

Quality of Life at School and the Performance of School Students

A review of the academic literature

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1. Introduction

The purpose of this report is to present a review of the academic literature to understand the impact of Quality of Life at school on the performance of school students. This should help Sodexo to enhance the links between Facilities Management and aspects of the Quality of Life and performance of school students, but also that of teachers and communities.

This review of the academic literature is informed by both quantitative and qualitative elements of context to help readers understand the specificity or generality of the research covered. Overall, the report was drafted so as to be sufficiently accessible for a wide readership while maintaining sufficient attention to detail to retain a degree of granularity and therefore meaning to the results of research carried out in specific contexts. Our hope is that it will allow Sodexo's Schools segment to develop its Quality of Life narrative further with the benefit of empirical data.

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2. Context

School is a key component of a child's life and Quality of Life at school is an important part of the overall Quality of Life enjoyed by a child. Over the last 40 years, it has been defined in a variety of ways in the academic literature, for example:

- as wellbeing resulting from children's integration into the life and the environment of their schools (Karatzias et al., 2001)
- as the degree of satisfaction or dissatisfaction perceived by children with their school life (Epstein & McPartland, 1976)
- as subjective well-being (SWB) in school, an important indicator reflecting the student's development in school (Huebner, 2010; Huebner & Gilman, 2003; Liu et al., 2014; Tian et al., 2015)
- as the cognitive component of SWB in school, school satisfaction is related to numerous aspects of students' school functioning and overall development (Verkuyten & Thijs, 2002), including student engagement in schooling, perceived academic competence, and overall positive mental and physical health (Suldo et al., 2014).

Quality of Life, particularly individual wellbeing, and the performance of school students, are linked. According to Earthman (2004):

"...there is sufficient research to state without equivocation that the building in which students spend a good deal of their time learning does in fact influence how well they learn..." (p.18).

3. Model

The impact of schools on the Quality of Life of its users - students, teachers, communities - can be characterised from different perspectives:

- services - that are directly linked to Quality of Life
- channels (cognitive, physiological, affective) - that concern how services affect users
- results

Further, the services that impact the learning process can be divided into (Higgins et al., 2004):

- products and services
- the physical environment
- communication
- systems and processes

Our emphasis will be on products and services in view of the availability of literature and Sodexo's services.

As set out above, Choi et al. (2014) show that the physical environment can impact three intertwined *channels*:

- **cognitive impacts** can be a result of environmental stimuli (e.g., noise) which, both in its sound or visual form, was shown to increase the load on the learner
- **physiological impacts** which can result from external aspects (e.g. oxygen, temperature, etc.) or internal aspects (e.g. lack of sugar) on the body of school students
- **affective impacts** that can be symbolic or physical (e.g., shapes, distances, colours) and concern the emotional links students can develop with their physical environment.

Finally, the impacts of schools' physical environments can lead to different results: various types of performance e.g. memory, visual, reading, and the wellbeing of the school students, their teachers, their community. This model is set out in Figure 1 below.

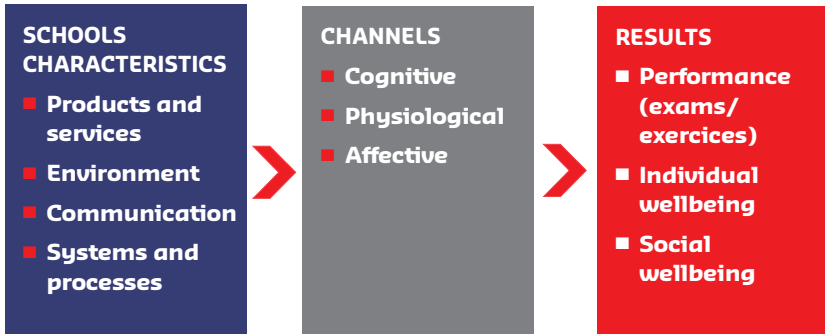


Figure 1. The Impacts of Schools on the Quality of Life of Users

4. Literature

School characteristics

In a literature review by Higgins et al. (2005), school characteristics are broken down into four main categories as set out above:

- products and services e.g. foodservices
- the physical environment e.g. temperature, air quality, room layout, space allocation
- communication within the school, outside of the school and signage
- systems and processes e.g. involvement in the school design process

Products and services

Unhealthy dietary patterns, such as diets that are low in fruits and vegetables and high in fats, have been cited as the most frequent chronic disease risk behaviour among adolescents between 12 and 17 years old. Within a school context, dietary pattern is both a personal (or family) choice and the result of foodservice options. Kubik et al. (2003) found that:

