



| Activity name   | KS4 Careerpilot: Jobs & Job Sectors  |
|---|--|
| Date  | Tranche 6 (Sept 2021 - Aug 2022)   |
| Total number of students                                    | ~5414  |
| Total number of target students                             | ~1565  |
| Institutions involved * Institutions that completed surveys | 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* |

### Introduction

This impact report summarises the evaluation survey results collated from 'Careerpilot: Jobs & Job Sector' workshops organised and delivered by Next Steps South West (NSSW). NSSW is the regional provision for the Office for Students' (OfS) Uni Connect programme. The workshops were delivered to pre-16, but primarily Year 9 students, during the 2021-2022 academic year which corresponds to the NSSW Tranche 6 (T6) period.

The Careerpilot workshops are designed to introduce KS4 students to the Careerpilot online platform to help them manage their future educational and career decisions. The 'Jobs & Job Sectors' session focuses specifically on the first stage of career planning and highlights the part of the platform which provides advice on over 800+jobs and their entry requirements. Students are shown how to register with the platform and navigate its pages and tools. Careerpilot sessions support students in their progression to HE by helping them understand different career opportunities and how higher education relates to each different pathway. The activity aims to reduce the impact that a lack of HE knowledge may have as a barrier to attending higher education. Due to its focus on independent research of local and national options, the





intervention also addresses the barriers of 'Soft Skills' and 'Geography' referred to in the NSSW Theory of Change.

The majority of sessions were delivered in computer suites at target schools in Cornwall, Devon, and Somerset, and were led by NSSW Institutional Officers (IOs) and County Outreach Officers (COOs). 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. Only one workshop was hosted live online instead of in-person. 'Careerpilot: Jobs & Job Sectors' was mainly delivered to entire year groups, and this enabled both target and non-target students to participate. In total, 30 schools hosted a workshop which supported ~5414 students across the South West.

## **Aims**

The 'Careerpilot: Jobs & Job Sectors' activity focuses on helping younger students explore different careers and their entry qualifications, and it encourages them to consider HE (including HE apprenticeships) within their future career plans. As such it supports in broadening students' understanding of future study options and HE progression pathways that can lead to their preferred career. Concurrently, it encourages students to reflect on their own personal plans and provides impartial tools to help them make an informed choice about their next steps. The intervention thus aims to address the 'Knowledge of HE', 'Soft Skills', and 'Geography' barriers to HE progression identified in the NSSW Theory of Change model.

Success of the activity is measured and evaluated against the targets for the expected short-term outcomes as detailed in table 1 below.

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|---------|-------|---------|---------|----------|------|------|-----------|--|
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| Barrier to HE      | Short-term outcomes                                    | Indicators  |
|--------------------|--|---|
| Knowledge of<br>HE | Increased knowledge of graduate opportunities          | Increased knowledge of graduate opportunities for <u>≥ 60% students</u> |
| 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                 |

## **Evaluation Design and Data Collection**

Evaluation of the workshop for Tranche 6 consisted of a post-activity survey, which was handed out to session participants as either a paper form or as an online link. Students answered anonymously. The survey was designed to evaluate the short-term outcomes and progress towards the medium-term outcomes to 'Support students to raise their aspirations for HE progression', 'Develop students' knowledge and awareness of the benefits of HE and graduate employment', and 'Develop students'





knowledge and awareness of their local and regional HE context, including HE course options and relevant LMI'. A mixture of quantitative and qualitative questions was included.

Several workshop participants were asked to complete a shorter pre-session control survey. For logistical reasons, students who completed the survey prior to the activity were not asked to also complete the survey post-activity. Therefore, it has not been possible to track any individual responses pre and post intervention. However, the pre-activity survey does function as a comparator group of responses from students who had not engaged with Careerpilot before completing the survey. To ensure consistency between the control and intervention group evaluations, comparable questions were asked on both surveys, but the grammatical tense was altered accordingly.

Students who participated in the Careerpilot activity online did not take part in the surveys; the data in this impact evaluation report only includes responses gathered from sessions hosted in schools. Out of the ~5414 students who took part, post-activity survey responses were gathered from 1253 participants and pre-activity survey responses were received from 506 participants. The responses from these surveys are presented and analysed below.

#### Results

To assess how much the session had impacted on students' knowledge of, and ability to use Careerpilot to explore future study and career options, the evaluation survey firstly asked participants to respond to five statements relating to the workshop. Figure 1 summarises the participant responses. From this data, it can be stated that overall, student participants had a positive experience with Careerpilot and had used it to explore personally relevant career options.

