

VALUES DRIVEN POLICY IN DESIGNING ENVIRONMENTS FOR CHILDREN AND YOUNG PEOPLE'S EDUCATION, HEALTH AND WELLBEING

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The new millennium coincided with a reappraisal of value in UK construction and calls from a wide range of influential individuals, professional institutions and government bodies for the industry to exceed stakeholders' expectations and develop integrated teams that can deliver world class products and services. As such value is certainly topical, but the importance of values as a separate but related concept is less well understood. This paper addresses the construction industry's need to deliver public buildings that can regenerate communities, transform schools, modernise healthcare facilities and inspire children in a way that will make a real difference to their lives. Doing this requires a strong service and estates vision driven not only by the technical building solutions, but also by practitioners aspirations. Stakeholder engagement is seen by the Government as a way to bring about this reform, however the stakeholder consultation tools that are being deployed by providers and clients alike may be limited in how they translate values, attitudes and good teaching, learning and healthcare practices into building design. The purpose of this paper is to present the need to understand with greater meaning the values and cultures of schools and healthcare facilities during construction briefing and delivery and how the spirits of users can be harnessed to ensure the success and transformation of a new facility. It presents a longitudinal case study in which various tools and approaches have been developed and applied to address this need within education capital projects. It also draws on value, values and stakeholder literature in education and healthcare. The importance of this paper is to extend the range of methodological tools used in construction to structure the effects of meaning, culture and values on the construction industry's processes, products and building operation and to translate learning between the education, health and social care sectors. It also hopes to encourage construction providers to extend their service and explore the opportunity to employ a similar methodology, particularly in the public sector environment where there is a growing need for multi-agency service integration.

Keywords: design, management, service, stakeholders, values.

INTRODUCTION

Today Governments are making much clearer statements of their values priorities and are eager to demonstrate value against them. The Office of the Deputy Prime Minister (Prime Minister Gordon Brown 2007) identified the need to understand the diverse values and interests of particular areas and places in the delivery of the sustainable communities planning policy statement. In the schools white paper choice, fair admissions, parental support, personalised learning, diversity and fair access are defined as guiding principles, DfES (2005) and in the Urban White Paper DETRA

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(2000) attractive, clean and friendly urban environments that promote enterprising and innovative cultures are identified as critical to success. A recent report on sustainable schools (House of Commons 2007), calls for service and construction providers to become more responsible for educational transformation. This paper described the application of a new bottom up approach to eliciting adult and children's values and behaviours using a questionnaire, workshop and modelling method. Also described here is the innovative application of an existing approach to understanding values that can be used by construction organisations to inform the development of policies, selection of participants, formation and leadership of teams or appraisal of personnel. The Schwartz Values Survey and universal values structure, one of the most advanced theories of human values, has been adapted and applied in this paper to access its effect on delivering greater value, building customer-oriented cultures and demonstrating corporate social responsibility (by protecting the various interests of stakeholders).

EXISTING PRACTICES TO IDENTIFYING PROJECT VALUES

Values are the personal and moral frames that guide us individually and collectively in what we think, say and do. They are often implicit, some values vary according to the situation, others are more fundamental and universal for all people from diverse geographic, cultural, linguistic and religious backgrounds. However, most people behave according to universal values for consistency and to help in their relationship with themselves and others. As such, values are motivations that inform our priorities, constrain our choices, frame our judgements and are the starting point for building anything - from new spaces and environments to diverse and cohesive communities.

Described here are some of the most widely used approaches within construction today. Used to indirectly elicit human values and involve stakeholders in participatory design.

Value management is an approach to defining the objectives and value drivers of clients, which are often functionally expressed to eliminate unnecessary costs. As a result of this objective fact finding, the approaches emphasis is often not on less easily measured subjective cultural factors. A handful of academics advocate a less strict and softer approach (Connaughton 1994; Green 1994; Connaughton 1997; Green 1998; Liu 2002; Thomson, Austin *et al.* 2003; Kelly 2004). However the push to reach a consensus view of value rather than allowing different stakeholders with diverse needs to express their various interests and values is still a limitation of the approach.

