Human Scale Education

New Learning Environments

A compendium of strategies for engaging with students in visualising new learning environments

By Mike Davies

human
SCALE
education

This is the first in a series of Occasional Papers published by Human Scale Education that has arisen out of the Human Scale Education Seminar Programme which ran from November 2009 to May 2010. The publication of these Occasional Papers has been supported by the National College for Leadership of Schools and Children's Services.

New Learning Environments

A compendium of strategies for engaging with students in visualising new learning environments

By Mike Davies

In recent years Mike Davies has worked mainly on school transformation within the Schools for the Future programme. This, linked with his other main area of interest – the reorganisation of schools on human scale lines – grew from his experience as a Headteacher of a number of schools in England and Scotland. The schools were mainly in economically deprived and challenging communities, each with an emphasis on supporting human scale practices in relation to curriculum design and development, pedagogy, the use of time and space, staff and student organisation and relationships.

supported by

National College
for Leadership of Schools
and Children's Services

human
S C A L E
education

Introduction

Building Schools for the Future has made possible on an unprecedented scale the redesign and rebuilding of our secondary schools. Its purpose is to transform the fabric of schools and, equally important, to transform the teaching and learning that goes on inside them.

The involvement of Human Scale Education in BSF schools has up to now been to support and advise on proposals for radical redesign both in terms of buildings and in curriculum, pedagogy and school organisation. The adoption of the principle of small scale , for example in the design of schools along SWAS lines as at Brislington Enterprise College, and the opportunities for a radical restructuring of the curriculum and learning approaches that small scale provides, has transformed the ethos as well as the organisation of several HSE schools.

Enabling students to visualise their new learning environment is an essential component of creating in them a sense of ownership and commitment to the school community. The experience of working collaboratively in small groups can inculcate in all students a practical grasp of the democratic process and develop in them the questioning and critical habits of mind that are fundamental to enquiry learning. These are values that are intrinsic to HSE's vision for school reform. The commitment to student involvement in the design of their learning environments as manifested in the strategies presented in this paper is robust and not tokenistic. It has little in common with generating the 'I want a swimming pool' wish list stage but focuses on developing deeper participation... encouraging thinking, challenging the current norms around curriculum, pedagogy, the use of time, school organisation and informal learning and social spaces.

Overview of Methods of Engagement/ Participation

The aim of the paper is to devise methods which will enable as many students as possible to think how their new environment might act as a catalyst for new ways of learning and being together. This will involve challenging current school

organisation and brainstorming alternative models for a learning community, what it means to be a member of such a community and, anticipating future trends in new technology, what new opportunities there will be for learning.

The author of this paper acknowledges the lead and innovation of the Sorrell Foundation and its innovative work in design and student voice. The Foundation's work is internationally recognised for its brilliance and many of the ideas on the following pages have at least an echo of their approaches. That said, the protocols that follow include a much broader array of topics, including a greater focus on learning, and are processes of continuous engagement and improvement rather than separate events.

The following ideas are intended to further:
• the engagement of learners of all ages;
• the cohesiveness of the community;
• circumstances where an individual's talents can find vent and flourish;
• thinking, debating, making and creating 'beyond the box';
• opportunities for individuals and groups to gain success and have their achievements recognised.

The strategies offer contexts, participation, responsibility, leadership, communication, inter-generational co-constructing, creativity and a host of skills,

