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Factors affecting educational achievement in Wales

Children and young people's systems mapping
validation workshops



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Mae'r ddogfen hon ar gael yn Gymraeg / This document is available in Welsh.

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1. Background

Education is a building block for health and well-being but not all young people are given the opportunity to reach their potential. There is a persistent educational achievement¹ gap in relation socio-economic disadvantage which has been exacerbated because of the pandemic. Reducing this gap is a priority in Welsh Government's Programme for Government.

Public Health Wales has committed to working with partners to influence education outcomes, taking a systems approach to identify where we can add value. We are focussing on what more can be done to reduce educational achievement socio-economic disadvantage gap to support health, well-being and equity. This complements our work on schools as a healthy setting.

We have undertaken a participatory systems mapping exercise with a range of stakeholders in education and health to look at the factors, and relationships between factors, which affect educational achievement in Wales. As part of validating the draft participatory systems map, we sought feedback from children and young people (CYP).

2. Approach to CYPs' workshops

Following a presentation to the Principal Youth Leads Group which gave an overview of the systems mapping work and the proposed approach for undertaking workshops with CYP, an expression of interest e-mail was sent to youth workers across Wales. Two youth workers, from Conwy County Borough Council and Tofaen County Borough Council agreed to facilitate workshops with existing CYP groups.

The facilitators were asked to complete two tasks with the CYP:

- **Task 1:** *to create rich pictures showing the factors that young people believe can affect educational achievement in Wales.*
- **Task 2:** *to sense check and give feedback on the factors affecting educational achievement identified through the participatory systems mapping exercise with education and health stakeholders.*

Rich pictures were used as a method of engaging and stimulating conversations with CYP. Rich pictures are a picture or drawing of a system or 'situation'.² They are a shared representation of an aspect of reality and usually involve minimal words.

The workshops facilitators were given a facilitation guide and prior to the workshops participated in an online training session led by Public Health Wales. Facilitators were encouraged to follow the steps outlined in the facilitation guide

¹ For the purposes of this briefing we are using the term achievement which incorporates attainment (measured through formal qualifications) and broader life skills.

² For an introduction to rich pictures see [Barbrook-Johnson and Penn \(2022\)](#).

although it was recognised that flexibility would be required depending on the CYP level of motivation and engagement with the activities.

At the start of the workshops, the facilitators gave an overview of the work, answered any questions, and sought consent from the CYP. For the rich picture exercise (task 1) CYP were presented with an example of a rich picture (Annex One) as well as examples of factors (e.g. things at school or at home, or in the place where you live) that affect educational achievement. They were asked to create a rich picture of the factors they believed can affect educational achievement in Wales for children up to the age of 16 / or GCSE level.

For task two, CYP were given lists of factors grouped from the participatory systems map and asked to determine what were the most important factors, if any factors were missing and any other feedback. For the purposes of task two, the wording of the factors identified in the participatory systems mapping exercise were simplified.

After the workshops the facilitators took pictures of the rich pictures and feedback sheets, and these were sent to Public Health Wales.

The workshops were conducted in the medium of English and materials produced in the workshops are therefore only available in English.

3. Findings

3.1 Conwy workshop

Five CYP attended the workshop.

Task 1

Factors identified by the young people that affect educational achievement were (see image 1 in Annex Two):

- Wi-Fi (x3) – ‘bad’ Wi-Fi
- Uniform (x4) – ‘bad’ uniform
- Stress (x2)
- Baking (x3)
- Longer break/more break/more free time/not enough play time (x4)
- We need more PE time/more football/more astro (astroturf) (x3)
- More time together
- Learning
- Religion, why do we learn it?
- School food need more options/more and better food options (x2)
- Hard maths

There are some similarities in the factors identified by the workshop participants and the factors identified by health and educational professionals, for example WiFi, ‘more astro’ which would fit under the category of ‘*Quality of school physical and digital infrastructure*’ and stress which would come under ‘*CYP’s mental health and*

well-being'. Other factors like 'more PE time', 'not enough play time', religion, hard maths, and learning would come under '*quality of curricula*' and potentially '*quality of teaching methods*'.

'Bad uniform' and more and better food options in school are not represented in the systems map.

Task 2

The findings from the first part of task 2 are shown in the tables below for each theme in the participatory systems map. The images from the workshops are shown in Annex Two.

Most important factors in education theme

Factor (simplified wording for workshop)	Factor (original wording from participatory systems map)
Quality of school buildings, classrooms, play areas and IT equipment	<i>Quality of school physical and digital infrastructure</i>
School focuses on young people's health and well-being	<i>Health and well-being focus by schools</i>
Access to school facilities during and outside school hours	<i>Access to school facilities during and outside school hours</i>
Support to help young people move from primary to secondary school	<i>Quality transition planning</i>
Government funding (money) going into education	<i>Appropriate level of investment in educational system in relation to population need</i>

Most important factors in child and family theme

Factor (simplified wording for workshop)	Factor (original wording from participatory systems map)
Young people's confidence	<i>CYP's confidence and self-esteem</i>
Young people's physical health and well-being	<i>Young people's physical health and well-being</i>
Young people's attitudes towards education (interested or not interested)	<i>Young people's attitudes towards education (interested or not interested)</i>
Young people feel comfortable in expressing their gender	<i>Ability to express gender preferences safely</i>
Additional learning needs (autism, dyslexia, dyspraxia, ADHD)	<i>Additional learning needs (autism, dyslexia, dyspraxia, ADHD)</i>
Young person's ability to deal with stress and life ups and downs	<i>CYP's Emotional resilience</i>

Confidence and self-esteem, attitudes towards education and ability to express gender preferences safely form an important cluster of feedback loops in the systems map.

