CoReD
Collaborative Redesign with schools

Evaluating our new school building.
What do the students think of it?

Context:

School location	Ponteland High School, PELE Trust, Ponteland, Northumberland, UK
Details about students	age range; 11 -18 Years (Year 7-13) approximate number on roll: 1600
School premises	Opened in 2020 On same site: primary school and community spaces: swimming pool, sports hall, café, library
School context	Village, semi-rural
Type of activity	whole school, Post Occupancy Evaluation (POE), student voice
Stage in design process:	in use reflection/POE

Tool used: Survey on Students' School Spaces (S3S)

Rationale for the activity and the tool adopted

(image: ponthigh.org)

Ponteland High School is a large, secondary school supporting the learning of students aged 11-18. The school has reorganised from a three-tier system to a Primary-Secondary model in 2019. As part of the reorganisation, the local council invested significant funds into capital projects in the Ponteland partnership. This resulted in the development of a multi-use site, incorporating two schools (Ponteland Primary and Ponteland High School) and multi-leisure facilities on one site.

The Secondary school was designed around a Planned Admission Number of 240 students to feed into the school from Year 7. Class and social spaces were designed around this planned number. The school was opened to students in October 2020 and is a state-of-the-art learning space with excellent facilities. Some of the facilities are covered under a shared-use agreement with community use factored in after 5 pm.

The school Leadership Team were keen to investigate the opportunity of contributing to the CoReD project by gathering evidence from key users about their experiences and recommendations relating to the learning spaces used. The Senior Leadership Team recognise that whilst the wonderful facilities contribute to a strong educational experience for students, the 'lived' experience may vary between groups of students, depending on their perceptions. The school was keen to learn more about which spaces were particularly valued as well as those areas of school which were less desirable or less used.

It was decided that the most appropriate tool to conduct the evaluation with the students was the Survey on Students' School Spaces (S3S). This would allow both a large-scale quick response from all students through the Phase 1 online survey (which could be done on a phone or computer) and then a deeper more focussed exploration in phase 2 through the focus groups with a sample of students.

The Survey on Student School Spaces is a tool aiming to promote the critical thinking and evaluation of ideas surrounding adapting school spaces, with the input of the students taken into consideration. Initially, it consists of an analysis of specific school spaces, with a focus on how students move through the spaces and how effective their use is for teaching and learning. Next, focus groups are formed to interpret and gain detail about the students' opinions and use of spaces. Finally, using the data gathered, the tool presents recommendations and possibilities on how to improve spaces. Overall, the goal of this tool is to improve school spaces in an inclusive way. Allowing students to have a sense of ownership and acknowledging the need to adapt school spaces in order to significantly improve teaching and learning.

Case study description: The Process

Stage 1

The Deputy Head Teacher and the team from Newcastle University took photos of the main formal and informal spaces used by the students and inserted these into the google forms online survey as per the instructions on the CoReD S3S tool webpage. https://www.ncl.ac.uk/cored/tools/school-spaces/

Careful consideration was given to a variety of learning spaces in school, with questions designed to sample student opinion on the following areas:

- Dining facilities

- Classroom environments

- Specialist teaching rooms (Technology and Science labs)

- Outdoor Social spaces

- Indoor Social spaces

- Wider learning resource spaces (library)
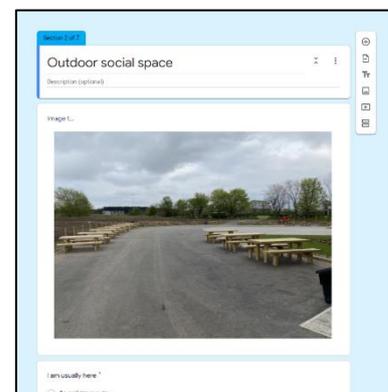
The survey took 15 minutes to complete and was carried out in tutor time during morning registrations. The online survey was completed by 674 students from Years 7-10 (aged 11-16 years)