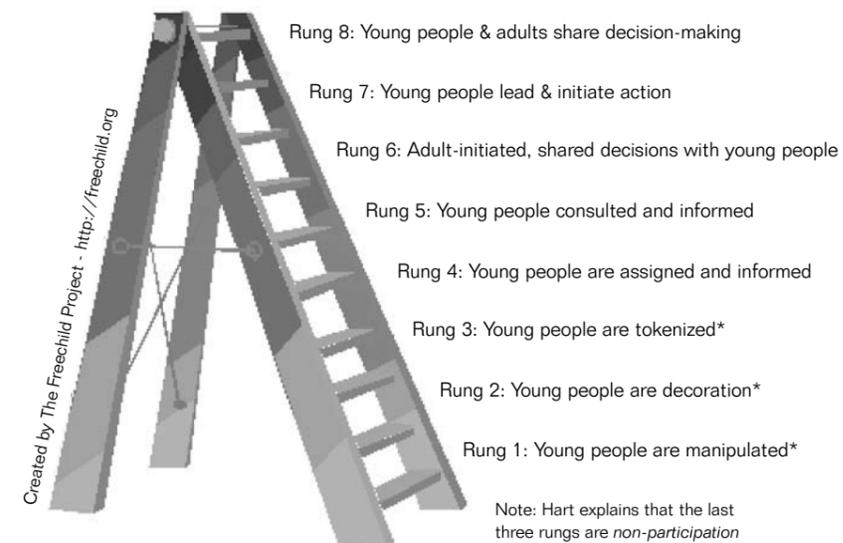especially through opportunities to:
• Listen, visit, visualise;
• Respond, improve, amend, offer alternatives;
• Model, simulate, create;
• Inform, tell, interpret, show, broadcast;
• Survey, test opinion;
• Apprentice, partner, co-construct, lead.

Ladder of Participation

A useful model for student participation can be found in Roger Hart's Ladder of Participation. This is taken from a book entitled 'Children's Participation: The Theory and Practice of Involving Young Citizens in Community Development and Environmental Care' published in 1992. It was a call to engage, involve and work in mutual endeavour with young people. It also warned of the dangers of 'tokenism'. the Ladder delineates the spectrum of participation, ranging from being 'manipulated' at the bottom of the ladder to 'sharing with adults in decision making ' at the top.

In the ideas that follow the vast majority of suggestions reflect the very top rung of Hart's ladder. Rung 8 is defined as 'Young people-initiated, shared decisions with adults. This happens when projects or programs are initiated by young people and decision-making is shared between young people and adults. These projects empower young people while at the same

Roger Hart's Ladder of Young People's Participation

Created by The Freechild Project - http://freechild.org

Rung 8: Young people & adults share decision-making

Rung 7: Young people lead & initiate action

Rung 6: Adult-initiated, shared decisions with young people

Rung 5: Young people consulted and informed

Rung 4: Young people are assigned and informed

Rung 3: Young people are tokenized*

Rung 2: Young people are decoration*

Rung 1: Young people are manipulated*

Note: Hart explains that the last three rungs are non-participation

Adapted from Hart, R. (1992). *Children's Participation from Tokenism to Citizenship.* Florence: UNICEF Innocenti Research Centre.

time enabling them to access and learn from the life experience and expertise of adults.'

Strategies for Engagement/ Participation

Student/staff committee

A student/staff committee will be established specifically for the purpose of launching and marking the progress of the visualisation project a and coordinating the activities of the other groups and activities that it commissions.

Launch and Marking progress

As a way of involving all students, a series of images of (i) external

facades (ii) outdoor landscapes (iii) outdoor play/spot/recreation areas (iv) general learning areas (v) circulation areas/atria/streets/arcades (vi) specialist resource areas (vii) social areas, toilets and student facilities and, (viii) Library/LRC areas will be loaded onto Facebook and each student invited to respond, debate and comment on a section. A group of students will be tasked with collating, analysing and reposting the results and trends. Such an exercise could inform the Design Festival and be invaluable to the Client Design Team.

Ideas for a series of appropriate ceremonies and engagements to mark the progress of the project and those involved in it will be developed with a student/staff committee established specifically for this purpose. A time capsule

could be sunk; there could be a 'topping out' ceremony; at the time of opening all in a year group could chose a book to go into the library.

Each student at the school on the day of opening could have a tile telling of their 'greatest wish', or 'mega ambition' incorporated as part of the decor, each could have a handprint sunk into a tile or a photo as part of their locker door. A joint student/staff group might be especially commissioned to plan, publicise and run a series of 'showcase' meetings and conferences for parents, local businesses, children and staff from local primary schools.

