



Fuel Zone

Topic:

Nutrition

Organisation:

Glasgow City Council (Cordia LLP since 2009)

Location:

Glasgow (Scotland)

Dates:

1996 to ongoing

Budget:

£50,000 per annum

Website:

www.fuelzone.co.uk; www.coolfuelkids.co.uk

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Overview

To combat the declining number of young people eating school meals, Glasgow City Council's Direct and Care Services (now Cordia LLP) developed the Fuel Zone concept in Glasgow to revamp the image of the school meals service and reward healthy eating.

Fuel Zone was developed in three stages: Stage One (1996 to 1999) involved refurbishing dining halls to create a vibrant, attractive environment; Stage Two (2002 to 2004) focused on promoting healthy eating; and Stage Three (2004 and ongoing) introduced a web-based points reward scheme that promotes the uptake of healthy options. Fuel Zone has been rolled out to 150 primary and 29 secondary schools in Glasgow, reaching over 80,000 pupils.

Results:

- Fuel Zone has increased the number of healthy options on school menus by 30 per cent from Stage One to Stage Two
- By 2006, uptake of school meals was up from a pre-Fuel Zone low of 32 per cent to 60 per cent
- Between 2007 and 2010, 4,211 rewards were distributed to school pupils as a result of their healthy eating
- In 2010, 5,792 pupils (approximately 25 per cent of Glasgow pupils) were registered with the Fuel Zone Points Rewards system



In 1996, Glasgow City Council's Direct and Care Services (DaCS, which became Cordia LLP in April 2009) recorded a serious decline in the number of young people eating school meals – uptake that year reached a record low of just 32 per cent.



The Scottish Executive outlined in its report Eating for Health: A Diet Action Plan for Scotland (1996) that school meals have an important role to play in supporting the nutrient intake of vulnerable children and promoting healthier eating to all Scottish children, among whom there is a growing prevalence of obesity.

Yet in 1988 local authorities (LAs) had been required to open the school meal service to competition. This encouraged caterers to reduce costs wherever possible, which led to a reduced focus on health, diet, choice and portion size. This conflicted with many of the lifestyles strategies LAs were developing at this time.

This was corroborated by a study conducted in Edinburgh in 1996 that showed school meals had deteriorated in nutritional quality, failing to meet expert guidelines or even the standard set by homemade packed lunches. It also revealed that children from disadvantaged backgrounds relied more on school meals for nutrition.

Against this backdrop of declining nutritional quality and uptake of school meals, the DaCS team felt they not only had a duty to improve the school meals service for the children of Glasgow's primary and secondary schools, but also the 3,500 catering staff across the city whose jobs depended on the service.

This led to the development of the Fuel Zone programme, which initially sought to build brand alliance over a three-year period and get students back into the dining halls (at this point healthy eating was not the primary focus). With the release of the 2002 *Hungry for Success* report, two further stages were added to the programme, which focused on promoting and incentivising healthy eating (see Scoping section for further details).



The Fuel Zone team made consultation a cornerstone of their programme and began with a lengthy consultation period with pupils.

The aim of the first stage of the programme (1996 to 1999) was to encourage school children to reject unhealthy foods at lunchtime, in favour of school meals. The team identified that to do this they needed to understand what the competition for school meals was.

Subsequently, the Fuel Zone team carried out a competitor review, which involved regularly walking the length of Glasgow's main high street and ordering from the menus in fast food shops. Each product and service was

examined to discover the pros and cons of dining away from school and to learn from the competition where possible. This exercise highlighted that the main competition came from local fast food establishments, such as chip shops and fast food franchises. Corner shops also competed against school meals and promoted well-known snack food brands.

In addition, the team carried out an extensive consultation with secondary school pupils from across Glasgow, which highlighted that young people were being marketed to by local food retailers. As a result, pupils were 'voting with their feet' - deserting the school canteen in favour of their local chip shop, burger van and junk food brands like McDonald's. Pupils considered the school meals service to be oldfashioned, drab and lacking credibility. They expressed their dissatisfaction with the environment and preferred fast food franchise outlets for their colourful and engaging surroundings. As lunchtime was perceived to be the only time that was 'theirs' during the school day, many students chose to leave the school grounds and meet at local chip shops and newsagents. Pupils indicated that they wanted an attractive, fast service with a greater range of meals and drinks. The queuing system used in most school dining halls and the potential social stigma of eating school meals were also identified as key issues, with some students reluctant to use school canteens, as it suggested they were eligible for free school meals.

