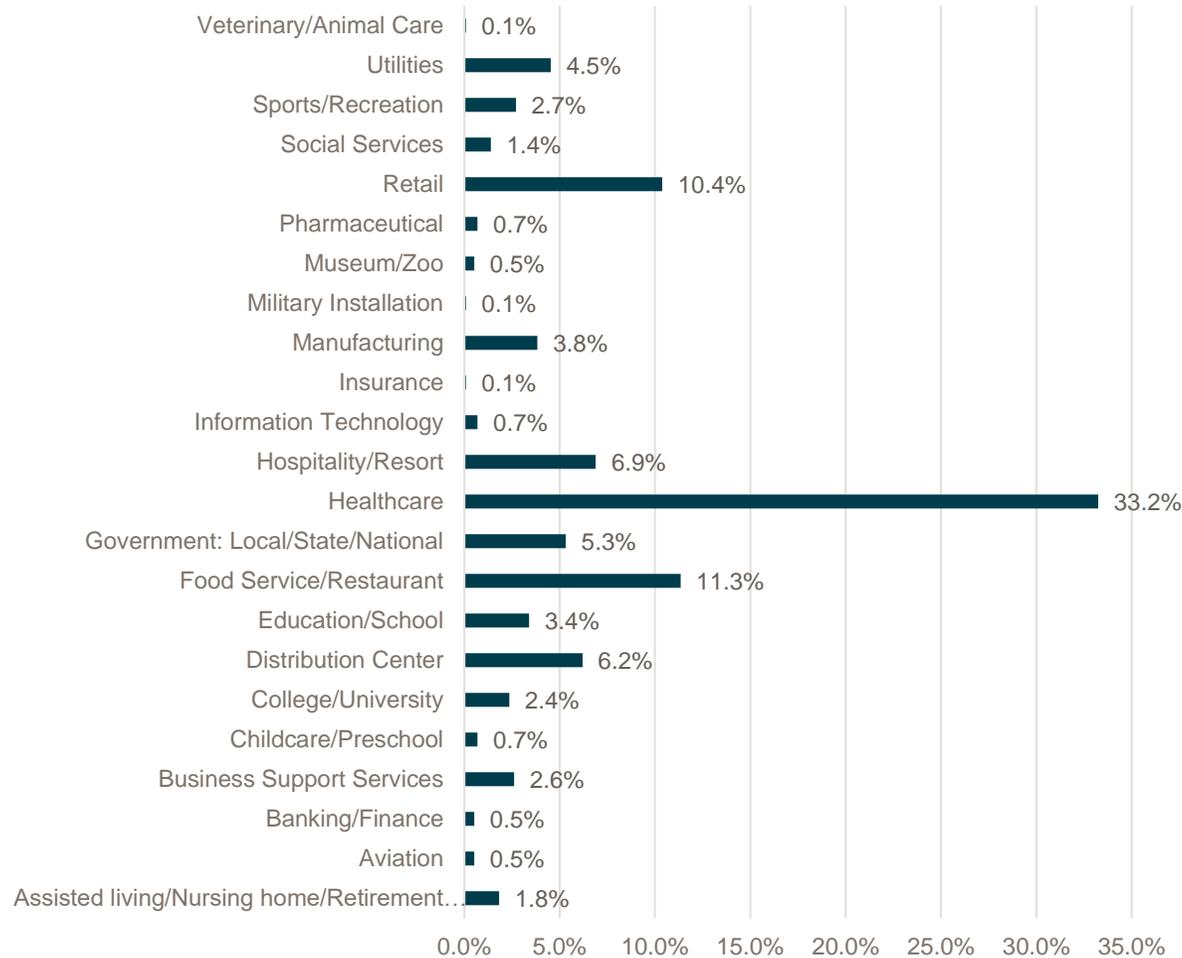
<sup>a</sup> Includes individuals known to CASSRs only. 'Employment Rates for People with Disabilities 2020-21.' Available at: <https://www.base-uk.org/employment-rates> [accessed on: 26 September 2022]

