**Next Steps South West Impact Report**

**Pre-16 Careerpilot: Jobs & Job Sectors 2021/2**

**Introduction**

This impact report summarises the evaluation survey results collated from the workshop ‘Careerpilot: Jobs & Job Sector’, organised and delivered by Next Steps South West (NSSW) in the academic year 2021/2. NSSW is the regional partnership for the national Office for Students’ (OfS) Uni Connect programme, and covers Cornwall, Devon and Somerset.

The Careerpilot workshops are designed to introduce Key Stage 4 students to the Careerpilot website to help them manage their future educational and career decisions. The ‘Jobs & Job Sectors’ workshop focuses specifically on the first stage of career planning, using the webpages which provide advice on over 800+ jobs. Students are shown how to register with the platform and navigate its pages and tools.

The majority of sessions were delivered in computer suites at target schools in Cornwall, Devon, and Somerset, and were led by NSSW Outreach Officers. Some workshops were further supported by NSSW student ambassadors (SAs) who facilitated the delivery of activities and provided additional information to students about their own experiences of HE and careers. One workshop was hosted live online. In total, 30 schools hosted a workshop which supported approximately 5414 students across the three counties. The workshops were delivered to pre-16 students, primarily in Year 9. See Appendix 1 for details.

Surveys were conducted in Careerpilot sessions and data has been collected and analysed by the NSSW Evaluation Team. In order to measure impact, counter-factual data was collected from a small comparator group, and where possible, appropriate tests have been applied to assess if post-session changes are statistically significant.

**Aims**

The ‘Jobs & Job Sectors’ workshop focuses on helping younger students explore different careers and the entry level qualifications required, giving them the opportunity to consider HE (including HE apprenticeships) within their future career plans. It also encourages students to reflect on their own personal plans and provides impartial tools to help them make informed choices about their next steps.

This outreach intervention aims to address the HE progression barriers: *‘Lack of* *Knowledge of HE*’, ‘*Lack of* *Soft Skills*’, and ‘*Geographical Barriers*’. Desired outcomes and indicators are presented in Appendix 2. Success in achieving short-term outcomes is considered to lead to progress towards longer-term outcomes, as identified in the NSSW Theory of Change.

**Evaluation Design and Data Collection**

For the majority of participants, an anonymous post-session survey was conducted to evaluate the session, comprising quantitative and qualitative questions. In order to collect data from a separate comparator group who had not yet engaged with Careerpilot, students in selected sessions were asked to complete a shorter, pre-session survey instead. 1253 participants completed a post-session survey and 506 participants completed a pre-session survey.

For the selected questions, the grammatical tense was altered accordingly, to ensure consistency between the control and intervention group evaluations. The analysis of the survey responses is presented below.

**Results**

Question 1a.) – d.) post-session survey only

In the post-session survey, participants were asked to respond to five statements relating to the workshop. Figures 1a.) – e.) show the participant responses.

**1a.) I found Careerpilot useful in helping me to explore different job sectors and career options (post-session)**

A total of 83.7% of respondents either agreed or strongly agreed.

**1b.) I have used Careerpilot to explore a career I was previously interested in (post-session)**

A total of 76.7% respondents either agreed or strongly agreed

**1c.) I have used Careerpilot to discover new jobs and their entry requirements (post-session)**

A total of 76.3% of respondents either agreed or strongly agreed.

**1d.) I understand how Careerpilot can help me to find local courses linked to subjects and careers I am interested in (post-session)**

A total of 78.8% of survey respondents either agreed or strongly agreed.

Question 1e.) pre- and post-session surveys

For statement 1e.) ‘Pre’ (control) survey data was available as well as ‘Post’ (intervention) survey data.

**1e.) (Pre-session) I understand about career opportunities available to people who go to university or study at higher education level/graduates**

**(Post-session) I understand *more* about career opportunities available to people who go to university or study at higher education level/graduates**

For this statement, the data shows that prior to a ‘Jobs & Job Sectors’ workshop, students mostly agreed (52.0%) and very few disagreed or strongly disagreed (3%) that they understood career opportunities available to graduates. The post-intervention responses are similar, with ‘Agree’ (51.5%) for the same statement. There were however more students choosing ‘Strongly agree’, with the data showing an 8.1% increase for this option. There was also an 8.9% drop in the number of students who felt ‘Unsure’.