These insights informed the eventual layout of a wide variety of food options and a fundamental reworking of food preparation and dining areas in the style of a fast food franchise.

Hungry for Success (2002)

November 2002 saw the release of the *Hungry for Success* report, a document prepared by the Scottish Executive's expert panel on school meals. The aim of the document was to provide legislative guidelines for improving the quality and nutritional standards of school meals

www.thensmc.com

across Scotland. A key requirement of the report was for educational authorities to consider the introduction of incentive schemes to promote nutritious food choices among pupils and to increase the uptake of school meals.



Following the release of this report, Fuel Zone shifted its focus to making school meals healthier, while still ensuring that students continued to eat them, rather than returning to the competing fast food outlets. In addition to increasing school meal uptake among primary and secondary school pupils and improving perceptions of the school meal service, Fuel Zone aimed to:

- Increase the number of healthy options on school menus
- Set up the Fuel Zone Points Reward scheme
- Encourage website registration and participation in the scheme



Relationships were built with a number of stakeholders to guide the programme's development, including:

- Greater Glasgow Health Boards and Health Promotion
- NHS Greater Glasgow and Clyde contributed to menu development

- The Scottish Executive's Modernisation Government Initiative
- Glasgow Young Scot
- Student Council (made up of students from across Glasgow)
- Catering staff area managers liaise between schools and Cordia to keep all parties up-to-date

All these stakeholders were identified as having a direct impact and role to play, and so keeping them involved throughout was vital for the successful development of the programme.



"I think good communication was the key. There were regular meetings to keep everybody up-to-date and involved. There were presentations – every time there were new ideas or a new development it was presented to the group, really making sure everybody was involved at every step of the way, and everybody's opinions were listened to and taken on board." (Stephanie McDowall, Marketing Coordinator)

Following research at each of the programme, a variety of interventions were developed.

Stage One (1996 to 1999)

To compete with the lure of fast food establishments, the Fuel Zone team developed plans to refurbish school canteens to replicate the look of popular high street food outlets and create a similar atmosphere of fun and choice for pupils. Traditional dinner counters would be replaced with high street style queuing systems, in the hope of creating an informal atmosphere where students could socialise and enjoy their lunch.

To compete with major high street brands, the Fuel Zone team hired an external marketing agency to develop a number of options for a brand. These were pre-tested with the Student Council and altered accordingly before being used in designs for Fuel Zone canteens and later on the Fuel Zone website.

A cashless card based system to pay for meals was also developed to counter the potential social stigma of eating school meals. The cashless card system would enable all pupils to pay for meals in the canteen on their card, and thus reduce discrimination between those who actually pay and those who are eligible for free school meals.

Stage Two (2002 to 2004)

The *Hungry for Success* report recommended the establishment of nutrient-based standards, known as Scottish Nutrient Standards for School Lunches, and that these standards should be adopted by all special and primary schools by December 2004 and all secondary schools by December 2006.

Subsequently, the focus of Stage Two of the Fuel Zone programme was on developing more healthy food menus within the schools. Menu options were developed in conjunction with a dietician and food safety officer to ensure they met the national nutritional criteria, and in consultation with pupils, who were invited to sampling days held in schools and to vote on the menu options for their school canteen. The menus were – and continue to be – decided by what the children want, what the dietician approves, and what is required by the Scottish Executive's standards.

Stage Three (2004 and ongoing)

Alongside the nutrient-based standards for school meals, the *Hungry for Success* report also identified seven underlying principles to govern the implementation of these standards.

Principle seven outlined that opportunities to utilise incentives to improve uptake of school lunches should be considered.

Consequently, Stage Three of the Fuel Zone programme focused on the development of a web-based Fuel Zone Points Rewards scheme. It was identified that further insight would need to be gathered into what sort of rewards would incentivise pupils to choose healthier school meal options. Focus groups were conducted in five high schools with a range of age groups, which provided insight into the types of rewards that would work across the whole school. The research revealed that older pupils preferred to receive voucher-based rewards, which would give them the independence to make their own purchasing decisions. Younger pupils wanted more tangible rewards, such as iPods.