Ten factors were identified in the social and community themes:

Factor (simplified wording for workshop)	Factor (original wording from participatory systems map)
Positive role models in the community (youth workers, police, scouts)	<i>Availability of positive role models in the community</i>
Access to museums, music, theatre and drama	<i>Access to arts in the community</i>
A community that is supportive, inclusive and works together	<i>Community cohesion</i>
Access to safe and active travel (walking, cycling)	<i>Access to safe and active travel (walking, cycling)</i>
Access to extracurricular activities outside of school (sports clubs, volunteering, holiday clubs)	<i>Access to extracurricular activities in the community</i>
Young people's access to youth services	<i>Young people's access to youth services</i>
Access to green and open spaces where young people can play and hang out or play sports	<i>Access to green and recreational space</i>
Lack of money and resources in your town, city or local area	<i>Community deprivation</i>
Young people feeling safe at home, in the street or in their community	<i>Community safety</i>
Unfair treatment of young people because of their ethnicity	<i>Racism</i>

Five factors were identified in the economic theme:

Factor (simplified wording for workshop)	Factor (original wording from participatory systems map)
Income (money) coming into the family home	<i>Household income</i>
Thing affecting the way you live at home (overcrowding, space to play)	<i>Living conditions</i>
Parent or main caregiver's ability to afford school trips and activities outside of school	<i>Primary caregiver's ability to afford school and extra-curricular related expense</i>
Difference in wealth (money) between families of young people in the school	<i>Level of economic inequality within school</i>
How many households are eligible for and receiving free school meals	<i>% of households eligible and receiving FSM</i>

The participants did not identify any factors missing or give any further feedback.

3.2 Torfaen workshops

Two youth workshops were undertaken by youth workers in Torfaen. The youth

workers running the workshops did not fully separate out the activities and they opted to have more of a discussion around the factors (generating lists of the most important) followed by the CYP representing their priorities in the form of drawings.

The youth workers captured what was most important to CYP in both workshops (see images 6 and 7 in Annex Two):

- Too much perfume (perhaps environmental issues)
- School too cold in the winter to learn
- Not enough teachers
- Not enough interventions for students
- Uniform is an issue and barrier to learning
- They want less subjects in the week; would rather focus on fewer
- They want more vocational opportunities/ on the job work experience
- Snow days (not allowed them anymore due to online learning)
- They said later starts with earlier finishes would be better
- Better trained teachers (they were not happy with how some of their teachers spoke to them; 'bad lessons')
- Better school based councillors
- ADHD
- More recreational opportunities
- An outdoor undercover area to hang around in
- 4g pitch (more facilities in general was mentioned)
- Gas/electric and bills in general too high for their parents
- Make stuff cheaper so that we can do more

Many of these factors map onto the factors identified in the participatory systems map such as *environment issues in the school, quality of teaching, additional learning needs, household income, school physical and digital infrastructure, quality of curricula* and more.

Group 1

The workshop started off with a conversation around the lists of factors from the participatory systems map. The youth worker captured what the young people felt was most important for them in relation to educational achievement (see above).

In the second part of the workshop the young people represented their priorities in the form of rich pictures. The young people were presented with rich picture examples and templates as well as examples of factors (e.g. things at school or at home). The factors represented in the rich pictures were as follows (see images 8-10 in annex):

- Stress
- Bullying
- Not allowed to go to the toilet

- Smoking ban (?)
- Truancy/attendance
- 'Late bus' (school transport)
- Cold (being cold in school or at home)
- Sub's (substitute teachers)

Group 2

Like Group 1, in the second part of the workshop the young people represented 'things that affect education in the form of rich pictures. The young people represented the following in their rich pictures (see images 11-15 in Annex Two):

Image 11, 12 and 14:

- Attention seekers/bad behaviour (disturbance in class)
- Incomplete work (?)
- Rules (in school or at home)
- Mental health
- Building access
- Family
- Cost of school trips
- Families need extra help (could be financially or because of ALN children)

Image 13:

- Absence due to sickness
- School uniform
- School trips (assume they mean cost of school trips)
- Not being allowed to leave school grounds
- Top yard??
- Dectorn??
- Only being allowed to go to toilet during breaks and lunch

Image 15:

- Mental health
- Do not feel safe (could be at home, the school or in the community)
- Bad behaviour/attention seekers (disturbance in class)
- Some families need more attention (potentially families with ALN children?)
- Rules (in school or at home)
- Family
- Cost of school trips
- Building access