The google forms survey automatically created bar charts, pie charts and tables and collated the responses to the open questions so that these could be analysed. For example:
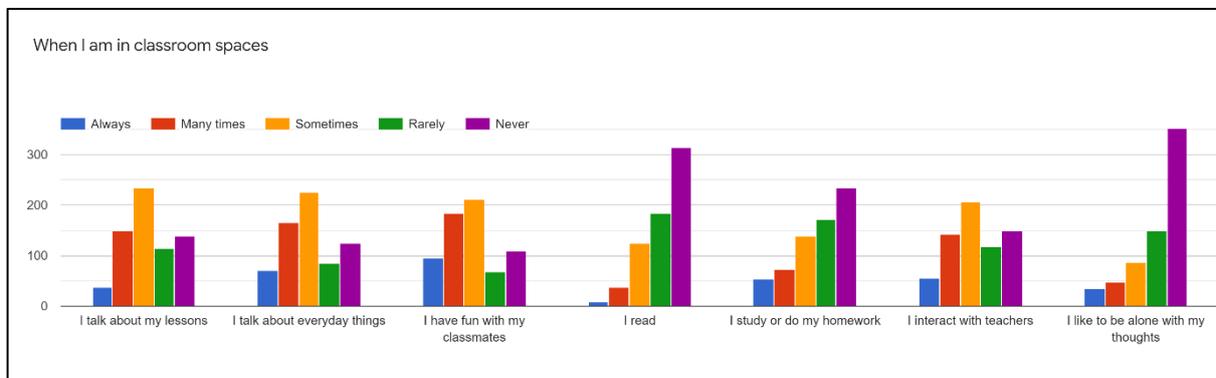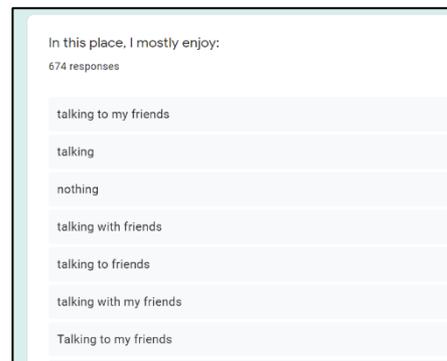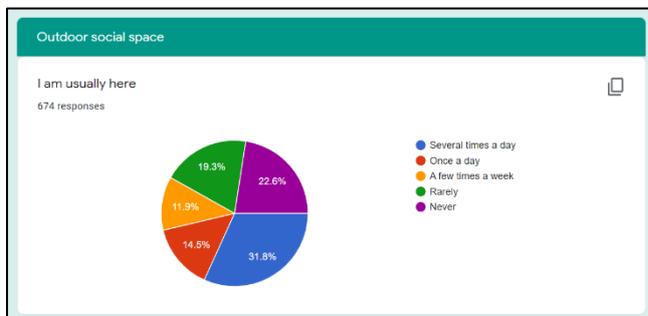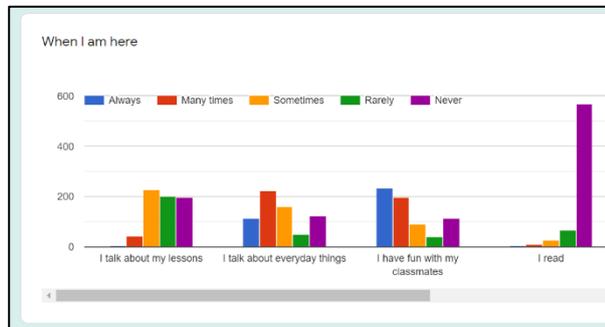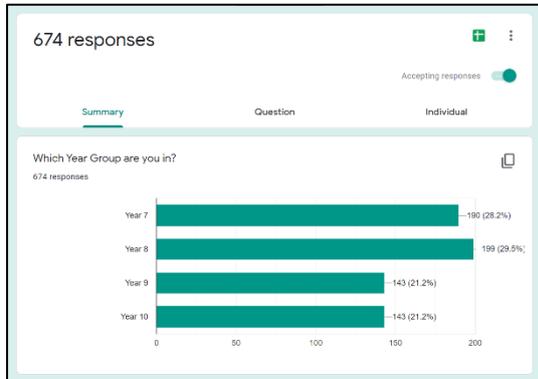
At this stage in the process, the decision was made by the Deputy Head Teacher and the Newcastle University team, that the data analysis and stage 2 focus groups would be undertaken by some interested Sixth Form students (aged 17-18 years) as an extra-curricular research project. Their results would be presented to the school leadership team. This would allow the students to develop a range of skills (data analysis, conducting focus groups, report writing, presenting information) which could be used on job or university application forms.