Building on this research, a web-based points reward scheme was developed to award healthy food choices, using a cashless payment system that would allow pupils to accrue points for every meal purchased. When pupils purchase their meal, the points would be awarded automatically and added to their account. All items would be awarded points, but the most points could be gained from the healthiest items. These points could then be redeemed for a range of items and activities that the research had identified would motivate the target audience, such as iPods, discounts at high street shops, gym sessions and cinema tickets. The cashless card system was also developed to have a number of further benefits: removing the need for staff to handle cash meant a faster, more hygienic service and reducing any stigma associated with free school meals. It was hoped that this would also contribute towards tackling playground theft although there is no evidence to suggest that this had in fact happened.

As part of the programme's ongoing service development, all Glasgow schools now have a school health group, which consists of pupil representatives, who meet on a frequent basis with catering staff to develop and generate ideas for continuous improvement.



The Fuel Zone programme is managed by a full-time administrator who regularly visits the city's schools on a rotational basis, to market the Fuel Zone Points Rewards scheme to students. She also conducts surveys, one-to-one interviews and focus groups with pupils to understand what the target audience wants from their service. These insights are fed into the development of all changes to the programme. These visits enable the Fuel Zone administrator to keep staff informed of the programme's progress and to build relationships so that staff are comfortable with the roll-out and have access to a constant point of contact.

Catering staff and area managers, who are all employed by Cordia LLP, are regularly involved and updated on the development of the Fuel Zone programme. The area managers actively try and engage with head teachers, as the most engaged head teachers tend to take a 'whole

school' approach to healthy eating and school meals, and encourage promotion of Fuel Zone in assemblies, which aids the success of the programme.

Stage One (1996 to 1999)

All of Glasgow's 29 secondary schools had their dining halls refurbished to create a vibrant, 'high street' environment that offered menus to suit the tastes of Glasgow's students.

Training was given to catering staff and area managers to educate them about the programme and the brand. Any issues or apprehensions were discussed and staff were reassured of the benefits of the programme and the importance of their role in the programme's success. This training also gave staff the opportunity to put forward any suggestions and ideas of their own with regards to shaping future developments of the programme (this training was continued into Stage Two).

Teaching packs were developed and distributed in August 2009. These contained recipes for home economics classes and presentations that could be used in classes or assemblies to encourage teachers to take a 'whole school' approach to healthy eating.

Stage Two (2002 to 2004)

Healthier menu options were developed in consultation with pupils. These consultations also led to the introduction of the Q-Card ready for Stage Three of the programme. Pupils were originally required to use their Young Scot card to accumulate points. However, the application form for the Young Scot card proved to be a barrier, as children had to provide a host of personal information and wait some time for their application to be processed. It was decided that the Q-Card would be a better vector for the scheme, as all young people are issued one when they enter secondary school. Following the introduction of the Q-Card, subscriptions to the scheme rose from 597 to 6,000 in a matter of months.

"One of the problems in the beginning with the Points Reward scheme was that pupils were required to have a Young Scot card to access the scheme. It sometimes took pupils a while to apply for these and a while for them to arrive, so during this period the pupil had no access to Fuel Zone. In order to overcome this problem the scheme was opened up to accept Q-Cards. This widened access and resulted in more pupils signing up." (Stephanie McDowall, Marketing Coordinator)

Forget cash, forget change!

Top up your Fuel Zone account online to pay for drinks, lunch and snacks in the Fuel Zone at your school...

Stage Three (2004 and ongoing)

The website, www.fuelzone.co.uk, was launched in 2004 and underpinned the cashless card reward scheme for choosing healthy school meal options. It gave pupils an online account with which to keep track of their reward points and order specific items.

This is done through a 'checkout', as with most other online ordering websites, and each pupil is given a username and password. Once they have placed an order, they receive electronic confirmation sent to their email address or have the option to print the page for reference. The website is content-managed by the Fuel Zone team, who control the various rewards and promotion changes, as well as the ordering and dispatch process within the schools network. When a reward has been selected from the online catalogue the information is fed into a central database that automatically deducts the appropriate reward points from the pupil's card.

The freedom to eat where they choose was a major driver for some young people. The ability to buy a pre-packed sandwich from local shops meant pupils could eat wherever they chose. The Fuel Zone team listened to this and in 2004 began providing similar products. However, young people also wanted the freedom to choose their own sandwich filling – as provided by fast food giant Subway. The Fuel Zone team therefore created SubZone, allowing young people to create their own substyle sandwiches.