4. Conclusion

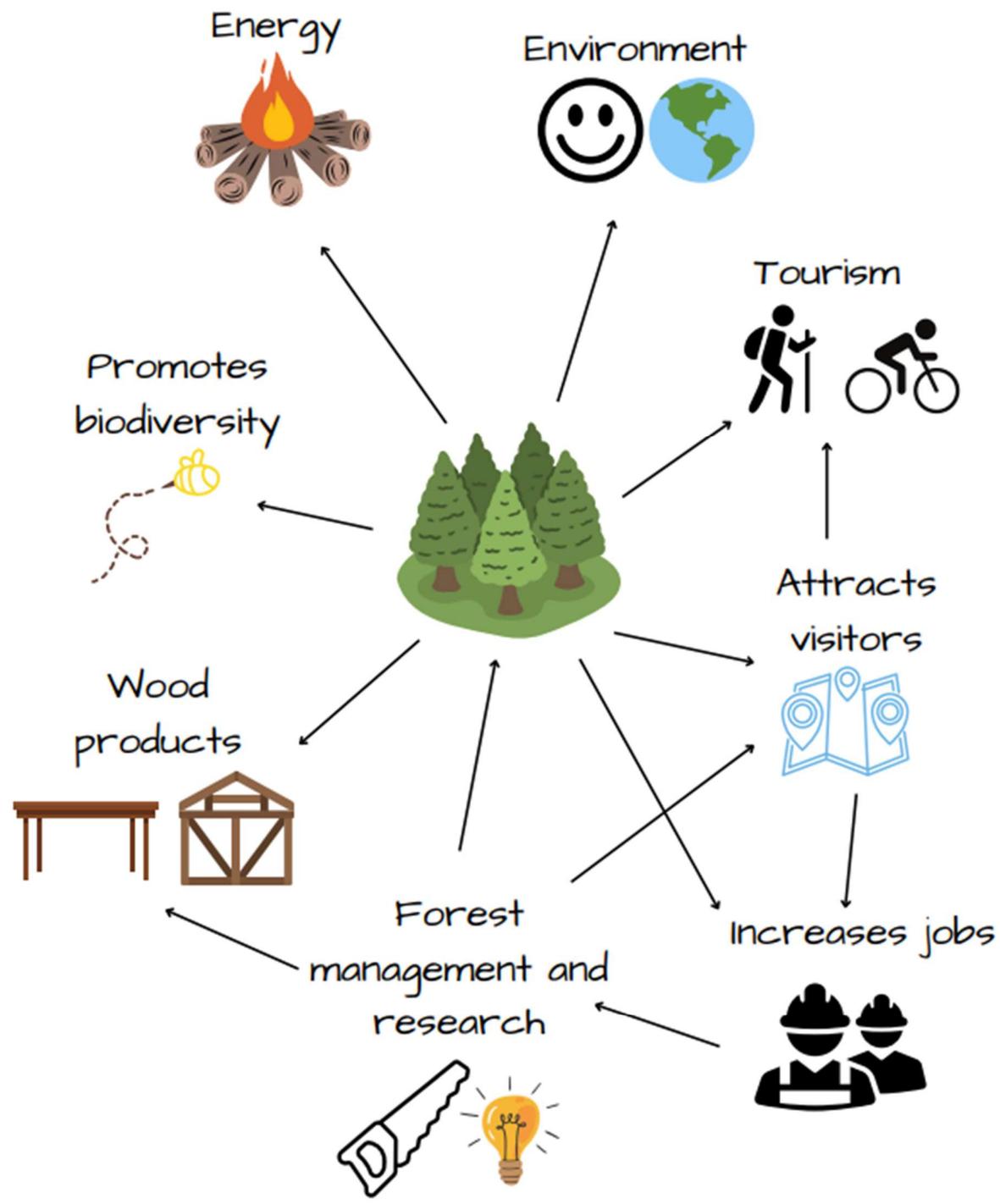
Overall, there were many similarities with the factors identified in the participatory systems map and the factors identified by CYP in the validation workshops. There are some differences including factors like uniform, school transport and school meals. Most factors identified by the CYP are from the education and child and family themes in the draft participatory systems map.

It is important to consider that these are our interpretations of the young people's rich pictures and we were not able to corroborate our interpretation with the participants in the workshops or the facilitators.

We also acknowledge that this was a small sample of young people from two areas in Wales. However, this was a validation exercise to sense check the factors identified by education and health stakeholders on the participatory systems map. Overall, the insights given by the CYP were consistent with participatory systems map.

Annex One: rich picture example

Rich picture example The value of forests



Adapted from Cavana and Adams (2010) Rich picture of a simple forest value chain

Image 2: Conwy, Task 2, education

Education system	
	What's most important?
Quality of school buildings, classrooms, play areas and IT equipment	●
School environment (e.g. noise, lighting, air quality)	
Curriculum is produced by a range of organisations in health and education	
School staff understand how a young person's development can be affected by highly stressful events	
Quality of teaching	
Good quality support for young people with different needs	
Young person's attendance at school	
School staff value young people from different backgrounds	
School focuses on young people's health and well-being	●
Young people's support services outside of the school	
The quality of what you learn in school	
Availability of training and development for teachers	
Good headteachers and senior teachers	
Young people engaging with lessons, teachers, support staff, homework	
Schools can recruit new staff when needed and staff enjoy and stay in their jobs	
Number of children that teachers and support staff are responsible for	
Good quality early years childcare (nurseries, child minders)	
Young people have the knowledge, skills and emotional development so they are ready to start primary school	
Access to school facilities during and outside school hours	●
School staff understand different groups of young people and give them equal opportunity to do well	
Schools give young people access to good quality work experiences and career guidance	
Bullying in school	
Unfair treatment of different young people, usually because of their ethnicity, age, gender or disability	
Young people who show up to school and go to class but find it difficult to learn because they don't feel good or aren't interested	
Health and well-being of all school staff	
Amount of young people who need additional support but are not getting it	
Support for young people with additional learning needs	
Working conditions for all school staff	
Behavioural management of young people in school (detention, praise, setting expectations)	
School staff understanding of disability	
Support to help young people move from primary to secondary school	●
Amount of money for family support services in school (school staff who work with parents or main caregivers)	
Government funding (money) going into education	●

Is there anything missing?