The definition of a project vision and mission as an abstract statements of a project's purpose is now widespread. According to (Johnson and Scholes 2002; Winch 2002) these define the overriding purpose in line with the values or expectation of the stakeholders and capture these in a clear, short and inspiring way. However the generality of these abstract statements often means they are difficult to translate into practice and they often represents a top down corporate view, rather than representing the hearts and minds of the broader employees and stakeholders.

Briefing is the approach taken by clients and designers to specify the functional outcomes and design quality requirements for a new building. These are often expressed as compliances to ensure a fundamental level of project success, and as such these objectively stated criteria might not inspire a unique and culturally specific design solution. Briefs may contain many detailed criteria, with no prioritisation to show their relative importance or relative cost. As such the design team may be left to

make their own decisions on what is most important for inclusion or exclusion as framed by their own value systems rather than those of the users.

During the design review process the design team will often build a tacit understanding of the attitudes of various stakeholder groups from their meetings with them. Designers often talk of their time with stakeholders giving them a feel or sense of what is required. This feeling is an intuitive approach to understanding the design requirements or inferring their judgements and design selection. However values often remain implicit, because people find them difficult to express and understand and architects may, without an understanding of the effect of their own values, overemphasise those that are important to them, rather than those that are important for the project.

Values statements demonstrate the broader goals that should direct business strategy. They define what is most important or highly prioritised by everyone in an organisation, however because of the difficulty in involving large numbers using existing brainstorming approaches only relatively small groups of individuals are used to understand the whole culture of an organisation.

This section has highlighted that there may be better ways to capture stakeholder values that further identify and define stakeholder values in design.

UNDERSTANDING VALUES IN EDUCATION SERVICE AND ENVIRONMENT DESIGN

There has been significant and growing importance placed on values in managing and developing schools and education of children (Handy and Aitken 1986; Bell 1996; Whitaker 1998). According to (Dalin, Rolff *et al.* 1993; Dalin 1996) through the complex establishment of school policy and vision, in understanding a school's strengths and weaknesses and selecting its people and environment, values form the basis for 'policy' at a school level. Further to this "each school has a wide variety of values, often living side by side, sometimes in conflict with each other, sometimes undiscovered" and that "school development processes will regularly face value dilemmas, conflicts over goals and norms, problems in reaching consensus and 'hidden agendas'." This illustrates the need for improved techniques to elicit and structure values, during the integration and transformation of schools. The rationale behind the new application of such tools as part of construction project briefing, is that new buildings often come about as a result of poor performing or poor resourcing and utilisation of schools, as such transformational change strategies are a very necessary part of the briefing process. (Annesley, Horne *et al.* 2002) first identified the need for better stakeholder engagement in briefing, according to them a "good design brief does more than just present facts, figures and requirements: it also clearly articulates the vision for the school and its underlying values and philosophy, so that the architect can reflect and embody these within their designs.", also "the client needs a clear understanding of the needs and aspirations of the school and its community and to be able to articulate what these might mean for the design of the building". This paper describes the use of one of the most advanced theories of values content and their trade-off structure. This structure can help individuals and organisations move beyond studying independent and singular values, to thinking about values systems and the interrelated structure of values. Each of the ten universal values pictured in Figure 2 are defined by their basic individual or collective position. This same universal values structure can also be used to understand the behaviours that will enable distinctive transformational learning, which could be the topic of the authors future work.