<sup>b</sup> Longhi, S. (2017), 'The disability pay gap'. EHRC Research Report no. 107. Available at: <https://www.equalityhumanrights.com/en/publication-download/research-report-107-disability-pay-gap> [accessed: 07 September 2022]

<sup>c</sup> Papworth Trust (2018), 'Disability Facts and Figures 2018: Disability in the United Kingdom'. Available at: <https://www.papworthtrust.org.uk/about-us/publications/> [accessed: 27 September 2018]

<sup>d</sup> Guidance. Learning(2018). 'Learning disabilities: applying All Our Health.' Available at: <https://www.gov.uk/government/publications/learning-disability-applying-all-our-health/learning-disabilities-applying-all-our-health> [accessed: 26 September 2022.]

# Over a third of employment opportunities for programme participants were in healthcare, followed by food/services and retail



## Further details on employed graduates

- On average, almost a **third of employed graduates worked in the healthcare sector**, followed by the retail sector and food service / restaurants.
- Average hourly pay was higher for programme participants employed in the **pharmaceutical sector, healthcare, IT, and veterinary / animal care** compared other industries.

## Data and Calculations

- Calculated using DFN Project SEARCH Data from 2016/17-2020/21 on participant outcomes 11 months after completion of the programme.
- All figures shown are an average of the yearly data for the 5 years of data provided.
- Only includes participants who were employed at the end of the programme and for whom, the industry of employment was reported.

# Sizeable gross earnings benefit were realised by programme participants, across a range of different industries

The average hourly pay for employed graduates of the programme

**£7.92/h – £8.83/h**  
(2016-17) (2020-21)

## Further details on employed graduates

- Average hourly pay, weighted by age group of employed programme graduates, ranged between £7.92/h in 2016/17 to £8.76 in 2018/19.
- On average, hourly pay for employed graduates was 22-33% higher than National Minimum Wage (NMW) or the National Living Wage (NLW), as is appropriate based on the age group. In particular, 18 to 20 year olds, who comprise over half the programme participants, earned about 36% more than NMW.
- Public data on average earnings of individuals with learning disabilities are unavailable. However, individuals with mental impairments<sup>a</sup>, such as those with learning disabilities, typically have the largest pay gaps compared to those non-disabled.

The average annual earnings for employed graduates of the programme

**£10,100 – £12,100**  
(2016-17) (2020-21)

## Further details on annual calculations

- Between 2016-17 and 2020-21, employed graduates worked on 25.5 hours per week. Only 3% had a seasonal contract.
- The 2 years impacted by the pandemic (2019/20 and 2020/21) saw a 7% decline in the number of employed graduates, but had limited impact on the annual earnings of those who did find employment.

## Data, Assumptions & Calculation

- Calculated using DFN Project SEARCH Data from 2016/17-2020/21 on participant outcomes 11 months after completion of the programme.
- All figures shown are an average of the yearly data for the 5 years of data provided.
- As an example, the annual earnings for employed graduates of the programme for 2016/17 can be calculated as follows:
  - Average hourly wage was £7.92
  - Average hours worked per week was 24.5h
  - Average weekly wage was £194 (£7.92 X 24.5h)
  - Annual earnings benefit was approx. £10,100 (£194 X 52 weeks)

Detailed calculations are provided in Annex B, and comparisons to NMW in Annex C.

Note: Calculations are not adjusted for inflation.

frontier economics <sup>a</sup> <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/disability/articles/disabilitypaygapsintheuk/2018> [accessed on: 16 September 2022]

<sup>b</sup> <https://www.gov.uk/national-minimum-wage-rates> [accessed on: 16 September 2022]

# programme participants report feeling happier, more independent and having higher self-esteem after completing the programme

Participants were asked to assess their **happiness** level, **independence** level and **self-esteem** before and after the programme, in a post-programme survey. As participants self-report the change in their mental states and the data was collected retrospectively, the results should be treated with some degree of caution.



Participants reported being **happier after the programme** compared to before.



Participants reported being **more independent after the programme** compared to before.



Participants reported having **higher self-esteem after the programme** compared to before.