Image 3: Conwy, Task 2, child and family

TASK 2 - EDUCATIONAL ACHIEVEMENT

Child and family

	What's most important?
Parent or main caregiver's experience of education	
Highly stressful events experienced by young person (parents divorcing, living with someone who uses drugs, experiencing abuse)	
Young people's motivation	
Highly stressful events experienced by parent or main caregiver when they were a young person (parents divorcing, living with someone who uses drugs, experiencing abuse)	
Parent or main caregiver's relationship with teachers and school	
Young person's home environment (noise, lighting, air quality)	
Young person's confidence	●
Quality of care for young people in Looked After System (cared for by their local authority)	
Hopes and ambitions of parents or main caregivers for their children	
Access to resources in the home (books, internet, computer)	
Young person's quality of sleep	
Amount of parents or main caregivers who work in good jobs (fair pay, flexible hours)	
Young person's hopes and ambitions for the future	
Young people having to care for family members	●
Young people's physical health and well-being	●
Quality of relationship between young people and parent or main caregiver in early life	
Parent or main caregiver's relationship with health services	
Young people's health harming behaviours (smoking, drinking alcohol, taking drugs, unhealthy food)	
Young people's attitudes towards education (interested or not interested)	●
Young people's health promoting behaviours (exercising, eating healthy food, washing your hands)	
Amount and quality of time parent or main caregiver can give to children to support learning at home	
Parent or main caregiver's mental health and well-being (e.g. feeling happy, sad or stressed)	
Young people feel comfortable in expressing their gender	●
Parent or main caregiver's educational achievement	
Young people's mental health and well-being (e.g. feeling happy, sad or stressed)	
Parent or main caregiver's physical health and well-being	
Additional learning needs (autism, dyslexia, dyspraxia, ADHD)	●
Quality of support for young people who are home schooled	
Young person's ability to deal with stress and life's ups and downs	●

Is there anything missing?

Image 4: Conwy, Task 2, social and community

Social and community

	What's most important?
Positive role models in the community (e.g. youth workers, police, scouts)	●
Access to museums, music, theatre and drama	●
A community that is supportive, inclusive and works together	●
Access to safe active travel to school (walking, cycling)	●
Access to extra curricular activities outside the school (sports clubs, volunteering, holiday clubs)	●
Young people's access to youth services	●
Access to green and open space (such as parks or playgrounds) where young people can play and hang out or play sports	●
Lack of money and resources in your town, city or local area	●
Young people feeling safe at home, in the street or in their community	●
Unfair treatment of young people because of their ethnicity	●
Organisations working together to support young people	
Young people feel their views are heard in the community	
Shared hopes and ambitions for people in a community	

Is there anything missing?

Image 5: Conwy, Task 2, economic

Economic

	What's most important?
Income (money) coming into the family home	● ●
Things affecting the way you live at home (overcrowding, space to play)	●
Parent or main caregiver's ability to afford school trips and activities outside of school	●
Physical housing conditions like mould, damp and cold	
<i>Differences between groups in society such as wealth, power and status</i>	
<i>Difference in wealth (money) between the families of young people in the school</i>	●
How many households are eligible for and receiving free school meals	● ●

Is there anything missing?