- *à la carte* availability was inversely associated with fruit and vegetable consumption and positively associated with total and saturated fat intake
- snack vending machines were negatively correlated with fruit consumption
- fried potatoes being served at school lunch was positively associated with vegetable and fruit/vegetable intake

In line with other studies, these results support the popularity of fried potatoes as a “preferred” vegetable choice by adolescents, and they suggest that when the fruit and vegetable selections offered to students at school lunch include fried potatoes, many choose this option. According to Kubik et al. (2003):

“results suggest that the primarily high-fat snacks and calorie-dense beverages offered and sold to students via *à la carte* programs are displacing fruits and vegetables in the diets of young teens and contributing to total and saturated fat intakes that exceed recommended levels”.

Environment

Research emerging from the field of design and environmental analysis since the late 1990s / early 2000s has indicated that the design and quality of schools settings – primary environments for children and adolescents – are particularly critical and have a direct effect on a child’s self-identity, self-esteem and academic performance (Ulrich, 2010). The two most important individual building elements found to affect student achievement are temperature control and air quality (Earthman, 2004).

Air temperature: Climate control (including the presence of air conditioning) has \ demonstrable impact on student learning outcomes (Cash, 1993; Earthman, 2004; Hines, 1996; Lanham, 1999; Barrett et al. 2015).

Lighting: Lighting ranked as the most or second most important criteria influencing student outcomes, with daylight offering the most positive impact (Barrett et al. 2015; Heschong Mahone Group, 1999). Daylight offers a more positive impact on student outcomes than other forms of lighting, potentially due to its biological effects on the human body (Heschong Mahone Group, 1999; Wurtman, 1975).

Air quality: Several studies (e.g. Hulin et al. 2012) have investigated associations of microbial pollutants and their sources in classrooms with asthma and respiratory outcomes. Higher airborne concentrations of airborne moulds are associated with respiratory outcomes such as asthma in several studies.. Visible dampness and mould in homes has been associated with increases in respiratory and asthma symptoms and with respiratory infections, suggesting a similar association for classrooms. However, the direct documentation of the adverse effects of visible dampness and mould in the classroom is considerably more limited. Fewer, and generally, smaller studies have been performed in schools.

Acoustics: Acoustics have also been shown to have an impact on student learning (Cash, 1993; Earthman, 2004; Hines, 1996; Lanham, 1999). Acoustic control matters such as chronic noise exposure have been shown to hinder cognitive functioning and to impair pre-reading and reading skills (Haines et al., 2001; Evans and Maxwell, 1997; Maxwell and Evans, 2000). In addition to aircraft noise, other types of environmental noise including from railways and road traffic have been found to affect reading. Road traffic noise outside schools, when exceeding 70 dB has also been found to reduce children’s attention.

Studies in English and Welsh schools show that chronic exposure to noise at school has a detrimental effect on children’s academic performance. Both external environmental noise heard inside a school and noise generated within

a school have an impact on children's test scores, but affect children in different ways. Moreover, the particular characteristics of the noise which impact on children's performance differ between external and school noise.

Aesthetic quality: Improved cosmetic features, such as exterior painting, careful maintenance and / or replacement of lockers and classroom furniture, carpeting, and the absence of graffiti have been associated with increased mean scale scores on every subtest of the Virginia Test of Academic Proficiency (Cash, 1993; Earthman, 2004; Hines, 1996; Lanham, 1999). These cosmetic features and comfort factors appeared to have more of an impact on student achievement than did structural factors (Cash, 1993), although structural factors also influenced achievement on every subtest but one (Hines, 1996).

Teachers were asked to rate the quality of their school facilities by responding to seven items that assessed their perceptions of the degree to which their school building was attractive, had adequate space, and was well maintained. These features tapped elements identified in previous research as potentially related to student achievement. Sample items include:

- this building is pleasing in appearance.
- the facilities here are lacking in regular maintenance (reverse-coded)

Consistent with the findings of earlier research, perceptions of the quality of school facilities were related to student achievement in English and mathematics.

Desirable designs include having 'friendly and agreeable' entrance areas, supervised private places for students, as well as public spaces that foster a sense of community, with particular attention to the colour used (Fisher, 2000). According to Bunting (2004), this means that modern schools must create spaces that students want to go to, similar to the way cafés attract people, rather than the space being purely functional. Other research has acknowledged that 'student achievement lags in shabby school buildings' but goes on to say that this research 'does not show that student performance rises when facilities go from decent buildings to those equipped with fancy classrooms, swimming pools, television studios and the like' (Stricherz in Higgins et al., 2005:36). In one study, the significant improvements in the learning environment were attributed to the better attitudes to teaching and learning the improvements in the physical environment created amongst all users (Berry in Higgins et al 2005:14).