## DFN Project SEARCH Survey

- Participants had to choose between “Very Low”, “Low”, “Medium”, “High” and “Very High” to questions such as:
  - Before joining DFN Project SEARCH, my HAPPINESS level was .....
  - After joining DFN Project SEARCH, my HAPPINESS level was .....
- The questions related to mental well-being were on happiness, independence and self-esteem, and are the focus of this report.
- Participants were also asked about their perception of changes in various skills, such as communication, time management, organisation, etc.

## Data, Calculations and Recommendations

- Calculated using DFN Data from 2020/21 on participant satisfaction after completing the programme, on a sample of about 200 respondents.
- As an example, proportion of participants feeling happier after the programme compared to before can be calculated as follows:
  - Rank the given choices from 1 to 5, with 1 is “Very Low” and 5 is “Very High”.
  - For each participant, take the difference between happiness level before the programme, and happiness level after the programme, e.g. state before was 3 and state after is 5 implying that the change is 2 (5-3)
  - Count the number of people for whom the difference is greater than 0, e.g. 115 reported difference of 1 or more.
  - Divide the number above by the total number of participants, e.g. 56% (115 / 205).
- In order to quantify the changes in mental health parameters for future studies, it is recommended to:
  - Use the SF-6D<sup>a</sup> or the ONS4<sup>b</sup> survey methods when designing the post-programme survey
  - Conduct a survey before and after the programme to evaluate the change, if possible, to limit the effect of recall bias.

# Survey shows that carers lack access to time-off from caring responsibilities – an issue that DFN Project SEARCH can assist in for carers of programme participants

40% of carers had not taken a day off from caring in more than year



% of working carers at risk of reducing or leaving employment



Of all carers said they had reduced their working hours to care<sup>c</sup>.  
14% reported having had to take a less qualified job.

*No available studies on care work for individuals with learning disabilities. The statistics represented here are illustrative, and may not be a perfect representation of carers of programme participants.*

- In 2011, 5.8 million people (10% of the population in England and Wales) identify themselves as unpaid carers, caring for someone with an illness or disability.<sup>b</sup> In 2017, this had increased to 7 million.<sup>d</sup>
  - Over a third of the population of England and Wales (37 per cent, 2.1 million) provide 20 or more hours of care a week.<sup>b</sup>
- A quarter of the people reported not having taken a break in over 5 years.<sup>c</sup>
  - Carers who had not had a break from caring within the last year reported suffering from mental and physical health difficulties as a result of caring.<sup>c</sup>
  - Over 3 million people juggle care with work. However the significant demands of caring mean that 1 in 5 carers are forced to give up work altogether.<sup>d</sup>

The studies noted above focus on care work for individuals with all types of disabilities, and across all age groups. The responses of carers of programme participants on the issues discussed may differ.

## How does DFN Project SEARCH affect carers?

- Carers UK found that carers most frequently listed access to breaks as one of three factors which could make a difference in their lives (42%).<sup>b</sup>
- **By helping participants join the workforce, DFN's Project SEARCH provides carers additional time**, allowing them to take the much needed break or the opportunity to continue their own work. This report discusses the qualitative effect on carers of programme participants through the channels of reduced care hours and potential to join the labour force.

# Employment opportunities for programme participants have the potential to free up time among family / carers of these participants

Public data on number of carers in the UK supporting individuals with learning disabilities, or average number of hours carers spend doing care-work is lacking. This report provides an illustrative example of the upper bound of potential free time carers may have if participants find and are engaged in employment.