To evaluate whether the response distributions of the two survey groups differed statistically, a Mann-Whitney U test was carried out to compare the ranks for the students who completed the pre-session survey versus those who completed the post-session survey. The Mann-Whitney U test was selected based upon its suitability for a non-normal distribution, and ordinal scaled data.

A statistically significant difference in the ranked scores was found between the two groups (p=<0.05) as shown in Appendix 3. This result confirms that there was a positive change in students’ understanding of career opportunities for graduates following engagement in the workshop.

Question 2) pre- and post-session surveys

Participants were asked ‘How confident are you in researching a future job or career path’ either as a result of the session (intervention) or prior to the session (control). See Figure 2:

Very confident

Fairly confident

Unsure

Not very confident

Not at all confident

**Figure 2.** Pre- and post- session ratings on confidence in researching a future job.

Students who completed a post-session survey reported feeling more confident (77.7% total ‘Very Confident’ and ‘Fairly Confident’) than those who had not yet engaged in the Careerpilot session (60.7% total).The post-session survey data also shows students to be less ‘Unsure’ (17.6%) after taking part, compared to those who had not yet taken part (29.2%). The percentage of students who stated that they were ‘Not very confident’ post-session (2.4%) was notably lower than those who had not received the intervention (9.1%).

A Mann-Whitney U test was also conducted on this survey question. A statistically significant difference in the ranked scores was found between the two groups (p=<0.05) as shown in Appendix 4. This result confirms that there was a positive change in students’ confidence in researching a future job or career path following participation in the session.

Question 3 post-session survey only

To gauge students’ intentions to use Careerpilot independently, the survey asked participants to select from six options on how they might use Careerpilot after the session. The clear majority indicated that they would use Careerpilot again (92.1% of responses).

Appendix 5 highlights that, most commonly, students intended to use the Careerpilot website for looking further into future career options. Students also reported that they would use it to research qualifications needed and to explore post-16 study options.

A small number of students also specified a different purpose such as “*comparing jobs*” and “*looking at what the job involves*” but those who selected ‘Other’ mostly did not leave a response or indicated that they were unsure if they would use it again. A small number of students stated that they intended to show the platform to family.

Question 4 pre- and post-session surveys

The surveys concluded by asking pre- and post- participants to provide an example of a graduate career or job. Due to the open nature of this survey question, the students’ responses were wide ranging and responses have been categorised into different job sectors.

Figure 3 shows the six most frequently cited job sectors. For data on all twenty-two job sectors, see Appendix 6.

**Figure 3.** Most frequently cited examples of graduate jobs

Figure 3 illustrates a difference in the types of jobs mentioned by the two survey groups. The pre-session group mostly answered this question with more generic roles e.g., “*Doctor/Nurse*”. The other most frequently listed professions were mainly from well-known employment areas such as teacher, scientist, vet, and lawyer.

In comparison, Figure 3 also shows that students who answered the survey post-session listed jobs in the medical professions less often, and gave a broader range of roles, most frequently in the creative arts and uniformed services sectors. There is also evidence that participants understood more about the range of specific jobs within a sector e.g., the medical profession, with examples such as “*Paediatrician*”, “*Radiographer*”, “*Dietitian*” and “*Physiotherapist*”, rather than doctor or nurse. See Appendix 6 for full details.

To investigate the link between the observed job sector frequencies and workshop attendance, two Chi-squared tests for independence were conducted:

The first test (*test statistic x²=50.05; df=2*) analysed the three categories, the *Doctor/Nurse/Medic*’, ‘*Education/Teaching*’ and ‘*Science Laboratory/Mathematics*’ sectors, which saw the largest decrease in response frequency between the pre- and post-session surveys.

The second test (*test statistic x²=7.49; df= 2*) was carried out for three categories, the ‘*Creative Art/Design*’, ‘*Security/Uniformed and Protective Services*’, and ‘*Sports/Health Fitness/Leisure*’ sectors, which saw the largest increase in response frequency between the pre- and post- session surveys.

Both statistical tests showed there to be a significant difference in the survey responses (p=<0.05) between the control group and intervention group. It can therefore be confirmed that having attended a workshop, students cited more specific graduate jobs, and from a broader range of sectors; specifically fewer in the doctor/teacher/science areas and more in the creative/uniformed/sports sectors.