Schools and classrooms can be more than a place to inhabit: they can also acquire an emotional significance. One perspective is that educators play an important role in constructing classrooms and schools, and therefore students'

identities. An extension of this idea is that children's environments have an impact on their cognitive and behavioural development and on childhood vulnerability (Ellis, 2005).

Green spaces: previous research has demonstrated positive associations between the greenness of high school landscapes and school wide academic performance (Barrett et al. 2015). Results demonstrate that classroom views to green landscapes cause significantly better performance on tests of attention and increase students' recovery from stressful experiences. Specific design classifications that have been related to student achievement on the Iowa Test of Basic Skills (ITBS) include pathways encouraging ease of movement, positive outdoor spaces, large-group meeting spaces, instructional neighbourhoods, ample egress, natural light and views, the presence of technology for teachers, and pleasing or appropriate colour, defined as age- and activity-appropriate colour choices (Tanner, 2000; Tanner and Lackney, 2006).

Access to sport facilities: Breslin and Brennan (2012) show that children who met the recommended guidelines for moderate to vigorous intensity physical activity reported higher levels of wellbeing.

Communication

This part has received less attention than others in terms of published research. The publications available refer to communication within school, outside school and on the campus. Communication includes explicit communication between students and teachers and implicit rules within the classroom (Moos, 1979). Open-plan classrooms have been reported to facilitate teacher-to-teacher interactions and 'social support' (Ahrentzen and Evans, 1984). Evans (1980) highlights the importance of clear signage on the campus, which can be achieved through the use of landmarks and a high degree of differentiation (Garling et al., 1986). Most recently, issues of corridors and navigation have been found to have only a small impact on learning in English primary schools where students spend most of their time in just one classroom (Barrett et al. 2015).

Systems and processes

According to Barrett et al. (2015) and David (1975), space appropriation is a way for students and teachers to feel a sense of belonging and empowered. Thus, Dudek (2000) and Clark (2002) encourage involvement of students and teachers in the design process. This can lead to increased satisfaction with the environment (Sundstrom, 1987). Killeen et al. (2003) found that the act of personalising the classroom by posting work of school projects, artwork, and the like in semi-public and public spaces generated a strong sense of identification with the school among the students.

Channels

Cognitive Effects of the Physical Learning Environment

Noise, whether visual or auditory, can be considered as a typical irrelevant environmental stimulus that takes resources away from learners' cognitive process. Glenberg et al. (1998) provided a demonstration of this phenomenon in the visual system by showing that memory retrieval could be improved when subjects averted their gaze from their environmental surroundings during cognitively difficult tasks. The irrelevant speech effect (e.g. Salamé and Baddeley, 1986) is a well-known example of this phenomenon in the auditory system, which refers to the interference from irrelevant auditory items (e.g. background speech or white noise) during immediate recall tests. In addition to visual and auditory contextual cues, Suss et al. (2012) demonstrated that olfactory contextual cues can also affect learning performance.

Physiological Effects of the Physical Learning Environment

Lan et al. (2011) found that in a very warm office environment (at 30°C), participants had a lower arterial oxygen saturation and were less willing to exert effort than in a thermally neutral office environment (at 22°C). Another example of a direct physiological effect of the environment is related to the effects of food on blood glucose levels. Elevated blood glucose, for example after a glucose drink, is associated with improvement on a number of cognitive tasks, particularly those that require mental processing effort (e.g., Scholey et al., 2001). Several studies have shown that the colour temperature of lamps (e.g., warm-white vs. cool-white) and the level of luminance (e.g., 300 vs. 1,500 Lx) has an impact on cognitive performance (e.g. Knez and Hygge, 2002).

Affective Effects of the Physical Learning Environment

Studies on the influence of seating arrangements in classrooms showed that learners assigned to the front row and the centre of each row participated more (e.g., Montello, 1988; Sommer, 1967) and were more attentive to learning activities (e.g., Marx et al., 2004) than peers in the middle and back rows, and peers at the sides of each row. With regard to the effect of emotional designs of learning materials on cognitive load, Um et al (2012); see also Plass et al. (2013) found that the use of an aesthetically appealing design in multimedia learning materials (e.g., use of a face-like pedagogical agent) led to positive emotions and reduced the perceived difficulty of the learning task.