## Potential time per week freed for carers of employed graduates

Based on hours worked per week by employed graduates between 2016/17 to 2020/21

# up to 25h per week

### Data, Assumptions and Recommendations

- Calculated using DFN Data from 2016/17 -2020/21 on participant outcomes 11 months after completion of the programme.
- All figures shown are an average of the yearly data for the 5 years of data provided.
- On average, employed graduates of the programme work about 25h per week, between 2016/17 and 2020/21.
- The hours that employed graduates spend at work are potential hours 'freed' from care responsibilities for family and care givers, under the following assumptions.
  - While at work, individuals will not require any care from the family / care givers.
  - If care work is shared across several family members, the total time saved would be less per carer.
- The time 'freed' could be used by carers to recharge, increase time in their existing jobs or find alternate employment themselves.
- In order to quantify the impact on carers of programme participants, it is recommended to include carers as a respondent group for a DFN survey. Questions on hours spent caring both before and after the programme for participants, wage potential of carers (e.g. carers wages if otherwise employed), and so on can draw assist in drawing out the economic impact of care work on individuals with learning disabilities.

## A closer look at Parents/Carers of Programme Graduates

- Social Value Lab interviewed 13 parents/carers of programme graduates (8 of whom had received an employment opportunity) in 2013 as part of an SROI evaluation<sup>a</sup>.
- Parents/carers reported (among others):
  - More time to do other things (break from caring)
  - Increased peace of mind because son / daughter better prepared for the future
  - Improved family relationships
  - Son / daughter can handle change better
- All of the above could lead to direct cost savings, for example through the reduced need for counselling as a result of improved relationships and temperament, or could allow for opportunities of additional earnings, for example through improved productivity or additional time to join the workforce.

# Potential reductions to welfare payments to eligible households

The UK's welfare system includes both non-means tested benefits and means-tested benefits and there is potential savings in the latter category due to earnings from employment opportunities provided by DFN Project SEARCH.

- **Means-tested benefits** such as such as Universal Credit (UC) are impacted by earnings and hours of employment. For every £1 that an eligible programme participant earns in employment, there is a 55p reduction in UC payment.
  - **DFN Project SEARCH could potentially reduce UC payments.**

*Note that if the programme participant has been assessed as having Limited Capability to Work (LCW) or Limited Capability to Work and Work-related Activity (LCWRA), then they will be eligible for Work Allowance – meaning they will have to earn above a certain threshold before UC payments will be reduced.*

- **Non-means tested benefits** such Personal Independence Payments are not impacted by employment and are only based on an assessment by Department of Work and Pensions. The receipt of these type of benefit payments will not be affected by DFN Project SEARCH.
- As welfare payments are case-dependent and there is a lack of public data on average awards for individuals with learning disabilities, it has not been possible to assess the quantitative impact of DFN Project SEARCH on such payments.
- Data collection on the welfare sources / receipt of payments among programme participants in future surveys can shed light on this area.

The two pen-profiles highlight the difference in Universal Credit payments when an individual is unemployed and later, employed via the opportunities from DFN Project SEARCH. The 'potential welfare savings' are strictly illustrative.



- 19 year old, single, with a disability but receiving no DLA, PIP, AA
- No dependents, and living with single-parent earning at or above £484 per week in Leicester
- Eligible for **£61 weekly** in Universal Credit if unemployed – a typical employed graduate of DFN Project SEARCH will not be eligible for this award, indicating potential savings for the government.

- 22 year old, living in Liverpool, with a disability, but receiving no DLA, PIP, AA
- No dependents, living with partner/carer who receives carers' allowance and earns between £154-223.99/week
- Cohabiting in a 1-bed council flat in Liverpool for £450 rent a month
- Eligible for **£165 weekly** when unemployed and only **£50 weekly** if employed in a job typical of DFN Project SEARCH graduates – the government could potentially save around £115 weekly



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# The quantitative and illustrative benefits from DFN Project SEARCH



## PARTICIPANT

### ■ Improved earnings.

- Employed graduates of the programme have an **average earning of £7.92/h** in 2016-17 to **£8.83/h** in 2020-21.
- Programme participants earned approximately **£10,100 annually** in 2016-17 to **£12,100 annually** in 2020-21.

### ■ Improved well-being in self-reported measures among participants.

- **56% happier** after the programme
- **60%** feel more **independent**
- **69%** have higher **self-esteem** ...after the programme compared to before

### RECOMMENDATIONS

- Use of established well-being methods and a pre and post programme can help quantify the benefits on mental health.
- Availability of data on occupation & earnings of individuals with learning disabilities can in future support the quantification of additionality.