**Conclusions**

The analysed data presented in this report demonstrates that the ‘Careerpilot: Jobs & Job Sectors’ workshop had a positive influence on students’ learning, knowledge and skills. From the analysis of responses to Question 1 a.) - d), it can be stated that participants had a positive experience with Careerpilot and had used it to research regional HE opportunities and to expand their knowledge of personally relevant career options.

Evidence of statistical significance enables the following conclusions to be made:

* There was a positive change in students’ understanding of career opportunities for graduates following engagement (Q1.e) This change was most likely brought about by the increase in ‘Strongly agree’ responses and the decrease in the ‘Unsure’ responses from the post-session respondents.
* Engagement in the intervention led to students having a greater level of self-confidence in researching a future job or career path (Q2)
* Participation in the session expanded students’ knowledge into a wider range of graduate career options, and improved understanding of graduate professions (Q4)

The majority of participants reported that they intended to use Careerpilot again, indicating that it would be used for further, independent research.

**Impact**

The conclusions drawn from this analysis indicate that the workshop addressed the stated barriers to HE progression. Participants increased their knowledge of HE, developed their research skills and learnt more about regional HE opportunities, compared with the comparator group. The workshop can therefore be considered impactful, and all desired outcomes of the session were achieved and exceeded. See Appendix 7.

**Appendices**

**Appendix 1.** Delivered to the following schools and colleges in 2021/2:

ACE School Bretonside, Bideford College, Bodmin College\*, Brannel School\*, Coombe Dean School\*, Fowey River Academy\*, Great Torrington School\*, Haygrove School\*, Heathfield Community School, Hele’s School\*, Marine Academy Plymouth, Notre Dame Plymouth\*, Paignton Academy, Pool Academy\*, Redruth School, Robert Black Science College, St Boniface’s RC College, St Ives School\*, St Luke’s C of E School, Teign School, Teignmouth Community School\*, The Blue School, The Castle School\*, The Ilfracombe Academy, Tiverton High School\*, Torpoint Community College\*, Torquay Academy\*, Uffculme School\*, UTC Plymouth\*, Whitstone School\*

*\*completed surveys*

**Total number of students:** ~5414

**Appendix 2.** How success of the workshop is measured.

|  |  |  |  |
| --- | --- | --- | --- |
| **Barrier to HE** | **Short-term outcomes** | **Indicators** | **Long term outcomes** |
| **Knowledge of HE** | Increased knowledge of graduate opportunities | Increased knowledge of graduate opportunities for **≥ 60% students** | Support students to raise their aspirations for HE progression’  Develop students’ knowledge and awareness of the benefits of HE and graduate employment’  Develop students’ knowledge and awareness of their local and regional HE context, including HE course options and relevant LMI. |
| **Soft Skills** | Increased understanding of job sectors | Increased understanding of job sectors for **≥ 60% students** |
| **Geography** | Increase knowledge of LMI and regional post-16 courses | Increased knowledge of graduate jobs for **≥ 40% students** |

**Appendix 3.** Q1e. Test to see whether there is a statistical difference in the agree/disagree responses between those who had engaged in Careerpilot: Jobs and Job Sectors compared with those who had not.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **N** | **Median** | **IQR** | **Mean rank** | **Mann-Whitney U** | **Z Value** | **p Value** |
| **Control group** | 506 | 4 | 3-4 | 232.8 | 2.8124E05 | -4.0465 | 5.198E-05  (p=<0.05) |
| **Intervention group** | 1253 | 4 | 4-4 | 647.2 |

**Appendix 4.** Q2. Test to see whether there is a statistical difference in the level of self-confidence between students who had engaged in Careerpilot: Jobs and Job Sectors compared with those who had not.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **N** | **Median** | **IQR** | **Mean rank** | **Mann-Whitney U** | **z Value** | **p Value** |
| **Control group** | 506 | 4 | 3-4 | 220.5 | 2.5958E05 | -6.6786 | 2.4116E-11  (p=<0.05) |
| **Intervention group** | 1253 | 4 | 4-4 | 659.5 |

**Appendix 5.** Students’ responses on how they would use Careerpilot after the session.

|  |  |  |  |
| --- | --- | --- | --- |
| **N responses = 1253** | | | |
| **Survey choice** | **Count (n)** | **Percentage of answers** | **Percentage of surveys** |
| **Looking at career options** | 817 | 41.4% | 65.2% |
| **Researching the qualifications needed for a chosen career path or course** | 463 | 23.5% | 37.0% |
| **Researching post-16 study options (college/ 6th form / apprenticeships)** | 311 | 15.8% | 24.8% |
| **Showing the site to family** | 203 | 10.3% | 16.2% |
| **I don’t intend to use it again** | 155 | 7.9% | 12.4% |
| **Other** | 23 | 1.2% | 1.8% |
| **Total** | **1972** | **100%** | **N/A** |

As respondents could select more than one option, some students have contributed more than once to the overall tallies; percentages are shown for both the count of answers (n=1972) and for the total number of unique responses (n=1253).