The primary school Fuel Zone was also developed during this time and is similar to its secondary school counterpart, but without the points reward element. Rather, younger pupils are encouraged to eat as much as they like from the healthy choices on offer. Pupils can mix and match elements like fruit, yoghurt and jelly for the same price and teachers reinforce healthy food choices. This was rolled out to 184 primary schools in Glasgow (although due to amalgamations and closures of some schools, this figure currently stands at 150 primary schools).

www.coolfuelkids.co.uk is the website dedicated to primary pupils. In addition to displaying the menus for the coming week, the site features games, healthy eating tips, recipes for cooking at home, food facts, a space for pupils to tell the Fuel Zone team what they think, and resources for teachers.



The most important factor in achieving the targets set out in the *Hungry for Success* report was to continually improve the Fuel Zone menu. Although it already offered healthy options, further changes during this time included taking chips and carbonated drinks off the daily menu. While vending machines initially offered fizzy drinks as well as water and fruit juices, all sugar-filled carbonated drinks were eventually removed by August 2007. To ensure these changes did not deter pupils from eating in the Fuel Zone they were supported by some other alterations.

The website was given a makeover – while the original website allowed pupils to check points and claim rewards, the new look website offers many more features:

- Own inbox for each registered member, which allows the Fuel Zone team to send tailored messages, providing an additional means of communicating with pupils and ensuring they log on regularly to check for any updates
- Weekly quiz, giving pupils the chance to win a small prize by answering the health related questions correctly
- Points calculator, enabling pupils to calculate how long it will take them to get the reward they are saving for
- Reward catalogue, updated to include a sixmonth membership to gym facilities in

Glasgow, portable iPod speakers and an iPod radio alarm

As part of further refreshment of the promotional materials for Fuel Zone, the following were installed into Fuel Zone canteens:

- Bright coloured counters
- Floor stickers
- Posters
- Light boxes that display menu options and points
- Plasma screens that advertise the menu options available and healthy lifestyle messages, as well as playing music videos. These are a key tool for encouraging children to stay in school for lunch

The Fuel Zone team is also committed to ensuring all food options satisfy the pupils and their parents. In some schools and community centres where take up is low, parents' nights are held to get parents on board. In some cases, kitchens are opened to allow parents to sample the food their children are offered on a daily basis.

The programme is monitored through regular system reports to examine uptake to the points based reward scheme to see where uptake is low, and thus where to target promotional activities, and to assess the popularity of different rewards.



Evaluation of the programme focuses on nutritional content and uptake of school meals. This data is collected routinely by the Scottish Executive. Further results are gathered by the Fuel Zone team on numbers registered for the points based reward scheme, which can be segmented by school, and the numbers of points and rewards administered.

Stage One (1996 to 1999)

Stage One focused on winning back patronage and customer loyalty and had a significant impact on the take-up of school meals across Glasgow:

- The number of pupils entitled to free school meals eating in Fuel Zone rose by 63 per cent
- Cash takings from Fuel Zone rose by 324 per cent
- Thanks to changes in canteen design and layout, the speed of service increased by 233 per cent

Stages Two and Three (2002 to present)

In 2006 Glasgow City Council met the targets set out in the *Hungry for Success* report for the adoption of Scottish Nutrient Standards for School Lunches in schools, four months ahead of the deadline.

Further successes in 2006 included:

- Over 800 rewards were issued between January and June 2006
- Nearly 160,000 healthy eating points were redeemed
- The most popular reward was a pair of cinema tickets, with 411 Glasgow pupils taking a friend to the cinema as a reward for eating in a healthy and balanced manner
- 61 Glasgow pupils received a 30GB Apple iPod
- Uptake of school meals in secondary schools increased from the pre-Fuel Zone figure of 32 per cent to 60 per cent
- Consumption of balanced meals increased from a pre-Fuel Zone level of 30 per cent to 60 per cent, according to product sales figures

2008 saw the publication of The Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations, which introduced stricter policies regarding the fat, vitamin and mineral content of school meals. Subsequently menus were altered again in Fuel Zone canteens, which the Fuel Zone team believes has impacted on the ability of canteens to compete with fast food outlets. While in 2006, school meal uptake had increased to 60 per cent, in 2010 this rate dropped to 40 per cent. This is thought to have been a result of the need to follow tighter restrictions on the nutritional value of school meals, meaning that lots of options can no longer be offered in schools.





Latest results

- From 2007 until 2010, 4,211 rewards were distributed to school pupils as a result of their healthy eating
- In 2010, 71 £20 Topshop vouchers and 69 digital cameras were claimed as rewards for healthy eating
- Registration remains steady at approximately 25 per cent of Glasgow pupils

Other external developments during recent years may have impacted on the programme. These include pilot trials by 8 schools to keep students within school grounds during lunchtime, and since August 2010 Scottish primary school children in the 20 per cent most deprived communities receive free school meals.