## FAMILY/CARER

### ■ Increased opportunity to join the workforce and add potential earnings.

- **up to 1 day per week** potentially freed from care work for use in other work

### RECOMMENDATIONS

- Including care givers into DFN Project SEARCH surveys can shed light on their role and potential impact.
- Availability of data on care work & earnings loss of carers assisting individuals with learning disabilities needed to quantify the impact on carers.



## ECONOMY

### ■ In alignment with the objectives of the New National Disability Strategy.

- **Reduced welfare payments.** Certain means-tested benefits, such as the Universal Credit, could be lower among eligible households, where the dependent participant is able to find employment through DFN Project SEARCH.

### RECOMMENDATIONS

- Welfare benefits vary greatly depending on individual circumstances. Data collection on the welfare sources / quantities among programme participants can shed light on this issue.

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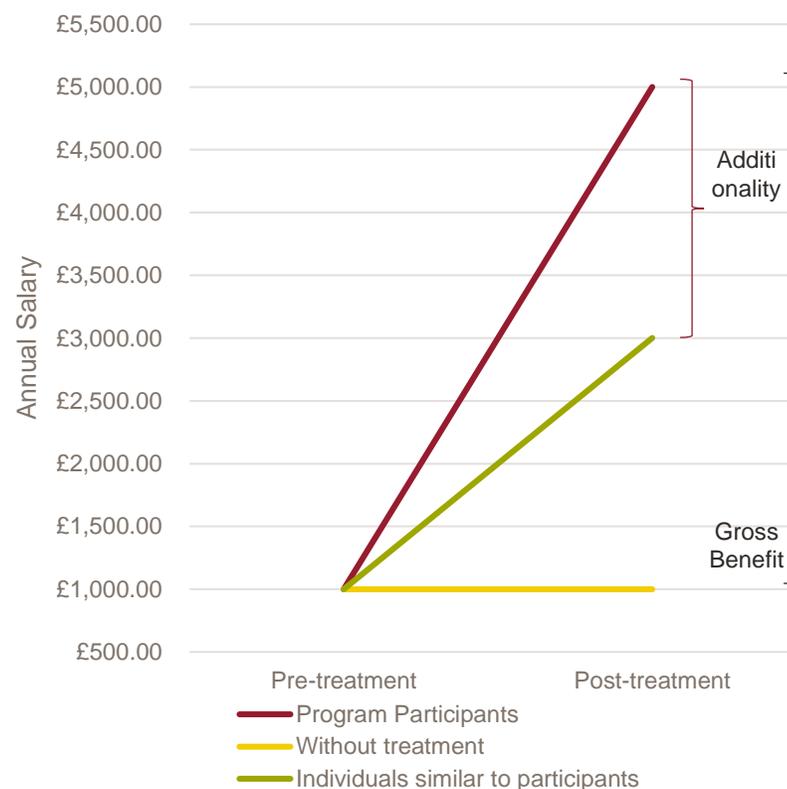
# Annex A – Estimating causal impact of DFN Project Search

In the ideal scenario, the assessment would consider the “additional” impact of the programme on participants. However due to data limitations on the counterfactual scenario, it was only possible to evaluate the gross benefits and in several cases, provide illustrative impacts.

## METHODOLOGICAL CONSIDERATIONS

- **Self-selection bias.** To the extent that individuals who are more likely to be employed choose to join DFN Project SEARCH, the quantitative impacts of the programme would be biased upwards.
  - *DFN Project SEARCH could include questions to identify if participants are selected at random, or potentially self-select themselves.*
- **Causal benefit or ‘additionality’.** The causal benefit of the programme is the difference between the observed outcome after the programme, and what would have happened to the same individual, absent the programme, i.e. the difference in outcomes between group A and group B.
  - *DFN Project SEARCH collects information on programme participants (let’s refer to them as group A). Currently public data on individuals with similar characteristics to programme participants are unavailable. If these individuals exist, let’s refer to them as group B, then they can act as the ‘counterfactual’.*

As suggested in the recommendations, small changes to the survey could help assess the causal impact in future studies.