Image 6: Torfaen, Group 1 and 2s discussion around the list of factors provided

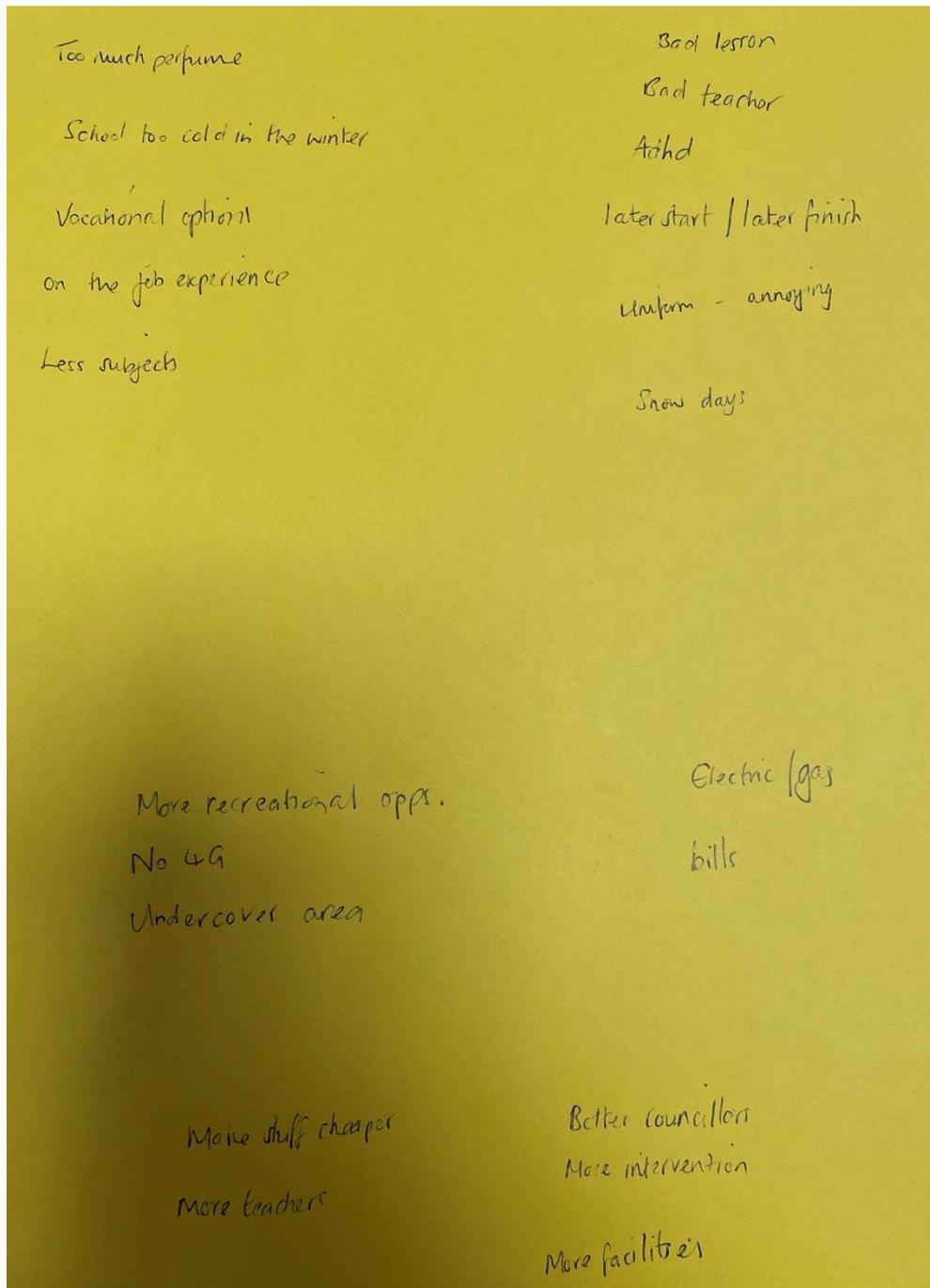


Image 7:

School too cold in the winter to learn
Not enough teachers
Not enough interventions for students
Uniform is an issue and barrier to learning
They want less subjects in the week; would rather focus on fewer
They want more vocational opportunities/ on the job work experience
Snow days (not allowed them anymore due to online learning)
They said later starts with earlier finishes would be better.
Better trained teachers (they were not happy with how some of their teachers spoke to them)
Better school based councillors
More recreational opportunities
An outdoor undercover area to hang around in
4g pitch
Gas/electric and bills in general too high for their parents
Make stuff cheaper so that we can do more