Design Festival

A festival aimed to help the whole school develop together an educational and design vision for their school. A series of small scale workshops, with up to 25 participants will be organised over two days. These will cover areas such as Culture and ethos; Curriculum offer; Pedagogical approaches; Learning spaces; School routines, rituals and rhythms; Outdoor spaces; Relationship with the community; School Identity; Communications; Social and informal spaces; Access and Inclusion; ICT; Safety and Security; Valuing the Past; The Healthy School; Sustainability; Colours, materials and lighting; Furniture, fabrics, finishes. Each workshop will follow a similar structure. Firstly, key issues need to

be identified; secondly, these issues will be explored in more detail and finally, they will be prioritised to create recommendations for the final design brief.

Learning Champions Group and Pioneer Learning Environments

In contrast to the focus on the built environment this group is concerned with learning, especially with the key question "How good can learning be in the future?" "How can design help?" As such it may be appropriate to have a small working group from each year or house or learning community. By adapting some of the work by Kenn Fisher or from the Faraday Project, an inventory could be made of the approaches to learning and the learning styles that students and staff use and how these can best be supported in the new school. As an illustration a group might chose to investigate the ways new technology could influence the design, e.g. the use of personal, mobile devices for every student. There will be a significant input from RM into this research, and a visit to the Real Centre at Abington will be included. This group will meet with members of the design teams to communicate their ideas and develop models of new learning settings.

Client Design Teams

The Design Festival could launch or be part of the establishment of the school's Client Design Team; a team is approximately 6 students. These

teams will attend a series of meetings, in between which they will carry out research with their peers and in the community to gather wider views. The process will produce a student-led brief for their own school with input from the whole school community. The time line will begin with the 'challenge' being presented to the student, followed by student research and investigation before moving to the development of the 'School Design Brief'.

Prior to the start of the BSF programme at individual schools Client Design Teams could be established to trial the processes they will follow. The might, for example take a small aspect of something that needs improving and use it as a prototype for establishing how the group will function and carry out its final, full remit.

Design Media Committee

This could be part of the above or a parallel group, giving a wider range of students an opportunity to be involved and develop a different range of skills. The key purpose of this group is to document the journey. To keep a blog and a video record of the processes at work - the meetings, newsletters correspondence, and keep the school and wider community, including local media, up to date with progress. Each school in a phase will be networked to celebrate progress as well as being able to be linked to schools in other parts of the Country and further afield.

Art Tableaux Group

A small group of students following a BTEC/Diploma Art course, telling the story of the rebuilding of the school as it happens using the site hoardings as a canvas tracing the progress and development. This will be a very visible and publically shared focus for conversation on progress and development. In some schools it will be important to incorporate existing buildings and environments to give a sense of history and continuity as well as the new.

Eco champions Group

This group might be a joint student/staff group, composed of people who have a real interest in the choice of materials, fabrics, furniture and plants that will go into the making of the new school. They will be involved in tests of materials, consideration of alternatives and consequences of certain choices over others. Issues of sustainability are at the heart of its concerns with the ambition of zero carbon emissions. Performance of energy consumption, water consumption and overheating will be recorded and presented on the website.

Habitat Watchers Group

The focus of this group, 5/6 members representing the full age range and including those for whom the 'natural world' holds particular importance, will be to work with the landscape team. They might, for example, seek out potential sites

that will attract and support wildlife, or audit 'biodiversity' to ensure that there is a variety of plants and other living things and that these are representative of the local area.

Problem Solving Teams

During the build period teams from the construction group will work with groups of students to explore issues, solve problems and plan through the eye of the student – such as anticipating and checking the likely circulation routes that students will use; identifying possible pressure points at lunch time; or areas where vulnerable students might feel design could help assist in greater security.