## Illustrative Example

- Everyone earns £1k before DFN.
- 100 people are selected, having similar characteristics (e.g. similar age, disability, household income)
  - 50 join DFN – they are “programme participants” – Group A.
  - 50 do not join DFN – they are “individuals similar to participants” – Group B.
- A few months after Project SEARCH ends, we check individual salaries:
  - The status quo is unchanged (yellow line).
  - Individuals similar to participants earn £3k (green line).
  - programme participants earn £5k (red line).
- **Quantitative effect:**
  - Gross benefit = £4k (£5k - £1k)
  - Additionality due to DFN = £2k (£5k - £3k)

# Annex B – Calculation of Gross Earnings Benefit

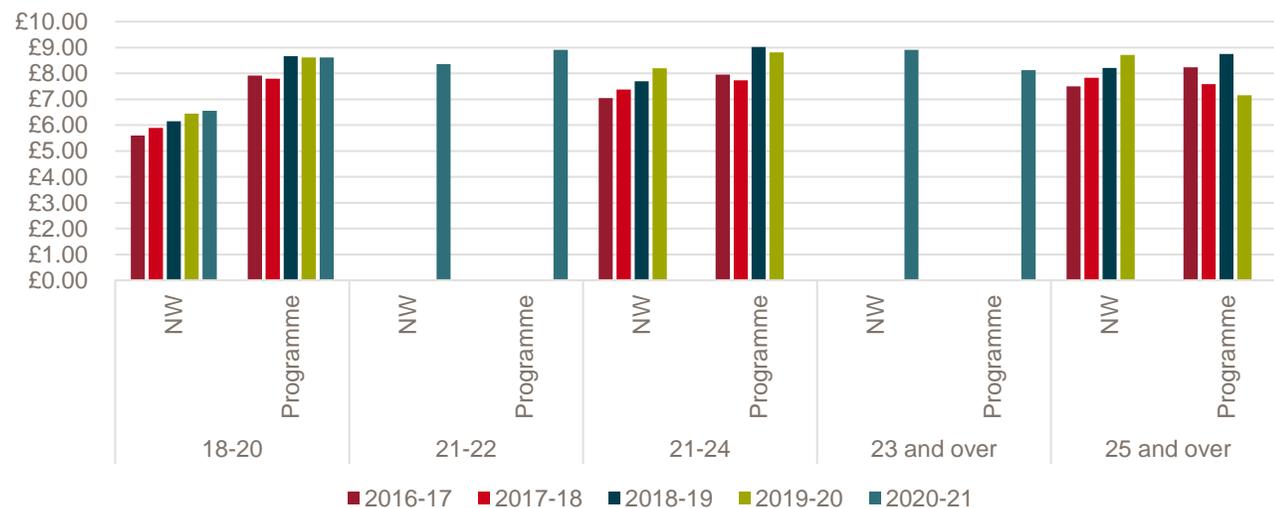
Details	(I) Employed Graduates of DFN Project SEARCH (All Ages)						(II) Average by Age Group		
	2016-17	2017-18	2018-19	2019-20	2020-21	Simple Average	Inflation Adjusted Averages	18-20 yo 2016-2021	21-24 yo 2016-2021
Average hourly wage (A)	£7.92	£7.80	£8.76	£8.64	£8.68	<b>£8.37</b>	<b>£7.81</b>	£8.33	£8.45
Average hours worked per week (B)	24.50	25.15	25.67	25.33	26.77	<b>25.48</b>	<b>25.46</b>	25.57	24.90
Average weekly wage (C = A X B)	£194.06	£196.06	£224.79	£218.96	£232.32	<b>£213.24</b>	<b>£198.99</b>	213.21	210.23
Assumed weeks worked per year (D)	52	52	52	52	52	<b>52</b>	<b>52</b>	52	52
<b>AVERAGE ANNUAL EARNINGS (C X D)</b>	<b>£10,091</b>	<b>£10,195</b>	<b>£11,689</b>	<b>£11,386</b>	<b>£12,081</b>	<b>£11,088</b>	<b>£10,348</b>	<b>£11,087</b>	<b>£10,932</b>