Results

Temperature, ventilation rate, air quality and light are typically reported as the most influential factors influencing students' learning as far as the physical environment is concerned. In an English study, differences in the physical

characteristics of primary school classrooms were found to explain 16% of the variation in learning progress over a year with light, temperature and air quality explaining half of that variation (Barrett et al. 2015). Barrett et al. (2015) further classify the factors of influence according to three categories, naturalness (light, temperature, air quality), individualisation (ownership and flexibility) and stimulation (complexity and colour). The authors claim that the first account for half of the learning impact, and the latter two a quarter for each. Although acoustic comfort seems to be considered a secondary factor (p. 24), this provides some idea of hierarchy among the factors.

Performance

Ventilation rate

The results of computerised performance tasks performed by more than 200 students showed significantly faster and more accurate responses for Choice Reaction¹ (by 2.2%), ColourWord Vigilance² (by 2.7%), Picture Memory³ (by 8%) and Word Recognition⁴ (by 15%) at higher ventilation rates compared with lower ventilation conditions (Bako-Biro et al., 2012).

Mendell et al. (2013) tracked ventilation rates (VRs) and illness absence over 2 years in 162 classrooms within 28 urban schools in three California school districts. After controlling for potential confounders, for each 1 litre per second (L/s) per student increase in ventilation rate, on average, student illness absence decreased by 1.6%. A substantial body of literature finds that lower ventilation rates also reduce student performance. For example, two of three studies in US schools found that increases in ventilation rates are associated with statistically significant improvements in performance in standard tests (mathematics, reading, and science) of academic achievement.

Mendell et al. estimate that increasing the average VR in California's classrooms to the minimum requirement in standards would decrease illness absence by 3.6%. They further estimate that increasing the average VR to a higher value, 9.4 L/s per student, would decrease illness absence by 7% to 10%.

¹ A red pointer was displayed on the screen, indicating towards North, East, South or West. Students' task was to follow the direction of the pointer on the keyboard by pressing the appropriate arrow key as fast as they could (Bako-Biro et al, 2012).

² Colour words: red, yellow, blue and white were shown on screen one at a time at constant intervals. Each time any of these words was presented it could be written in any one of the colours. Students were instructed to press the <ENTER> key as fast as possible when there was a match between the meaning of the word and the colour of the text (Bako-Biro et al, 2012).

³ Six pictures were shown on the screen for 2 s. Students were asked to memorise the location of each picture shown and recall their correct location by pressing the appropriate number key using the keypad (Bako-Biro et al, 2012).

⁴ Four words were presented on the screen. One of the four words had no meaning (non-word); the task was to indicate the non-word by pressing the corresponding numeric key.

Following earlier studies which indicated such a correlation, there is growing evidence to show that impairment of learning performance and increased absenteeism are partly due to inadequate ventilation and unsuitable thermal conditions in classrooms.

Coley and Greeves (2004) carried out a study on how ventilation rates affect cognitive performance in a primary school and reported: "The effects are best characterised by the power of attention factor which represents the intensity of concentration at a particular moment with faster responses reflecting higher levels of focused attention. Increased levels of Carbon dioxide (CO₂) from a mean of 690 parts per million (ppm) to a mean of 2909 ppm lead to a detriment in power of attention of about 5%".

Air quality

Growth in cognitive development was diminished in children in schools in Barcelona, Spain, with higher levels of traffic-related pollutants in the classroom and outdoors. Forns et al. (2016) found that higher levels of traffic-related pollutants in classrooms in Barcelona were associated with lower child behaviour development based on a survey completed by parents.

Among the most common pollutants to be studied for its effect on cognition is nitrogen dioxide (NO₂), a toxicant produced by fossil fuel combustion and thus closely linked to road traffic as well as gas stoves. In Quanzhou, China, Wang et al. (2009) showed that exposure to traffic-related pollution was found to be associated with poor performance in neurobehavioral tests (cognitive, motor, sensory, and psychomotor).

Room temperature

In an intervention study in Denmark, speed in tests of subtraction, addition, and reading were statistically significantly improved at 20°C relative to 25°C; however, there were no effects on errors. Error rates in an acoustic proofreading test involving listening to recorded text were diminished at 20°C, but speed was not affected. There were no statistically significant associations of temperature with performance in tests of multiplication and logical thinking. Improvements in performance at 20°C versus 25°C, when statistically significant, were generally less than 10% but in one case the improvement was as high as 37%. In a cross-sectional study from the US that employed data from standard academic achievement testing, scores in the maths test increased about 0.5% per each 1°C decrease in temperature in the 25°C to 20°C range. A study conducted by Lanham (1999) found that air conditioning accounted for 1.6% of the total variance in 3rd Grade English, 2.8 % for 5th Grade English, and 4.8% for 5th Grade Technology. Scores in reading and science were affected similarly by temperature, but the associations were not statistically significant.