Image 8: Torfaen, Group 1, rich pictures

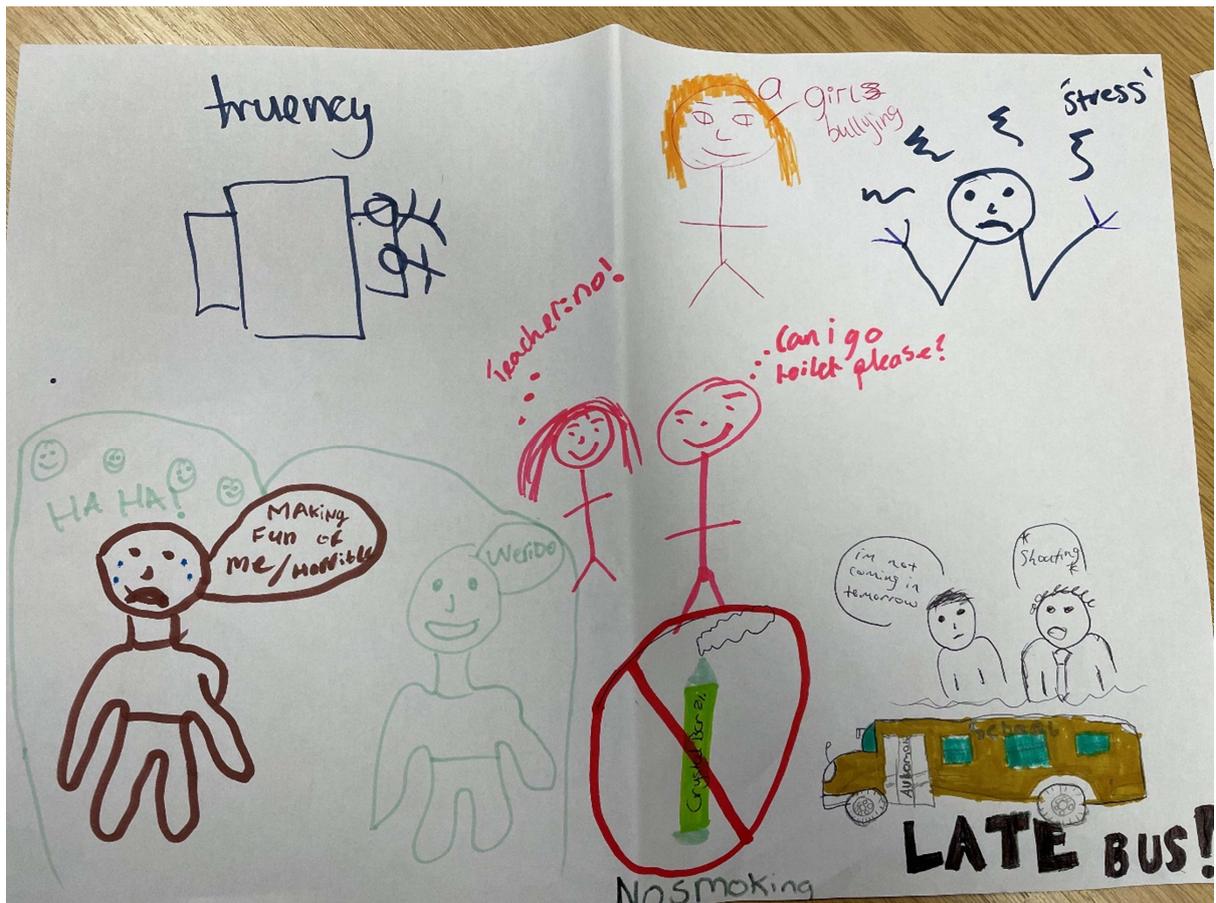


Image 9: Torfaen, Group 1, rich pictures

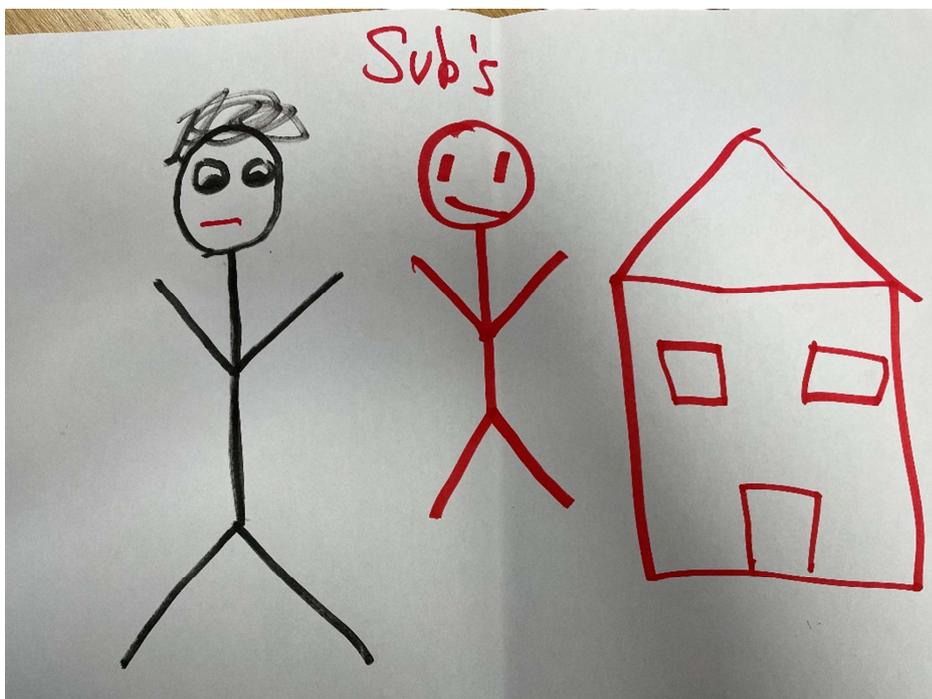


Image 10: Torfaen, Group 1, rich pictures