## Methodology

- All analysis is based on DFN Project SEARCH data. All calculations are carried out by Frontier Economics.
- Sample includes programme graduates who found employment and reported their wages.
  - Between 2016/17 and 2020/21, over 50% of programme participants reported being employed.
  - About 12% on average drop out annually, and are not included in our analysis.
- In (I), we report the averages across the entire population and consider this to be the headline results.
  - Inflation adjusted averages are calculated using the GDP Deflator with 2020/21 prices as the base.
- In (II), we provide a sensitivity by considering the two most representative age groups, in line with NMW/NLW. As expected, the results are comparable to the simple average reported in (I) as these age groups drive the results..
- Under 3% of employed graduates report that they are in seasonal employment and therefore have not been separately considered for our analysis.

# Annex C – Wage distribution across age categories, compared to NMW

Age Group	2016-17	2017-18	2018-19	2019-20	2020-21
18-20	41%	32%	41%	34%	31%
21-22					7%
21-24	13%	5%	17%	7%	
23 and over					-9%
25 and over	10%	-3%	7%	-18%	
<b>Weighted Average</b>	<b>30%</b>	<b>22%</b>	<b>33%</b>	<b>24%</b>	<b>23%</b>



## Methodology

- Table 1 uses data on average hourly wages of DFN Project SEARCH employed graduates and data on National Minimum Wage (NMW) and National Living Wage (NLW) from the official government website<sup>a</sup>.
- All calculations are carried out by Frontier Economics. Sample for DFN Project SEARCH data includes programme graduates who found employment and reported their wages.
- For simplicity, we do not calculate wage differentials by month and use calendar years instead.
  - For example, average hourly wage of all 18-20 year old employed graduates in 2017-18 are compared to the NMW in the period April-17 to March-18.
- The average hourly wage differential for each age group is calculated as follows:
  - $(\text{Wage of employed graduate of the programme} - \text{NMW or NLW}) / \text{NMW or NLW} * 100$
- The weighted average for the entire year accounts for the number of programme participants in each age group who were employed for each cohort.

**Overall, employed graduates of DFN Project SEARCH earn higher hourly wages on average than NMW or NLW (as is appropriate based on age).**

- Those who are above 25 in 2019-20 and above 23 in 2020-21 have negative wage differentials, but comprise only 2% of total employed graduates between 2016-2021.

<sup>a</sup> National Minimum Wage Rates. Available here: <https://www.gov.uk/national-minimum-wage-rates> [accessed on 16 September 2022]

# Annex D – Policy in Practice, Pen Profile 1



- 19 year old, single, with a disability but receiving no DLA, PIP, AA
- No dependents, and living with single-parent earning at or above £484 per week in Leicester

## Methodology

- We created a hypothetical profile based on the age and potential household circumstances of a typical DFN Project SEARCH participant in the calculator provided by “Policy in Practice”.
- For scenario (I) shown in the left table, we assumed certain demographic characteristics, and that the individual was working for 25h per week, and earned £8.37/h. These are typical hours worked and wage received by an average employed graduate of DFN Project SEARCH.
- For scenario (II) shown in the right tab, we assumed the individual had the same demographic characteristics as above, but did not work.
- The potential savings for the government is the amount of Universal Credit the individual becomes eligible for if they are out of work.
  - In Scenario (I), the amount in the last row “Universal Credit” is £0.
  - In Scenario (II), the individual becomes eligible for £61.23.
  - Potential Welfare Savings = £61.23 - £0 = £61.23

## Universal Credit

### Step 1: Calculate any Housing Element

Deduction due to non-dependants	£17.97
<u>Housing Component</u>	£85.88

### Step 2: Calculate Maximum Universal Credit

*This is made up of elements based on household circumstance*

Standard allowance	£61.23
<u>Maximum Universal Credit</u>	£61.23

### Step 3: Calculate income

*This is 55% of net earned income after application of the work allowance plus non-earned income & income from savings. Private pension contributions are deducted.*