In a study of university-level computer classrooms, there were statistically significant increases in ocular, nasal, and throat symptoms, headache, and tiredness with increased temperature. These outcomes increased about 1.5% per each 1°C increase in temperature.

Sound

In a cross-national study of aircraft noise, “a 5 dB difference in aircraft noise was equivalent to a 2-month reading delay in the United Kingdom and a 1-month reading delay in the Netherlands” (Basner et al 2014).

In classrooms where acoustics were better, children reported their relationship with their peers and their teachers as better than in classrooms with bad acoustics.

Physical quality

In a 2000 survey of school principals in 32 countries in both the global North and South, nearly 30% of US principals noted that the quality of their school’s buildings and grounds impacted student learning, and almost 40% noted the same for available instructional space (von Ahlefeld, 2009).

Improvements in the physical structure of schools in the global South appear to positively impact students’ test scores (Glewwe et al., 2011). In their investigation of the relations between school physical quality and rural Kenyan first-grade children’s cognitive functioning and behaviour, Daley et al. (2005) found that the availability of natural light (in schools without electricity) predicted students’ test scores.

More recent research examining student achievement scores with school facilities’ quality ratings, has revealed differences of between five and 17 percentile points in achievement scores of students in functional buildings compared with scores of students in poor buildings, after controlling for socioeconomic status. The status of the building (roofs, ceilings and walls, heating and electrical systems, and bathroom facilities) was evaluated by a committee of experts including engineers, architects, and maintenance and the building was rated poor, fair, or excellent according to their overall physical condition. Data suggested that as schools move from poor to fair, average achievement scores increased by 5.46 percentage points, while improvement from poor to excellent was associated with a 10.9 percentage point increase (Berner, 1993). Several extensive studies of school buildings show that student achievement scores were higher in schools with higher quality ratings. In schools that were well maintained, swept and mopped more frequently, and where graffiti was removed more expediently, achievement scores were higher. Where lockers were kept in good repair and classroom furniture was of higher quality, achievement improved (Cash, 1993; Earthman, 2004; Hines, 1996;

Lanham, 1999). These findings have been repeated in studies throughout the US. A district-wide study of 139 Milwaukee schools using a comprehensive facility assessment documented that good facilities had a significant impact on reading achievement (Lewis, 2000). Researchers investigating the impact of school facility condition on student learning and behaviour, as well as teacher turnover, in Texas middle schools reported a positive relationship between facility condition and student achievement (O'Neill and Oates, 2001). In English primary schools, researchers have found that the impact of the classroom physical environment is much more important than that of 'whole-school' factors; primary school students in England spend most of their time in a single classroom (Barrett et al. 2015).

Wellbeing

A multiple regression analysis (Zullig et al., 2011) among middle and high school students suggested that five school climate domains are significantly related to school satisfaction:

- academic support
- positive student-teacher relationships
- school connectedness
- order and discipline
- academic satisfaction

School physical environment and school social environment came after academic support, positive student-teacher relationships and academic satisfaction. This is in line with most studies: student-teacher relationships is most strongly correlated with all other school climate measures, connectedness to others (Thapa et al., 2013), and perceptions of social, emotional and academic support (Osterman, 2000; Wentzel, 2002). In an Australian study, the strongest predictors of child wellbeing were relationships with peers and school (teacher relationships, school climate, school satisfaction).