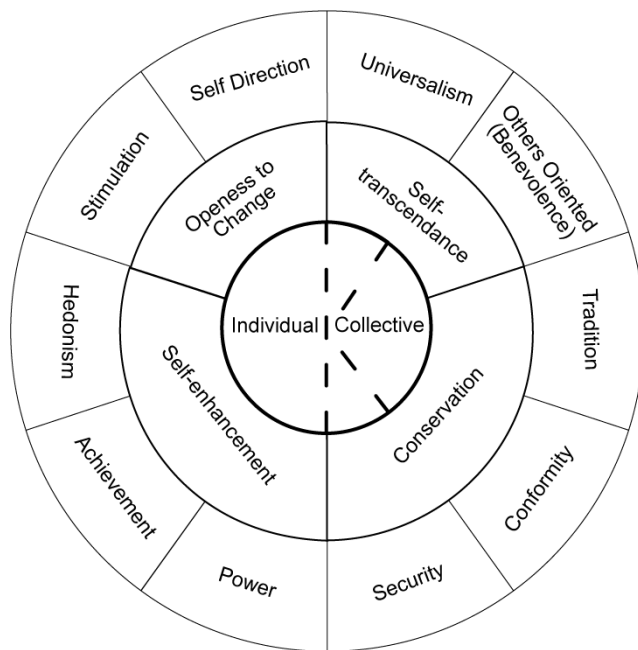


Figure 1: Values structure, (adapted from Schwartz and Boehnke, 2003).

The universal values categories are defined by their underlying motivational goal. In table 1. below, are the ten neutrally defined principles that can be applied in any situation, however we have adapted their language slightly to better align them with the five Every Child Matters values priorities expressed in policy and to ensure that the revised list covers all the values that both adults & children subscribe to or behave according to. Those values that are taken from Every Child Matters are asterixed.

Table 1: Schwartz's Universal Human Values and Education Specific alternatives

Human Values (using neutral language)	Education Specific Values
Self-direction (Independent thought and action)	Be individual
Stimulation (Excitement, novelty and challenge)	Be creative
Hedonism (Pleasure and sensuous gratification)	Enjoy and achieve *
Achievement (Personal success and competence)	Economic wellbeing *
Power (Status, prestige and control)	Respect authority
Security (Safety, harmony and stability)	Stay safe * + Be healthy *
Conformity (Avoiding upset or harm to others)	Be professional
Tradition (Respect, commitment and acceptance of customs)	Respect Tradition
Others orientated (Welfare of personal contacts)	Work in teams
Universalism (Welfare of all people (understanding, tolerance))	Make a positive contribution *

CASE STUDIES TO TEST A NEW APPROACH TO DEFINING PUPIL AND ADULT VALUES

This section presents the use of methods which can help school staff understand their interests, motivations and values in the context of their community. It also allows the definition of values statements as a means of communicating the schools mission and a starting point from which to define and measure supporting behaviours. These values can then be aligned with the values and attitudes of pupils to design school services and estates that realise and build an exciting and enjoyable learning environment. It is hoped that these lessons could be applied in a healthcare context that has been supported by literature here.

Data Collection

The approach to defining a school brief was trialled in two studies. Study A aimed to identify a school's values priorities, using an adapted SVS instrument with 28 volunteers from within a single school. Each individual participant used a questionnaire to comparatively rate the importance of 56 values "as a guiding principle in my working life" on a 9 point scale with anchors of -1 ("opposed to my values") and 7 ("of supreme importance"). This individual questionnaire measures people's personal values priorities, not the approved norms of groups, where according to (Schwartz 1992) the average individual values profile is "one way to characterise cultural value priorities.". Study B challenged the scope of values statements against a set of children's attitudes (defined in a school design festival). In study A, all 28 employees responses were aggregated and averaged in a collective organisational values plot to reveal alignment and misalignment within the group, where according to Schwartz the average reflects the values of the group while "Individual variations around this average reflects unique personality and experience". Study B was a simple subjective investigation of the alignment between staff values and the outcomes of a pupil design festival that provides a child's perspective of what they would like to see in their new community facility. The design festival involved 90 pupils and around 25 adults representing the teaching and design team staff. Facilitators and co-facilitators directed seven workshops based on seven themes agreed by the school and according to their priorities, these included: School Journeys, School Identity, Sustainability & Environment, Learning Spaces, Extended Schools, ICT, Dining & Healthy Eating. These thematic groups allowed for discussions that were relevant, simply understood and of interest to all participants.