83.7% of survey respondents either agreed or strongly agreed with statement a.), that they had found Careerpilot useful in exploring different job sectors and career options. Likewise, most of the responses also agreed or strongly agreed to statements b.) and c.); with the majority of students agreeing that they had managed to use Careerpilot to explore a career they were previously interested in (48.0%) and to discover new jobs and their entry requirements (50.0%). The lower percentages of those who selected 'Disagree' and 'Strongly disagree' to the first three statements is further testament that the session had been useful.

In terms of their ability to use Careerpilot again and specifically in relation to HE, just over three-quarters (78.9%) of respondents stated they 'Strongly agree' or 'Agree' that they now understand how Careerpilot can help them find local courses linked to subjects and careers they are interested in. These results indicate that the session helped a substantial percentage of students to improve their independent research ability and confidence in using the Careerpilot tool.







Figure 1. Students' opinions about statements relating to the session.

Agree

Strongly agree

Unsure

■Pre ■Post

Disagree

Strongly disagree





For statement e.), 'Pre' (control) survey data was available as well as 'Post' (intervention) survey data. For this statement, the data shows that prior to a 'Careerpilot: Jobs & Job Sectors' session, students mostly agreed (52.0%) and very few disagreed or strongly disagreed (2.2%, 0.8% respectively) that they understood about career opportunities available to people who went to university. The responses did not alter much post intervention, as again most students selected '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'. It is therefore likely that the workshop had some positive influence on ensuring students felt more knowledgeable about graduate careers and it had started to help pupils to better understand graduate employment opportunities.

To ascertain whether the response distributions of the two survey groups statistically differed, a Mann-Whitney U test (see appendix 1) was used to compare the ranks for the 506 students who completed a pre-intervention survey versus the 1253 students who completed the post-intervention survey. A Mann-Whitney U test was selected based upon its suitability for a non-normal distribution, and ordinal scaled data. A statistically significant difference between the ranked scores was found between the two groups (p=<0.05). This result confirms that there was a positive change in students' understanding of career opportunities for graduates following engagement. This change was likely exhibited by the increase in 'Strongly agree' responses and decrease in the 'Unsure' responses for the post-activity respondents.

To affirm the answers provided in the first part of the survey, and to evaluate whether the 'Careerpilot' Jobs & Job Sectors' session content had been useful, workshop participants were next asked, as a result of the session, how confident they were in researching a future job or career path. The results for this question are displayed alongside control data in figure 2. Students who completed the survey prior to attending a session were alternatively asked how confident they were more generally.

Students who completed a pre-session survey reported feeling less confident than those who had engaged in the Careerpilot session as 60.7% of students felt 'Confident' or 'Very confident' beforehand compared with 77.7% after the session. Similarly, the pre-session survey data shows students to be more 'Unsure' (29.2%) before taking part compared to those who had taken part (17.6%). A difference of -6.7% in those who reported feeling 'Not very confident' between pre to post results also highlights a positive change in sentiment because of participation. There is therefore evidence to suggest that by taking part in the activity students developed more confidence in their research ability, a key soft skill that can pose a barrier to HE progression for NSSW students.

A Mann-Whitney U test (see appendix 2) also conducted on this survey question showed that significantly (p=<0.05) the confidence ratings are different between the control and intervention groups. The statistic therefore indicates that engagement in





the intervention leads to greater confidence in researching a future job or career path, a difference that is statistically significant.

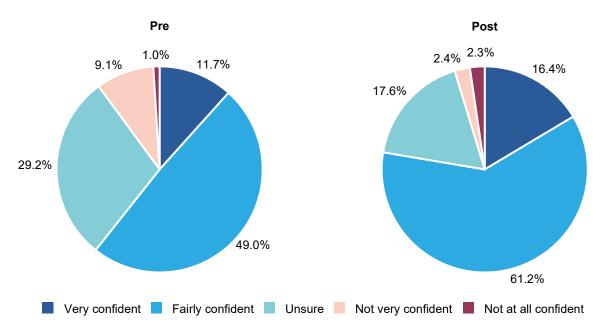


Figure 2. Pre and post session student ratings about how confident they are researching a future job.