**Appendix 6.** Survey responses of examples of graduate jobs.

Blanks, unrelated answers and ‘not sure’ responses are not shown. Job categories displayed in Figure 3 are highlighted in light blue.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Job Sector** | **Pre**  **count** | **Post**  **count** | **Pre-**  **% of total** | **Post-**  **% of total** | **Absolute change %** |
| **Admin/Business/ Management** | 10 | 10 | 1.7% | 0.9% | -0.8% |
| **Animal Care/Land and Environment** | 35 | 76 | 5.8% | 6.5% | 0.7% |
| **Automotive Services** | 4 | 18 | 0.7% | 1.5% | 0.9% |
| **Banking/Finance** | 5 | 25 | 0.8% | 2.1% | 1.3% |
| **Computing/IT** | 7 | 55 | 1.2% | 4.7% | 3.5% |
| **Creative Arts/Design** | 8 | 142 | 1.3% | 12.1% | 10.8% |
| **Doctor/Nurse/Medic** | 244 | 47 | 40.5% | 4.0% | -36.4% |
| **Engineering/Manufacturing** | 20 | 63 | 3.3% | 5.4% | 2.1% |
| **Hair and Beauty** | 1 | 35 | 0.2% | 3.0% | 2.8% |
| **Heritage/Culture/Library** | 1 | 10 | 0.2% | 0.9% | 0.7% |
| **Hospitality/Catering/Tourism** | 2 | 54 | 0.3% | 4.6% | 4.3% |
| **Law/Legal** | 59 | 83 | 9.8% | 7.1% | -2.7% |
| **Marketing/Media/Internet** | 2 | 32 | 0.3% | 2.7% | 2.4% |
| **Other Healthcare** | 15 | 84 | 2.5% | 7.2% | 4.7% |
| **Property/Construction** | 13 | 74 | 2.2% | 6.3% | 4.2% |
| **Retail/Customer Services** | 2 | 7 | 0.3% | 0.6% | 0.3% |
| **Science/Laboratory/Mathematics** | 57 | 57 | 9.5% | 4.9% | -4.6% |
| **Security/Uniformed and Protective Services** | 17 | 115 | 2.8% | 9.8% | 7.0% |
| **Social Care/Caring Services** | 6 | 26 | 1.0% | 2.2% | 1.2% |
| **Sports/Health Fitness/Leisure** | 4 | 87 | 0.7% | 7.4% | 6.8% |
| **Teaching/Education** | 87 | 44 | 14.4% | 3.8% | -10.7% |
| **Transport/Distribution and Logistics** | 4 | 25 | 0.7% | 2.1% | 1.5% |

**Appendix 7.** Jobs and Job Sectors outcomes 2021/2.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Barrier to HE** | **Short-term outcomes** | **Indicators** | **Evidence** | **Outcome** |
| **Lack of Knowledge of HE** | Increased knowledge of graduate opportunities | Increased knowledge of graduate opportunities for **≥ 60% students** | 76.7% had used Careerpilot to explore a career they were interested in  76.4% had used Careerpilot to discover new jobs and their entry requirements  75.8% understood more about career opportunities for graduates  85.3% could list at least one career or job that they researched that requires a HE degree  Target 60%: Result 75.8+% | **Achieved**  Exceeded |
| **Lack of Soft Skills** | Increased understanding of job sectors | Increased understanding of job sectors for **≥ 60% students** | 83.7% found Careerpilot useful in helping to explore different jobs and careers  92.1% specified that they would use Careerpilot again, primarily to look at career options  Target 60%: Result 83.7+% | **Achieved**  **E**xceeded |
| **Geography** | Increase knowledge of LMI and regional post-16 courses | Increased knowledge of graduate jobs for **≥ 40% students** | 78.9% understood how Careerpilot can help to find local courses linked to subject/careers of interest  Target 40%: Result 78.9% | **Achieved**  **E**xceeded |