Understand Staff Values Questionnaire and Workshop

This study aims to summarise the perspectives and priorities of staff, and provide a basis from which to explore how they can realise their distinctive values, enhance their areas of excellence and deliver transformational practices. This workshop involved all 28 staff, representing the leadership team, teaching (foundation, Key stages 1 & 2) and support staff (admin, finance, educational specialist). Participants moved from an understanding of their own values and motivations and the whole school's priorities to a debate of how these could be realised through new design solutions. The objectives of the study was to: understand the alignment of individuals' values with those collectively shared by the school, initiate the generation of a set of shared values priorities, introduce all staff to the new building design, and gather feedback and consider new practices that can help create transformational learning experiences.

Prior to the workshop each member of staff completed a values questionnaire. The school were subsequently sent a values plot (a radar chart that shows their values priorities against the organisational average) and a motivation chart (a pie chart showing their preference for particular high level motivational goals) for each respondent. Examples of individual values plots are shown in Fig 2. These are interesting because they highlight where individuals may be misaligned with the average of their colleagues, for example for one member of staff creativity, innovation, learning and public image were unimportant, while for another protecting the environment, capable and sense of belonging were less important, relative to the other values.

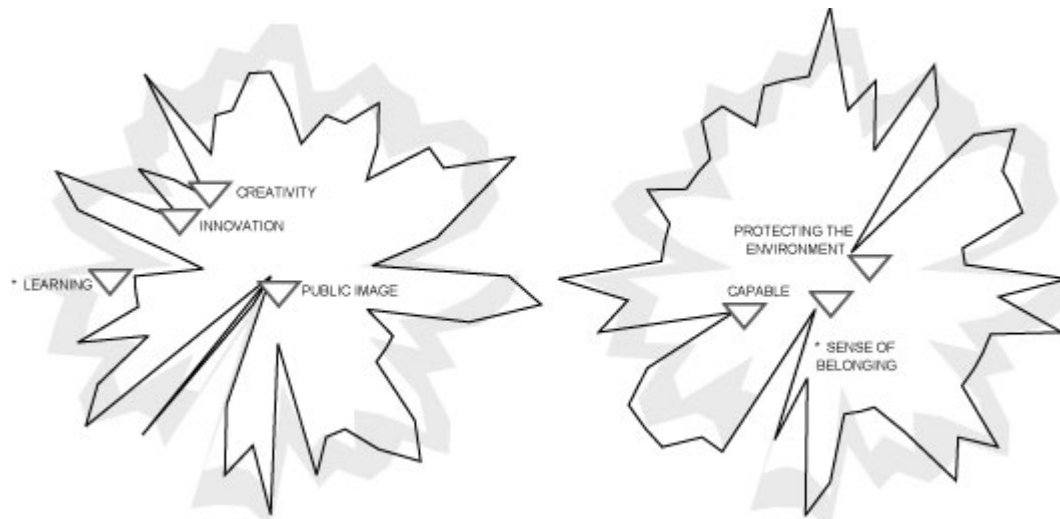


Figure 2: Example individual values plots that can be compared to the organisational average