To investigate students' inclination towards using Careerpilot again, the survey next asked participants to indicate from six options how they might use Careerpilot after the session. The students' responses can be seen in table 2 below. As respondents could select more than one option, some students have contributed more than once to the overall tallies. As such, the table below shows percentages calculated for both the count of answers (n=1972) and for the total number of unique responses (n=1253).

**Table 2.** Students' thoughts about how they will 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                       | 157.4                     |  |  |  |  |  |  |

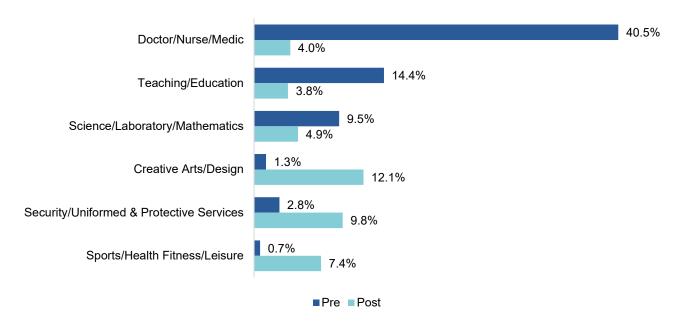
Table 2 highlights that most commonly, students intended to use the Careerpilot platform for looking further at future career options (n=817). Students also reported that they would be keen to use it to research qualifications needed (n=463) and to





research post-16 study options (n=311). Relatively fewer students intended to show the platform to family (n=203). A small number of students (n=23) also specified a different purpose such as "comparing jobs" and "looking at what the job involves" but primarily those who selected 'Other' either did not leave a response or indicated that they were unsure e.g., "I do not know" if they would use it again. As the clear majority (92.1%) of answers indicated that the Careerpilot platform would be used again, and in multiple ways, the data indicates that the students likely found it useful for researching future careers and study pathways.

The last survey question asked session participants to provide an example of a career or job that they researched during the workshop that required a university degree or higher education study. This sought to confirm if students had been using the Careerpilot platform to explore jobs in relation to HE, and if those explorations had improved their knowledge of graduate opportunities and careers. Due to the open nature of this survey question, the students' responses were wide ranging. As such, the responses were categorised into different job sectors to help structure the data for analysis. Pre-survey respondents were also asked to provide an example of a job or career requiring HE, and similarly the responses were grouped by the same job sector categories. The results for the six prominent job sectors from the pre- and post- survey responses are displayed in figure 3. For an in-depth look at the data for all twenty-two job sectors see appendix 3.



**Figure 3.** Jobs/careers that are considered to require a university degree or higher education study. Only the highest percentage change sectors between pre and post answers are shown.

Figure 3 illustrates a difference in the types of jobs being mentioned by the two survey groups. Those who answered the survey prior to the session mostly answered this question with more generic roles e.g., "Doctor/Nurse". They also frequently listed other professions related to well-known employment areas such as teacher, scientist, vet,





and lawyer. In comparison, figure 3 shows that students who answered the survey post-activity listed jobs in the medical professions less frequently, giving a broader range of roles, most frequently in the creative arts and uniformed services sectors. The broader range of jobs mentioned by session participants is also evident in appendix 3 which details 17 job sectors that saw a positive percentage change between the pre and post survey responses.

There is also evidence that participants understood more about the range of specific jobs e.g., within the medical profession, such as "Paediatrician", "Radiographer", "Dietitian" and "Physiotherapist", rather than doctor or nurse. This provides evidence of the impact of the session in strengthening the students' understanding of what constitutes a graduate role, and in expanding their knowledge into a wider range of career options for those with HE qualifications.

To investigate whether there was any link between the observed job sector frequencies and workshop attendance or not, two Chi-squared tests for independence were conducted. The first test (test statistic  $x^2=50.05$ ; df=2) analysed the three categorises, the Doctor/Nurse/Medic', 'Education/Teaching' and 'Science Laboratory/Mathematics' sectors, which saw the largest decrease in response frequency between the pre and post surveys. The second test (test statistic  $x^2=7.49$ ; df=2) was made for the 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 surveys. Both statistical tests showed there to be a significant (p=<0.05) difference in the survey responses between the control group and intervention group. It can therefore be confirmed that having attended a session, students specified different jobs as requiring HE; specifically fewer in the doctor/teacher/science areas and more in the creative/uniformed/sports areas. The statistics thus also verify the suggestion that the session and Careerpilot website provided greater opportunity in which to explore different job areas that require a university qualification, as well as improved knowledge about what constitutes a graduate profession.