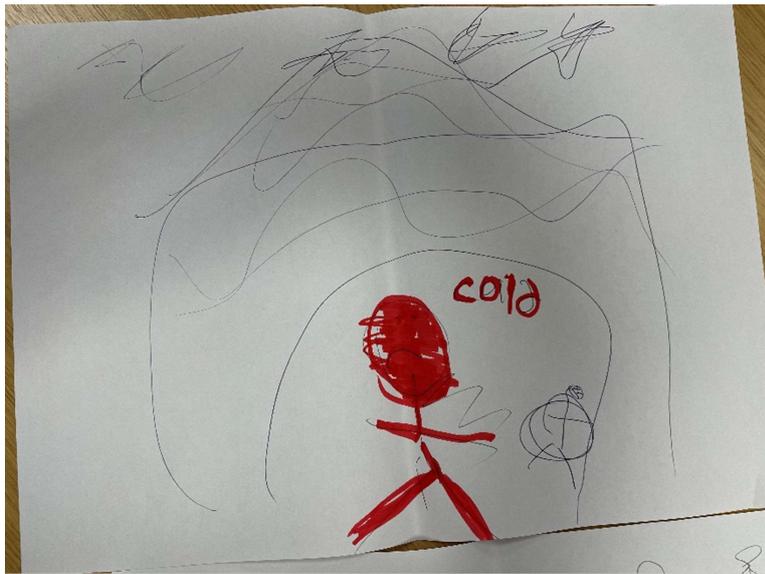


Image 11: Torfaen, Group 2, rich pictures

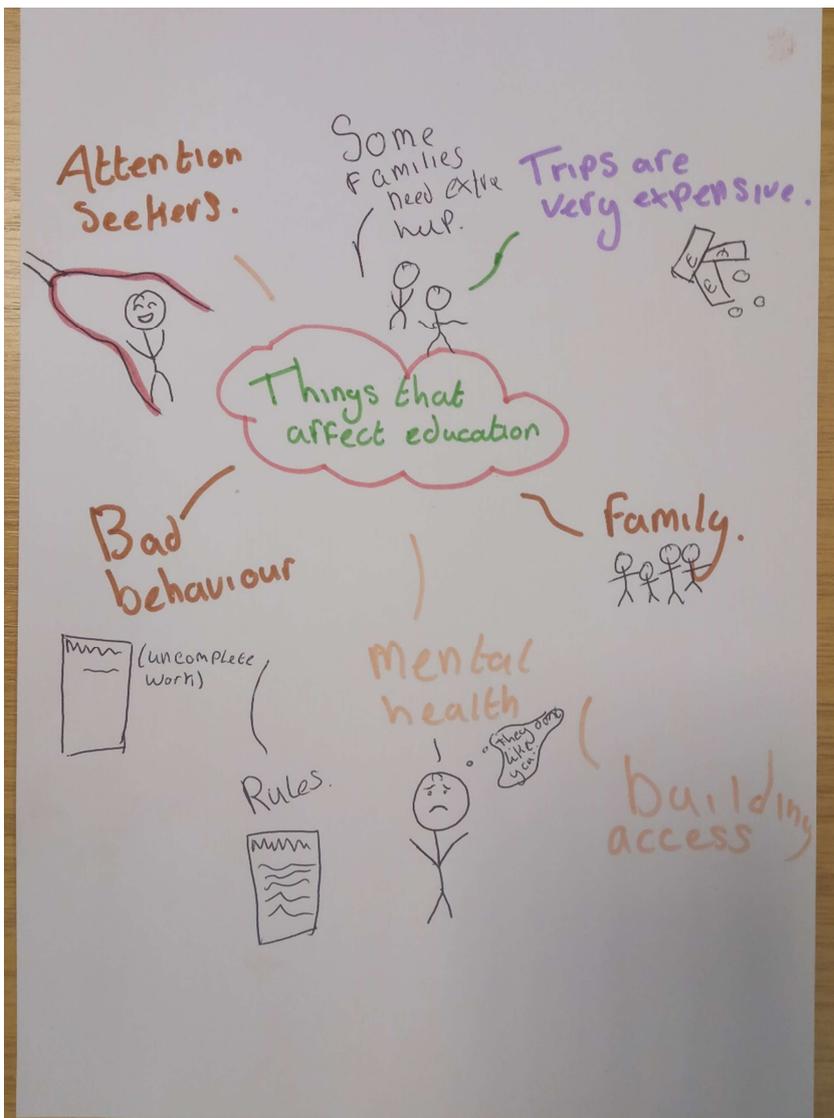


Image 12: Torfaen, Group 2, rich pictures