Empirical research has shown that the setting of top down values statements alone does not lead to better practice. Rather it is the consideration of individuals' values and their alignment with organisational values priorities and practice that can positively affect employee satisfaction, work attitude, commitment, effectiveness and staff turnover. Figure 3 shows a plot of the schools average organisational values priorities. This was used as the starting point for defining personalised organisational values statements in a workshop. Working in four teaching and support teams participants aligned their individual and team values by comparing their high and low individual values priorities with the organisation's average. Where the standard deviation of individual scores were shown to determine the strength of alignment or misalignment within the organisation. Groups then generated team values and structured them before transferring them onto a large wall chart for the whole organisation. Then groups of volunteers found themes under each category. In a plenary discussion participants collectively agreed which values categories were of "high", "medium" and "low" relative importance. The results of this was that: make a positive contribution, enjoy and achieve, be healthy, stay safe, work in teams and make a positive contribution were seen to be the highest priorities, while be individual, be creative and innovative, respect authority and be professional were of medium importance, with economic wellbeing and respect traditions being of low importance in the case study school.

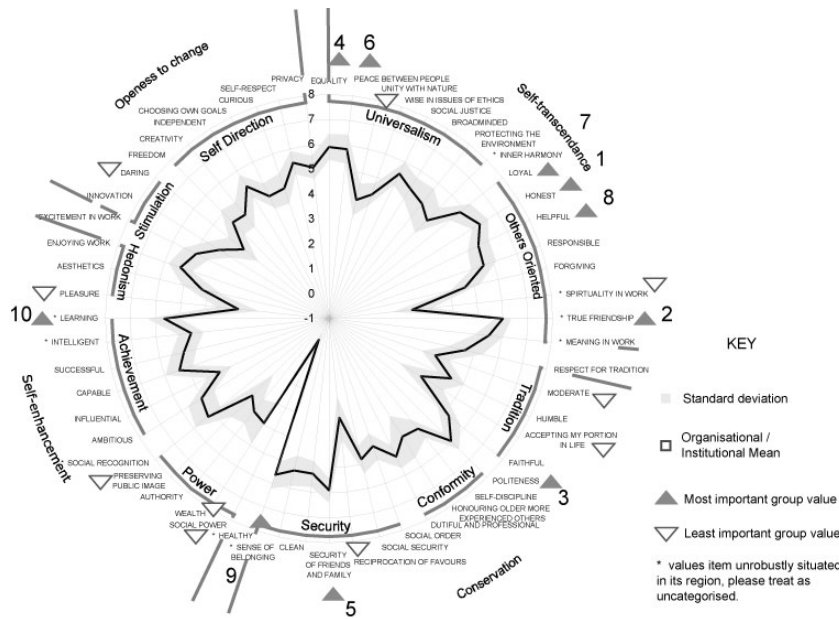


Figure 3: Average Organisational Values Plot

Table 2, shows examples of the values themes defined by school staff in the values workshop against the attitudes of pupils, defined in the design festival. The alignment of both provides both means and ends to incorporate into design.

Table 2:

Universal Values	Teacher Values	Pupils Attitudes
Make a positive contribution	(1) Promoting Respect and Independence *; and (2) Peace and Harmony of People and the Environment	A separate area for recycling and sorting; Easy access to the site from the classrooms; Sustainable building systems such as a water turbine or windmill to provide an ICT learning resource; The use of low impact building materials; The reuse and recycling of materials and Gardens and places to grow vegetables
Stay Safe	(1) Rules to Ensure Safety; (2) Safe Environment (Physical and Emotional); (3) Friends and Family	A separate toddler /nursery / reception class play area; A screen to separate quite areas outside from ball game play areas
Be Healthy	(1) Clean and Safe Environment; (2) Healthy Mind and Body; (3) Hygiene; (4) Healthy Eating and Balanced Diet	Circular tables that can be easily cleaned; Easily accessible drinking water and A wide and expansive corridor that gives the feeling of space
Enjoy and achieve	(1) Learning and Developing - Learning and developing the whole person *; (2) Celebrating Achievements - Valuing achievements by staff and pupils; (3) Teamwork - Working in a team; (4) Fun - Enjoyment of time and activities in school	A bright and colourful landscape with lots of different textures and smells; A light and colourful dining area; Fun walking routes with benches, paths and planting that forms divides; Interesting and colourful stones and external play surfaces; Interesting windows with colourful glass, particularly in the library
Be individual	Promoting Respect and Independence *	Quite seating overlooking the river, a friendship bench and wildlife viewing shelter; A variety of interesting and challenging climbing frames, climbing walls and courses; and Play areas in and among trees