Continual consultation

The Fuel Zone team seeks to continually update the menus options and rewards they deliver, and thus regularly conduct focus groups, online polls and consult with the student council. Research was conducted in 2010 to help develop a hot drinks counter in Fuel Zone canteens.

Shared learning and expansion of the Fuel Zone concept

The Fuel Zone team regularly shares learning with other departments of Glasgow City Council, which has led to development of plans to collaborate further with Glasgow Young Scot and Glasgow Community Safety Services to widen the points-based reward scheme to other positive behaviour areas, including physical activity and good citizenship. This work is planned for roll out in Easter 2011.

"Other council departments are now changing the ways that they do things. With the Glasgow Community Safety Services, they're now incentivising good behaviour, and you've got Young Scot who are now incentivising healthy lifestyles, so in that way it's influencing how other departments do things." (Stephanie McDowall, Marketing Coordinator)



Fuel Zone also shares learning and findings from its work with other interested parties from LAs and elsewhere. This has led to the Fuel Zone idea being managed by Cordia LLP in North Lanarkshire. This scheme works under the branding 'Web-Bite' (www.web-bite.co.uk) and on the same principles as Fuel Zone. However local research conducted has led to different styles in branding and different rewards, which are tailored to pupils in the North Lanarkshire area.

Challenges

Adhering to the Scottish national nutritional regulations of 2008 has meant some food options have ceased to act as viable alternatives to unhealthy options. Catering staff are finding it difficult to meet criteria around salt and sugar content and children are once again looking for less healthy alternatives.

The issue of fast food vans inside or in close proximity to school grounds has undermined some of the habit breaking work achieved by Fuel Zone. While a number of councils have taken steps to prevent chip vans trading near schools at lunchtime, they still act as a major competitor to healthy school meals.

Despite the programme's groundbreaking work, pupils are still patronising fast food vendors.

Debate continues on what further mechanisms could be implemented, such as keeping pupils on school grounds at lunchtime, with results from pilots in eight schools to be disseminated in December 2010. With uptake of school meals in Glasgow having decreased from 60 per cent in 2006 to 40 per cent in 2010 (although remaining higher than the pre-Fuel Zone low of 32 per cent), further work needs to be conducted to stop pupils 'voting with their feet' in favour of fast foods with high calorie, fat, sugar and salt contents.

Lessons learned

Updating menus and rewards

The Fuel Zone team have learned the importance of maintaining fresh, new content on the menu and on the website. Pupils tire of menu options easily and the Fuel Zone canteens must compete with its counterparts on the high street by bringing out new and more varied food options. Similarly, the rewards issued through the

scheme are constantly updated to keep young people engaged with the programme and returning to the website.

Attracting students to the scheme

Site visits by the Fuel Zone administrator, where she goes into schools, answers any questions and shows students the rewards they can redeem, has been a huge success, particularly to overcome pupils' perception that they will not actually get the rewards.

Another successful initiative to encourage pupils to register has been the use of scratch card promotions that advertise the Fuel Zone scheme and offer more immediate rewards, like concert tickets. A 'double points' week was not very successful in getting people to join the scheme, since it just appealed to those already registered with the scheme.

Changing the points system also contributed to the take-up of the scheme – in Stage Two

pupils were required to earn more points over a longer period before accruing enough to purchase a prize. The team therefore introduced smaller prizes such as cinema tickets, which could be earned weekly.

Multi-agency work and sponsorship

Having rolled out the programme, the Fuel Zone team believe that similar projects should strive to be integrated among multiple agencies and departments to ensure high-level buy-in. Fuel Zone are hoping to develop this through further joint work with the Glasgow Young Scot scheme and Glasgow Community Safety Services to broaden the programme and provide rewards for wider behaviours, such as physical activity and good citizenship.

"The best advice would be to make sure your project is integrated among multi agencies and departments to ensure you've got complete buy-in." (Stephanie McDowall, Marketing Coordinator)

Trying to gain support and sponsorship from private sector partners who supply the rewards could help the success of similar projects. This would assist projects to gain high-level support from strong brands and would aid budgets. Fuel Zone is beginning to look more into this area to see whether it can obtain sponsorship and discounts from suppliers for rewards.