## Conclusion

Overall, the survey data presented and analysed in this report demonstrates that the 'Careerpilot: Jobs & Job Sectors' workshop had a positive influence on students' learning across Tranche 6. As a tool to explore future study and career options, survey participants identified Careerpilot as being useful and agreed that they had managed to use it to explore new jobs and associated HE entry requirements (see figure 1). Students in fact managed to explore many different jobs that require higher education as evidenced by the range of job categories determined for the last survey question (see appendix 3). Engagement with Careerpilot also resulted in participants agreeing that they now understood how to use the tool to find local courses for subjects and jobs they are interested (see figure 1). The majority of participants further indicated





that they intended to use Careerpilot again (see table 2), and that they were now confident in being able to research a future job or career path (see figure 2).

Familiarising students with Careerpilot in KS4 (years 9-11), helps them to understand the different elements of job and career planning, and the factors that need to be considered when thinking about future career options of interest. Additionally, the Careerpilot activity sets students up in being able to understand more of the benefits of HE-study, improve their exploration and investigation skills, and raise their aspirations. All of which can be barriers to HE progression. The impact of the session in relation to the NSSW barriers to higher education is shown in table 3.

Table 3. Jobs and Job Sectors outcomes achieved in T6.

| Barrier to<br>HE                              | Short-term outcomes  | Indicators  | Evidence  | Outcome<br>Achieved |  |
|---|--|---|---|---------------------|--|
|   |  |   | 76.7% had used Careerpilot<br>to explore a career<br>interested in                                    |                     |  |
| Knowledge knowledge of graduate opportunities | Increased knowledge of                                       | 76.4% had used Careerpilot to discover new job and their entry requirements |   |                     |  |
|   | graduate opportunities for <u>≥</u> 60% students             | 75.8% understood more about career opportunities for graduates              | Achieved  |                     |  |
|   |  |   | 85.3% could list at least one career or job that they researched that requires a HE degree            |                     |  |
|   |  |   | Target 60%: Result 75.8+%   |                     |  |
|   | Increased  | Increased understanding of  | 83.7% found Careerpilot useful in helping to explore different jobs and careers                       |                     |  |
| Soft Skills                                   | understanding of job<br>sectors                              | job sectors for <u>≥ 60%</u> students                                       | 92.1% specified that they would use Careerpilot again, primarily to look at career options            | Achieved            |  |
|   |  |   | Target 60%: Result 83.7+%   |                     |  |
| Geography                                     | Increase knowledge<br>of LMI and regional<br>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 interest in | Achieved            |  |
| Geography                                     | _  | · —   |   | Aomove              |  |

Table 3 indicates that the expected outcomes of the session have been achieved and exceeded, with the Careerpilot activity making significant impact on the 'Soft Skills' and 'Geography' barriers. Students now have an increased knowledge of graduate employment opportunities and increased knowledge of labour market information and





local post-16 study options. Likewise, Careerpilot sessions had a considerable impact on pupils' ability to explore different jobs and career sectors, and many would use the tool again. This positive impact on the barriers to HE progression means the 'Careerpilot: Jobs & Job Sectors' activity is well designed and supportive to young people.





# **Appendix**

**Appendix 1.** Test to see whether there is a statistical difference in the agree/disagree sentiments between those who engaged in Careerpilot: Jobs and Job Sectors compared with those who did not.

|                    | N    | Median | IQR | Mean<br>rank | Mann-<br>Whitney U | Z Value     | p Value   |
|--------------------|------|--------|-----|--------------|--------------------|-------------|-----------|
| Control group      | 506  | 4      | 3-4 | 232.8        | 2 9124505          | E05 -4.0465 | 5.198E-05 |
| Intervention group | 1253 | 4      | 4-4 | 647.2        | 2.8124E05          |             | (p=<0.05) |

**Appendix 2.** Test to see whether there is a statistical difference in the confidence ratings between those who engaged in Careerpilot: Jobs and Job Sectors compared with those who did not.

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

**Appendix 3.** Survey responses about a job or career students thought needed HE-study, and that they had explored during the intervention. Blank and unrelated answers, and answers where students were not sure are not shown. Job categories displayed in figure 3 are highlighted in light blue.

|  | Pre   | Post  | Pre        | Post       | Absolute |
|--|-------|-------|------------|------------|----------|
|  | count | count | % of total | % of total | change % |
| Administration/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%     |