New School Arts Group

The remit of this group is to contribute to the aesthetics of the new and refurbished elements both internally and in the school grounds. The group will design and exhibit, for selection by their peers, the patterns for window blinds, curtains, screens etc. This process could take the form of an open competition. Another aspect of the group's work will be to manage a budget and work with the Local Authority arts offices to select an appropriate artist to commission an art piece, e.g. a sculpture for the grounds, glass artwork or a focal point for the LRC and be involved in its development.

Materials Champions Working Party

This group might be another joint student/staff group, composed of people who have a real interest in the choice of materials that will go into the making of the new school. Issues of durability, maintenance and effectiveness are at the heat of its concerns. A series of visits to sites where the proposed materials have been used will generate reports on topics such as weathering, proneness to scuffing/graffiti, attractiveness, acoustics etc. Some of the materials will be the subject of video evidence on the school's BSF website.

Interior Design Forum

A small group of students, maybe a group from each school year or house could be involved in the selection of the range, colour, textures, fabrics, sizes of furniture and equipment that will be going into the social and more formal learning areas. Some of their ideas can be 'tested' in the Pioneer Learning Environment room that will be set up in each school. This group will visit a number of showrooms as well as seeing the process of manufacture of some of the equipment. In schools with a particular specialism a separate group will be convened to drill into more depth on particular aspects eh lighting and sound systems in a specialist performing arts college. Elsewhere a group could be involved in the selection of different equipment/seating for outdoor

areas, they can be involved in or commission Art works for the new building.

A 0.5 day x 6 weeks course to include architect-led 'learning walks' around the City focussed on how space is used, the impact of colour, furniture, the creation of working settings both formal and informal. In addition students could visit innovative and recognised new and refurbished schools, to pick up ideas and compare and contrast them with ideas presented by the designers – both architects and FF&E. Such a course might appeal to Year 9 students and/or those interested in architecture/design as a career or as a module at the 14-19 stage. Students would maintain a video journal of their visits and comments. This would be posted on a section of the School's BSF website.

Careers in Construction

The construction site provides every school with a living laboratory and workshop. They offer opportunities for observation – writing a poem, keeping a journal, scripting a blog; for maths – shapes, weights, volumes; for technology – stresses, structures, model making; for health and safety – procedures, risk, induction; for management studies – coordination, processes, quality assurance etc.

Tour Party Leaders

As the school opens it is anticipated that a large number of requests for visits will be received from other

schools and interested parties. This will give new opportunities to students to develop social, management and communication skills as pairs of young people are trained to be effective guides and ambassadors for their school. Such involvement will help maintain pride in the school as well as ensuring that the students have a good grasp of the breadth and range of opportunities and special features.

Study area at Ungdomsskolen

Student Satisfaction Panel

There are opportunities to consult and get feedback from students and staff as to their feelings and perceptions about their new learning environment. A representative panel of six students will be set up with the remit of seeking staff and student views. This will be done by an online questionnaire devised with the students. Students will be asked to outlining likes/dislikes of the new environment and suggest radical new ideas for improvement, especially in relation to the permanent new school. The lessons learnt from this will be fed into future projects. On completion of the build stage the Panel will conduct a post-occupancy evaluation. This will involve surveying all students of the school and interviewing a sample of the young people and a range of staff. The students may choose to focus on a range of issues, e.g. the new learning environments and/or school as a social place. The Panel will be encouraged to link with similar Panels in other schools to compare and contrast findings.

Students planning

Munkegaardsskolen toilets

Summary: A Ladder of Opportunity

For individuals

- chairing a working group, e.g. Design Media Committee
- presenting at a conference, e.g. BCSE

For small groups

- researching sustainability, e.g. a Problem Solving Team
- chronicling the story, e.g. the Art Tableaux Group

For class groups

- surveying learning styles, e.g. a class Learning Champions Group
- enriching mainstream curriculum, e.g. BETC class

For whole teams

- prioritising likes and preferences, e.g. responding to Images at Launch
- engaging with all, e.g. whole school Satisfaction Surveys

Ideas in Action – Integrating building design with the curriculum

Some practical ideas for groups and classes to explore

English and PSHE

Starter Exercise – This exercise might work well with Year 7 students. Each group of three or four students sorts the vocabulary words into categories that they discuss, decide and define for themselves. Each category needs to be titled. One member of each group reports their ideas to the whole class making clear the rationale for their decisions. An extension of this would be to ask the students to rank or prioritise their categories, and compare priorities between groups.

