

## Meaningful Learning Experiences

|                         |   |  |
|-------------------------|---|--|
| Strategic Commitment    | ✓ | Part of a pilot supported by a large academy trust         |
| Curriculum Provision    | ✓ | Year 8 Maths topic about Scatter Graphs and Bivariate Data |
| Employer Partnerships   | ✓ | Part of an initiative to promote Allied Health Professions |
| Reflective Young People | ✓ | Providing real contexts for data analysis                  |
| Informed Career Choices | ✓ | Broadening understanding about careers in the NHS          |

### Year 8 students use real data from Podiatrists to apply learning about Scatter Graphs

Criteria define successful learning about Scatter Graphs in Year 8 Maths for students at Greensward Academy in Hockley, Essex:

- Can I plot points on a scatter graph?
- Can I describe the relationship between the data, including correlation?
- Can I draw and use a "line of best fit" to estimate results?

As part of a wider programme involving Health Education England, the project plan proposed that: *'Students would choose one of two sets of data provided by the College of Podiatry, along with background information about the profession and the specific health issues for elderly patients and children. They would be challenged to apply their maths skills to display the data and show the link between treatment and improvement – helping to show the value of professional care provided by podiatrists.'*

Data for two case studies was provided by the Head of Education & Professional Development at the College of Podiatry and additional input was provided by the Emeritus Professor at Canterbury Christ Church University with a special interest in *'diabetic foot research and biomechanics of locomotion for people who are healthy and those who are poorly'*.

The project was planned in the middle of a COVID lockdown period, although completion was only possible when students returned to the classroom, where they all had access to graph paper.

### Benefits for the Students

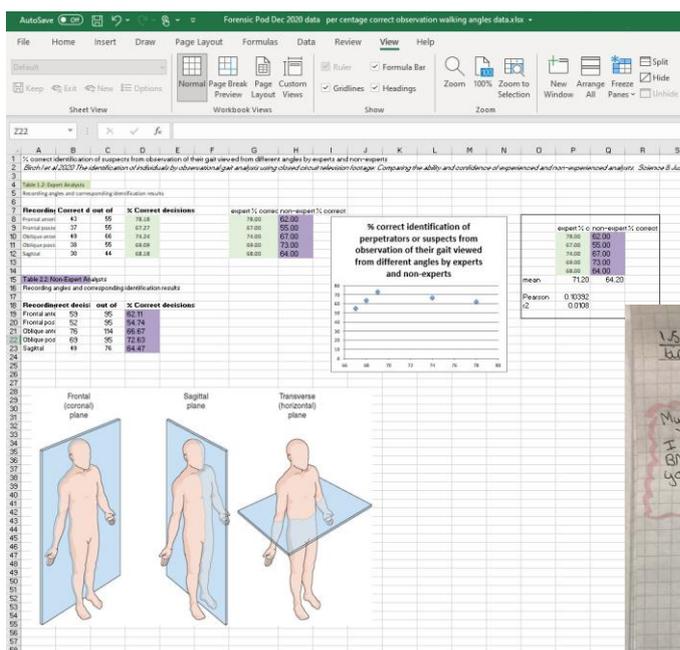
- Students received feedback from the Professor: *'It is so interesting to see your work, the careful plotting of data on your graphs and your conclusions. It's clear you have thought hard. You have spotted that as body mass increases there is a relationship of increasing visits to the GP increase ...'* She went on to describe examples, symptoms and treatments.
- *'Thank you for giving my class the chance to work on and analyse some data and info on BMI and podiatry.'* (Teacher)

### Benefits for the School

- Current classroom resources used fictitious data, such as sales of scarves vs temperature, exam results in different subjects and distance travelled by a vehicle vs petrol consumption.
- Podiatrists supporting the project provided real data: *'Please find attached the first two cases and data, which we hope are suitable. Have a look through and let us know what you think. We will continue to work up other options in the background.'*

### Benefits for the Employer

- The project helped to promote Podiatry as a valuable health profession and potentially interesting future career path for Key Stage 3 students to consider.
- *'Could the following be passed on to your students? I hope you are pleased with what they have achieved, it's so encouraging to see their thinking.'* (Podiatry Specialist)



The COLLEGE  
of PODIATRY

Year 8 students applied their learning about scatter graphs by using real data provided by professional Podiatrists. Examples of their work were sent back to the College of Podiatry, who provided encouraging feedback and information about the way the profession deals with foot problems.