Stage 2

12 students volunteered to take part in Stage 2 of the process. They were brought together in December 2021 with the Deputy Head Teacher and Newcastle University team outlining the purpose

of the research and providing them with the survey data and the instructions for using the Survey on Student School Spaces.

Focus groups of 8-10 students were identified in Year 7-10. The students were timetabled for a 'walk through' of each location identified in the survey, with 15 min evaluations taking place in each learning space. Sixth Form students worked in pairs, interviewing each group of students about their views on each space.

Findings: written by the student researchers

1) Classrooms:

The main ideas that were uncovered by the surveys was that the aspect of the lessons which the students enjoyed the most was anything related to interacting with other members of the class, particularly talking with friends and working with groups to have discussions about the work. The main concerns within the data was the comfort level (the issue mentioned most was the chairs being too hard), and the spacing between the tables (too close together). Another less significant factor being lighting, too bright yet too dark with the blinds down, however this could be due to the time of year of which the survey was carried out.

It is clear that students enjoy lessons and that the nature of lessons is far more important to them than the actual physical characteristics of the space. There was an overall perception that rooms were smaller than in the previous building but it was not seen as a major limiting factor.

2) Eating Areas

The first group that we interviewed were Year 10 students. We found that the majority of the students use the dining street to socialise with their friends, even though they don't always get to sit with each other. In their opinion, they would appreciate a bigger space to sit and eat their food and talk to their friends. The average rating they gave the dining street was 3/5.

The second group we met with were the year 9s who used the dining hall more to eat their food rather than talk to their friends. They said that it gets way too busy to sit there for long with each other and that more seating was needed in the area to make it more enjoyable to talk to their friends without getting split up. They agreed with each other that the food selection was okay but more choice would be greatly appreciated. Furthermore, the students mentioned that the seating could be more comfortable to improve the size of the area as well as the comfort. The average rating they gave to the dining street was 3.5/5.

The third group of students we interviewed were the year 7s, however their answers were extremely similar to the fourth group we saw, which were the year 8s. The majority agreed that they used the dining street only for eating and not much else. A few from each group mentioned that more space and colour would make the dining street much nicer and better, as well as lower prices for some of the food. More vegan selection would be greatly appreciated. The Year 8s mentioned that more space between each of the benches next to the tables would mean more people could fit next to each other, therefore friendship groups wouldn't get split up. The average rating for both the groups for the dining street was 3.5/5.

All the groups had a lot of ideas and were happy to share, which made the interviews easier to gather the information we needed. In particular, the year 7s and 8s were much happier to voice their opinions which was quite interesting. In conclusion, the overall thought was that the dining street would be more popular if the seating was more comfortable and there were more spaces between the benches. Also, a greater selection of food would be appreciated by every group.

3) Science / Technology Classrooms

In a series of questions about the school's science and technology labs, the students said they thought the chairs were uncomfortable and needed cushioning or padding, but also the majority of these students preferred to have backs on chairs. They also explained that the lighting was too bright at the front of the classroom which then glared off the board and made it difficult for the students to see what they teachers were writing or explaining; many of the students, particularly in year 8, thought the North side of the buildings

science and tech labs were too bright during the day whereas the South side of the building was too dark. We then found out that the students quite liked the style of desks in the tech rooms and the layout in the science rooms, however they said the layout of the food labs were too long so they were sat far away from the board which made it difficult for the students to hear and see what was happening as well. One of the main ideas pupils brought to the focus group was that although the large space is effective and useful for practical experiments or cooking, this becomes detrimental when doing theory-based learning as the teacher is too far away. One student said they 'feel far away from the rest of the class' when asked how included they felt in the layout, whereas others said they 'enjoy being able to see everybody else'.