Starter Exercise

|					
Acoustics	Sofas	Circulation	Discussing	Identity	Toilets
Group work	Stairwells	Desk top computers	Storage	Dining	Social space
Hard play areas	Researching	Flexibility	Concrete	Desks	Natural light
Video conferencing	Natural ventilation	Presenting	Informal learning	Electronic display	Laptops
Entrances	Corridors	Lockers	Security	making	Sustainability
Timber	Tables	Problem solving	Water fountains	Mobile phones	Community
Facade	Sculptures	Signage	Vehicle routes	Renewable enery	Inclusion
Colours	Solar panels	Notebooks	Display space	Experimenting	Reception

Mathematics

Geometric shapes: this idea might feature as part of a maths course during the construction phase. Its focus is on students identifying different geometric shapes in the design and understanding the significance of shape in relation to elements such as aesthetics and strength.
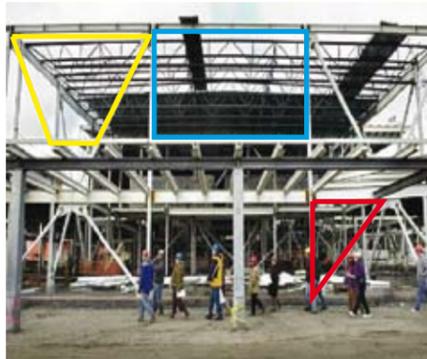
A range of shapes such as:

Triangle   Prism   Rectangle

Pyramid   Cylinder   Cone
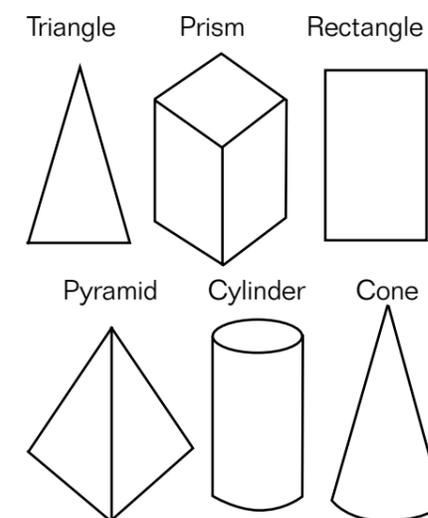
Initially students might explore the web for photographs of buildings in their area and identify the range of shapes they can see[1]:
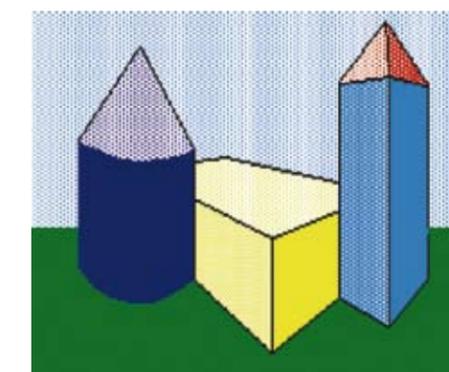
They could then do the same with images of their own buildings as they developed.

The construction frame allows identification of basic shapes such as the rectangle, trapezium and triangle.

Art/Photography

Great places and how to make them even better

The purpose of this activity is to increase students' awareness of the design of the places they use and help them develop some criteria for discriminating between competing designs. These student generated design criteria can then be used in an appreciation of their current and/or new school. A way into the ideas might be to:

• Start working with a group or a class to generate a list of their favourite places – a room in their house, an activity centre, a restaurant, a holiday flat, cinema, sports arena, shop, theme park etc and ask the students to articulate a couple of reasons why they like it – they might also relate whether all in their family would agree! If the group is 'cold' it might help to start by showing a range if images of contrasting places, and/or asking students to search the web for images of places they like.