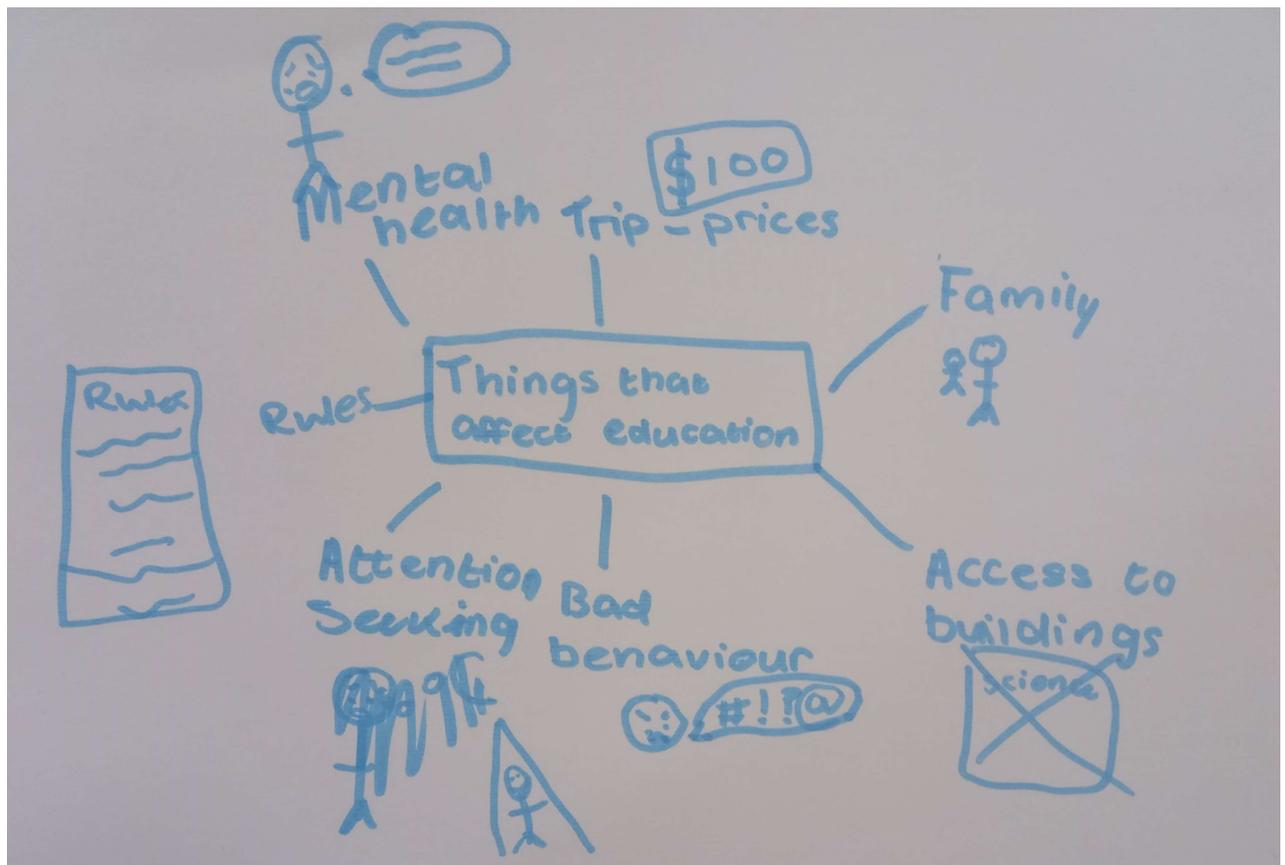


Image 13: Torfaen, Group 2, rich pictures



Image 14: Torfaen, Group 2, rich pictures

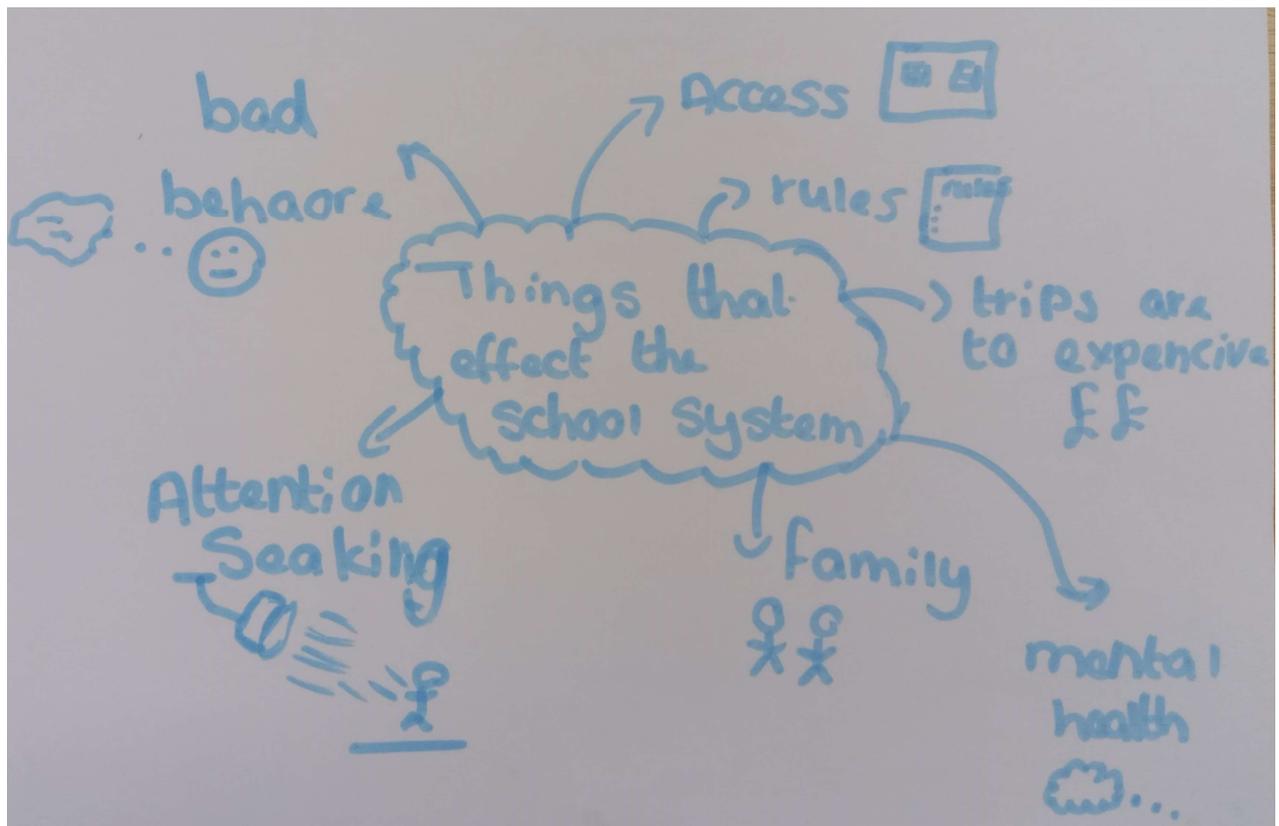


Image 15: Torfaen, Group 2, rich pictures