The spaces feel positive with the layout of desks positioned in the U-shape but students do prefer sitting close to friends in order to make lessons and the space more enjoyable to work in. Students in older year groups were more critical of the lack of desk space which they found impractical where plug sockets and gas taps had been installed leaving half of the desk unusable, especially when trying to use textbooks, so they should be moved backwards to make more of the desk space available. This was something that had come up in the survey so this was already expected. Students in younger year groups were still concerned about this, but were generally positive about the overall layout of the rooms and the space available. Perhaps this could be due to the higher level of focus and theory lessons needed for exams as you progress through the school year groups. and they thought these should be moved back into the excess space behind in order to make it easier to work.

More practical learning was something the students wanted to see implemented into their timetables such as more experiments, but the majority of students felt strongly that the range of equipment available was very good. We also found that when asked about whether the space they liked was used effectively they decided they thought the teacher should move around more to make sure that everything can be heard, but also move the teacher out of the way of the board when the students need to see it. Grouped classrooms was also an idea they liked with having chemistry, biology and physics grouped into different sections rather than being placed anywhere.

4) Outdoor Social Spaces

One of the questions we gained the most beneficial responses from was how well-used outdoor spaces are. This question helped us gauge how popular the space is and whether it needs to be majorly changed in order to increase the popularity or not. The majority of the answers were around 1-2 for all age groups which shows that it is an underused space. Possible reasons for this could be lack of

sheltering from the weather due to it being an outdoor space. It could also be caused by the location of the space because the area itself is quite out of the way and it can seem like a chore to go all the way out to the space just to have to come back again causing the other spaces such as the social areas to look more appealing to the students. It should be noted this data is based on winter-use. I suspect the areas would be more used in the summer months.

We also asked students how the spaces could be improved. Some answers include: make the space less crowded, add more things to do, add a shelter for winter/bad weather. From the range of responses we evaluated that the most requested change to the space was to add a shelter for when the weather gets bad. This shows that the reasoning for a lack of use of the space is that it is

too wet, during some parts of the year, to use on a regular basis. Another response within this question that cropped up a lot was that the space is not cleaned enough. This could be a main factor in the lack of use of the space because students want a clean and safe space to socialise in. A final point about this question that came up multiple times was the students wanted more things to do. This could include having a sports equipment box so that students could play small games on the yard. This would indefinitely increase the usage of this space however the pros and cons must be weighed up when considering this because although the usage of the space will increase the staffing of the space must also increase in order to make sure the space remains safe for all the students.

The final question that was beneficial to our research was question 1 because it talked about the students' thoughts on the size of the space. This is important because if the space is considered too small it can cause overcrowding in the space which can cause the space to be unsafe. On the other hand, if the space is too big it can cause the space to be unnecessarily over staffed which can take teachers who are on duty away from more important duties.

Overall, recommendations to be made include: adding a shelter to the space for when the weather is bad, adding an equipment box to allow games to be played and cleaning the space more regularly. This will increase the usage of this space whilst keeping the space a safe environment for the students.

5) Student Communal Areas

Students had mixed feelings about this space as many people found that it was fairly spacious but it wasn't good for socialising as the sound reverberated around the space a lot. The younger years, especially 7 and 9 used the space a lot more regularly than other year groups and many would have been happier with soft seating and would have liked to be able to eat and drink. There was a clear difference in usage of the social spaces in relation to the age of the students. Our own perceptions based on the survey was that the younger students in Year 7 & 8 make a much greater use of the spaces than the older students in Year 9 & 10. This may be due to the fact that the spaces are not large enough to accommodate large numbers of older students who may be seeking additional spaces in which to socialise.

6) Additional Study Spaces

The majority of the students from different year groups said they didn't use the library and were likely not to use it in the future due to it being so open and noise polluted, however, one of the year 10 students stated that they frequently use the library to read or do their homework. This suggests to us that there is a certain atmosphere created in the library which only a small number of students could work in. The students also justified why they wouldn't necessarily use the library. They stated it was too open and in the middle of school they don't feel private/ comfortable enough to use it often.

Another reason for the students not using the library is that the resources available don't cover a wide demographic or academic range. One student that said they used the library often said she would bring in her own books to read as the books available in the library were "too childish", suggesting the students may use the library if there was a more diverse array of books to choose from.