Net earned income	£209.25
Minus work allowance	£0.00
Income after work allowance	£209.25
Earnings for assessment (55% of net earnings)	£115.09
Total income	£115.09
<u>Income for assessment</u>	£115.09

### Step 4: Deduction due to income & savings

*Deduct income from maximum Universal Credit*

Maximum Universal Credit	£61.23
Minus income for assessment	£115.09
<u>Universal Credit</u>	£0.00

## Universal Credit

### Step 1: Calculate any Housing Element

Deduction due to non-dependants	£17.97
<u>Housing Component</u>	£85.88

### Step 2: Calculate Maximum Universal Credit

*This is made up of elements based on household circumstance*

Standard allowance	£61.23
<u>Maximum Universal Credit</u>	£61.23

### Step 3: Calculate income

*This is 55% of net earned income after application of the work allowance plus non-earned income & income from savings. Private pension contributions are deducted.*

Total income	£0.00
<u>Income for assessment</u>	£0.00

### Step 4: Deduction due to income & savings

*Deduct income from maximum Universal Credit*

Maximum Universal Credit	£61.23
Minus income for assessment	£0.00
<u>Universal Credit</u>	£61.23

# Annex D – Policy in Practice, Pen Profile 2



- 22 year old, living in Liverpool, with a disability, but receiving no DLA, PIP, AA
- No dependents, living with partner/carer who receives carers' allowance and earns between £154-223.99/week
- Cohabiting in a 1-bed council flat in Liverpool for £450 rent a month

## Methodology

- We followed the same process for the second pen profile. However, in this case, we assumed the individual had caring needs, and therefore their family could not work full-time.
- For scenario (I) shown in the left table, we again assumed the individual was working for 25h per week, and earned £8.37/h. These are typical hours worked and wage received by an average employed graduate of DFN Project SEARCH.
- For scenario (II) shown in the right tab, we assumed the individual had the same demographic characteristics as above, but did not work.
- The potential savings for the government is the amount of Universal Credit the individual becomes eligible for if they are out of work.
  - In Scenario (I), the individual is eligible for £49.98 in Universal Credit.
  - In Scenario (II), the individual becomes eligible for £165.07.
  - Potential Welfare Savings = £165.07 - £49.98 = £115.09.

## Universal Credit

### Step 1: Calculate any Housing Element

Gross rent	£103.85
Deduction due to ineligible services and charges	£0.00
<u>Housing Component</u>	£103.85

### Step 2: Calculate Maximum Universal Credit

*This is made up of elements based on household circumstance*

Standard allowance	£61.23
Housing	£103.85
<u>Maximum Universal Credit</u>	£165.07

### Step 3: Calculate income

*This is 55% of net earned income after application of the work allowance plus non-earned income & income from savings. Private pension contributions are deducted.*

Net earned income	£209.25
Minus work allowance	£0.00
Income after work allowance	£209.25
Earnings for assessment (55% of net earnings)	£115.09
Total income	£115.09
<u>Income for assessment</u>	£115.09

### Step 4: Deduction due to income & savings

*Deduct income from maximum Universal Credit*

Maximum Universal Credit	£165.07
Minus income for assessment	£115.09
<u>Universal Credit</u>	£49.98

## Universal Credit

### Step 1: Calculate any Housing Element

Gross rent	£103.85
Deduction due to ineligible services and charges	£0.00
<u>Housing Component</u>	£103.85

### Step 2: Calculate Maximum Universal Credit

*This is made up of elements based on household circumstance*

Standard allowance	£61.23
Housing	£103.85
<u>Maximum Universal Credit</u>	£165.07

### Step 3: Calculate income

*This is 55% of net earned income after application of the work allowance plus non-earned income & income from savings. Private pension contributions are deducted.*

Total income	£0.00
<u>Income for assessment</u>	£0.00

### Step 4: Deduction due to income & savings

*Deduct income from maximum Universal Credit*

Maximum Universal Credit	£165.07
Minus income for assessment	£0.00
<u>Universal Credit</u>	£165.07



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