5. Summary

SCHOOL CRITERIA	MAIN FINDINGS	CONTEXT	REFERENCES
Temperature	Air conditioning accounts for 1 to 5% of performance variance. Improvements in performance at 20°C versus 25°C were between less than 10% up to 37%.	English primary schools and American schools (3rd to 5th grades);	Barrett et al. 2015; Cash, 1993; Earthman, 2004; Hines, 1996; Lanham, 1999.
Light	Colour temperature of the lamps and level of luminance have an impact on cognitive performance.	Swedish schools and English primary schools	Barrett et al. 2015; Hygge and Knez, 2001; Knez and Hygge, 2002.
Daylight	Daylight offers a more positive effect on student outcomes than other forms of lighting, potentially due to its biological effects on the human body.	American African schools and English primary schools	Barrett et al. 2015; Heschong Mahone Group, 1999;
Ventilation rate	More accurate responses for Choice Reaction (by 2.2%), ColourWord Vigilance (by 2.7%), Picture Memory (by 8%) and Word Recognition (by 15%) at the higher ventilation rates compared with the low ventilation conditions. A study found that scores in mathematics, reading and science increase approximately 0.5% for each 1 L/s per person increase in VR. For each 1 litre per second (L/s) per student increase in ventilation rate, on average, illness absence of students decreased by 1.6%.	Californian schools	Bako-Biro et al., 2012; Haverinen-Shaughnessey et al., 2006.
Air quality	Traffic-related pollution was found to be associated with poor performance on neurobehavioral tests.	Chinese schools Spanish schools	Wang et al., 2009; Forns et al. 2016

SCHOOL CRITERIA	MAIN FINDINGS	CONTEXT	REFERENCES
Acoustics	Acoustical control impairs pre-reading and reading skills. Road, train, traffic noise outside schools, at levels of around 70 dB, have also been found to negatively impact children's attention.	English, Dutch and Welsh schools	Cash, 1993; Earthman, 2004; Hines, 1996; Lanham, 1999; Haines et al., 2001; Evans and Maxwell, 1997; Maxwell and Evans, 2000.
Physical quality	Improved cosmetic features, such as exterior painting, careful maintenance and/or replacement of lockers and classroom furniture, carpeting, and the absence of graffiti have been associated with increased mean scale scores on tests. Perceptions of the quality of school facilities were related to student achievement in English and mathematics. Desirable designs include having 'friendly and agreeable' entrance areas, supervised private places for students, as well as public spaces that foster a sense of community, with particular attention to the colour used.	American schools and English primary schools	Barrett et al. 2015; Cash, 1993; Earthman, 2004; Hines, 1996; Lanham, 1999; Bunting, 2004; Fisher, 2000; Berry, 2005; Ellis, 2005; Um et al, 2012; Plass et al., 2013.
Green spaces	Positive associations between the greenness of high school landscapes and academic performance. Results demonstrate that classroom views to green landscapes cause significantly better performance on tests of attention and increase student's recovery from stressful experiences. These include pathways encouraging ease of movement, positive outdoor spaces, large-group meeting spaces, instructional neighbourhoods, ample egress, natural light and views, the presence of technology for teachers, and pleasing or appropriate colour, defined as age- and activity-appropriate colour choices.	American schools and English primary schools	Barrett et al. 2015; Tanner, 2000; Tanner and Lackney, 2006

SCHOOL CRITERIA	MAIN FINDINGS	CONTEXT	REFERENCES
Access to sport	It has been shown that children who met the recommended guidelines for moderate to vigorous intensity physical activity reported higher levels of wellbeing..	Northern Irish schools	Breslin et al., 2012
Systems and processes	Space appropriation is a way for students and teachers to feel empowered. The involvement of students and teachers in the design process can lead to an increased satisfaction with environments; studies found that the act of personalising the classroom by posting work of school projects, artwork, and the like in semi-public and public spaces generated a strong sense of identification with the school among the students.	American factories; American schools	Sundstrom, 1987; Killeen, 2003; Davis, 1975; Dudek, 2000; Clark, 2002.
Food	Elevated blood glucose, for example through a glucose drink, is associated with an improvement on a number of cognitive tasks, particularly those that require effortful mental processing.	UK schools	Scholey et al., 2001
Communication/ Physical lay out	Classrooms with clear breakout zones or breakout rooms attached have been found to have a positive impact on learning. Open-plan classrooms facilitate teacher-to-teacher interactions and 'social support'. Studies on the influence of seating arrangements in classrooms showed that learners assigned to the front row and the centre of each row participated more and were more attentive to learning activities than peers in the middle and back rows and peers at the side of each row. importance of clear signage on the campus.	American schools and English primary schools	Ahrentzen and Evans, 1984; Barrett et al. 2015; Evans, 1980; Garling et al., 1986; Marx et al., 2004; Montello, 1988; Sommer, 1967.

SCHOOL CRITERIA	MAIN FINDINGS	CONTEXT	REFERENCES
Wellbeing	Academic Support, Positive Student-Teacher Relationships, School Connectedness, Order and Discipline, and Academic Satisfaction were all shown to contribute to students' sense of wellbeing.	Cash, 1993;	Wang et al., 2009; Forns et al. 2016

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