To fix this problem and make the library more appealing to students, the school could provide more books and resources to give the students more incentive to use it. However, the main problem is with the layout of the library, with it being in the middle of the school and such a big open space, there is far too much noise pollution and zero privacy at all. This is a major negative factor brought up by almost all students across the fouryear groups as a unanimous reason as to why they didn't use the library. This problem could be overcome though, through time, as older students (6th formers) frequently use the library and seem to care less about the open plan and noise.
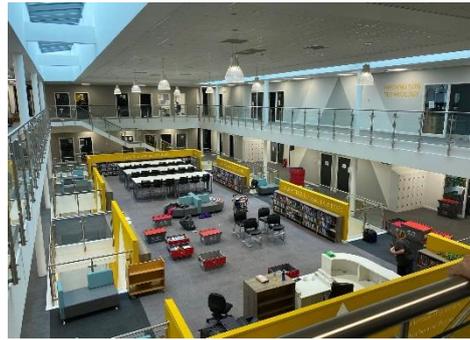
The Students' conclusions:

The data has provided some interesting ideas in relation to the design of the school and the experiences of students within it. Students clearly enjoy the facilities and resources on offer. They make reference to light and comfort being a strong element of the physical infrastructure. They believe the school is well laid out, and is easy to navigate. They made numerous references to learning which implies the quality of the learning experience was more important than the physical characteristics of the building.

Of particular interest was:

● The relationship between age and use of some school facilities. Social spaces were more valued and well-used by the younger students (Year 7 & 8) than the older students. Likewise, the Dining Streets were used differently, depending on the age of the students

● The orientation of the Food Technology rooms was highlighted as of concern during teacher explanations / written tasks based on physical distance from the teacher. Where rooms were designed to be collaborative (the organisation / design of desks) students really appreciated and enjoyed this.

● The library was seen as limited in use because of the overall open layout and plan of this space. Students communicated they did not enjoy the concept of being visible in this space, due to its central focus point in school. Some of the newer learning spaces, most notably the Lecture Theatre, had not been sufficiently used to generate strong opinions / judgements.

● Outdoor social spaces are seasonally dependent on good weather to be effective. More shelter / protection was seen as desirable to ensure year-round use. Currently, students only enjoy using them in the warmer months because of the nature of the open, colder environment outside.

● Students were more interested in the quality of the learning experience rather than the individual characteristics of teaching rooms. They enjoy their classroom spaces, particularly noting light and modern facilities but arguably some students would like more physical space in rooms.

Next steps

The research undertaken by the sixth form students has provided the Deputy Head Teacher with valuable insight into the views of the students more generally and he has already been able to undertake some changes based on the findings.

1. The problematic sight-lines in the science/technology laboratories (the ability to see the teacher/the board when learning theory or watching demonstrations) have been addressed by moving the students to the front when these are taking place.
2. The school is considering how to create shelter in the outdoor social spaces, so that these can be used all year. An outdoor food serving area has recently been opened (May 2022) and creating places that are weather-proof, where this food can be eaten would also address the issue of general outdoor shelter.
3. It is hoped that the new outdoor serving area will also address the issue raised about the lack of space in the dining streets.

Review of the process – Deputy Head Teacher end of project interview

In terms of the process involved when using the Survey of Students' School Spaces (S3S) tool, this was considered to be extremely useful and one that the Deputy Head Teacher felt could be undertaken by teachers, who are generally well-versed in student-voice practices. He considered the quantitative and qualitative data that was produced to be very powerful. He acknowledged that student voice rarely focusses on school space and that the S3S tool could effectively support teachers to do this. However, he raised the point that it was a time-consuming process and that teachers would need some interest in/understanding of research in order to use the quantitative data effectively.

In terms of asking student researchers to undertake the data analysis and focus groups, this was considered to have worked very well, and benefitted the majority of the students – both academically and socially. However, in hindsight the Deputy Head Teacher stated he would select students with a genuine interest and ability as both the data analysis and undertaking the focus groups were challenging and intellectually demanding. Again, the process of involving students was time-consuming and required a commitment from the Deputy Head Teacher in terms of managing, training and supporting the students.

The students also needed to be able to dedicate several days of work to the process- taking part in training, analysing the data, conducting the focus groups and writing the report. Any schools considering adopting the student researcher approach would need to factor in training the students in order to ensure that any data produced would be useful and rigorous.