• With the list recorded for all to share, students can be asked to identify any patterns... are they fun places, birthday or places of other celebrations? Places full of colour, texture, scale or shape? Buildings with particular features like a water fountain, spiral staircase, special floor patterns or domed or vaulted ceilings? Hopefully, it will be possible to begin to identify some emerging categories that the students hold as important.

• Small groups of 3 or 4 might have a discussion on the factors that make somewhere special, a 'great place'... and compare the ideas that arise in the various class groups. This will inevitably lead into a debate over 'likes' and 'dislikes'.

• Students could be asked to sketch or photograph a couple of places in their area – one they like and one they don't. For each a short description might be written explaining what makes them 'cool' or not. As a class group, students can be asked to look for patterns of likes and dislikes and begin to analyse what are emerging as the discriminating criteria – are they to do with feelings or design?

• The emergent list of criteria can them be applied to the design of their present and/or new school. In an existing school students can take photographs to determine the match with their ideas. In a new context they can look at sketches and computer generated image, CGIs, of the proposed environments to see show well are their student generated design criteria are being met? Where are congratulations due and what developments might be suggested?

• Finally, students might compare the list of their design criteria and those officially published. They might discuss the differences as well as trace and suggest where any differences in emphasis might have arisen and why. It would be a real bonus to have this discussion with the design team.

Conclusion

In a recent article Michael Fielding[2], a doyen of student voice in the UK, has drawn a distinction between programmes and activities that cast the student in the role of a consumer, emphasising individual choice, and those that create opportunities with the student to further human flourishing through democratic partnerships. He suggests that many of the early arrangements, including some school councils, focused on school improvement targeted at instrumental outcomes rather than being concerned with educating young people to be citizens of a more human society. Michael Fielding yearns for a 'radical collegiality', a time when students and their teachers work in partnership on endeavours that matter to them and that they can jointly affect. In this he very much reflects the aspirations of rung 8 of Roger Hart's ladder of participation with which I opened this booklet. I very much hope that at least some of the ideas and suggestions I have outlined will have agency in proffering new ways of students and staff working together and prefigure some of the opportunities that our new and refurbished schools are offering to their local communities as schools reculture themselves into places of hope, endeavour and success.

References

1. Council of Educational Facility Planners International, 2008

2. Fielding, M. (forthcoming) Patterns of Partnership: Student voice, intergenerational learning and democratic fellowship. In Rethinking Educational Practice Through Reflexive Inquiry. Mockler, Nicole; Sachs, Judyth (Eds.) Springer, London 2011

An earlier version of this paper was commissioned by BAM who are leaders in school and college new build and refurbishment schemes and have developed a reputation for innovative, collaborative working with clients.

Manifesto

A Practical Manifesto for Education on a Human Scale

Human Scale Education suggests the following seven key practices that schools might follow. These practices are facets of educating on a human scale and were planned originally to represent the seven sides of a fifty pence piece.

1. Smaller learning communities.

2. Small teams of teachers of between 4 to 6 teachers, learning mentors, learning support assistants who will see no more than between 80 to 90 learners each week.

3. A curriculum that is co-constructed and holistic.

4. A timetable that is flexible with blocks of time which make provision for whole class teaching, small group teaching and individual learning. Teacher planning and evaluation timetabled.

5. Pedagogy that is inquiry-based, experiential and supported by ICT. Assessment that involves the Assessment for Learning approaches of dialogue, negotiation and peer review and develops forms of Authentic Assessment such as portfolio, exhibition and performance.

6. Student voice involving students in the learning arrangements and organisation of the school.

7. Genuine partnership with parents and the community.

human
S C A L E
education