THE IMPORTANCE OF VALUES IN HEALTHCARE SERVICE AND ENVIRONMENT DESIGN

The application of values within healthcare design is limited, with few structured methods and tools existing. As such this paper draws on the authors experience of applying such methods in other construction sectors, while drawing on the context and need for the use of values in the Healthcare sector. A number of highly influential individuals and institutions have already provided strong support for the use of values in healthcare. According to (Light 1997) “Health care systems are driven by values, not by economic forces”, while for (Prime Minister Gordon Brown 2007) Shared values are the bedrock on which the elements of our nation are built. Our values are given shape and meaning by the institutions that people know and trust, from the NHS to Parliament. (Bankauskaite and Saltman 2007) believe that “the concept of ‘values’ has become a recognized element in policy analysis, as reflected in WHO publications... Yet research into the definition, operationalization and application of this notion of values remains underdeveloped”, which is the need this paper addresses.

According to (Greer and Rowland 2007) the importance of values can be seen with: the inclusion of guidance on building values and the definition of common values in the EU Health System (WHO Europe 2006), the setting of principles and values which underpin the NHS Plan (DH 2006) and Lord Darzi’s and Alan Johnson’s comments, that determine that a review of the NHS should include understanding its sustainability within a community system that changes and enhances local accountability, and secures value for money and protects the fundamental values that the NHS has always embodied (DH 2007). However, values identification is made more difficult by the fact that “to understand real values we must focus on the values revealed in the everyday lives of the health service” and that “In the UK, the assumption is often that the purpose of devolution is to produce divergence” (Greer and Rowland 2007). However, (Greer and Rowland 2007) supports their universal use, determining that “whether the arguments are high-level ones about the private sector or local ones about the maternity units, the language of health politics is the language of values” and that devolution is not just about different means but also ends, and as such “different systems make different choices because policymakers differ in the meaning and priorities they assign to different values”. For example policy, service and estates designers are making these choices when specifying equipment such as bedside TV’s, headphones, telephones, radios, and facilities for active play. Through the provision of breastfeeding facilities for mothers to feed with privacy and dignity and good food, drink and snacks, such as fresh fruit and chilled water to help establish positive eating habits. Menu’s that offer choices and that are appropriate to the different cultural needs of children and their families and respect their traditions (DH 2001).

According to (Simces 2003), the link between consultation and quality health care is defined under the following five categories: values to guide healthcare, clinical care decision-making and planning, development of healthcare services and facilities, governance, agency and structure and collaborative practice. The focus of this paper is on understanding individual and collective values that can be identified during a estates project or as part of service design community consultation. According to (Lomas 1997) the public may not feel comfortable making choices without expertise, so consulting them on the values of a service can be very important, which is surprising given how rarely it is done. (Maloff, Bilan *et al.* 2000) found that communities welcomed making decisions on principles, values, client satisfaction and

service delivery, however were uncertain and less willing to make decisions about planning, managing services and setting resource priorities without information as evidence. (Greer and Rowland 2007) determines the need for “understanding the reach of values, their importance in politics, and the way we talk about shared and different values...”. Their use, according to him, is “important in shaping the future of health and devolution. Values, no matter how vapid, motivate us all, and in health, as in many other areas, a frank discussion of differing and shared values is much, much healthier than sniping or moralising.”

CONCLUSIONS

This paper has argued that the use of values concept is as important to healthcare as it is to education. It demonstrates a method to understanding and aligning values that has been trialed within the education sector, and provides a strong argument for its application within the healthcare sector. However further work should contextualise values with the physical and mental needs and conditions that are so important in the health and social care sector.

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