Milton Keynes: an example of a sustainable city?

Nikki Flanagan, Geography Subject Leader at The Hazeley School, Milton Keynes Matthew Morgan, Geography Teacher at The Royal Latin School, Buckingham

The emphasis on *sustainable development* as a central concept in geographical study is now widely accepted. Most GCSE and A level students can rehearse the phrase from the 1987 Bruntland Commission of "meeting the needs of the present without compromising the ability of future generations to meet their own needs" The theme of sustainability is not only a useful link between human and environmental aspects of the subject but the importance of sustainable development to the future of the planet provides a rationale for the legitimacy of Geography as a critical discipline in today's curriculum.

However, in the last decade, the scale on which sustainability is examined in schools has shifted. There has been a move to ask students to consider the debate on a more local level, for example, the disadvantages of unsustainable urban living or an evaluation of the strategies that urban managers use to try and make urban areas more sustainable. Most cities are characterised by large ecological footprints, unsustainable living patterns and practices, and the juxtaposition of poverty and excessive consumption. These factors combine to produce air, water and noise pollution, climate and land degradation, biodiversity loss, vehicle congestion, poor health, crime, and other social, economic, and environmental problems that influence social well being. Increasingly larger proportions of the human population are concentrated in the largest 'mega cities', creating new and significant challenges for urban managers and providing a strong motivation for understanding how cities can become ecologically and socio-culturally more sustainable. Interest in sustainable communities has not only captured the imagination of Geographers, but it is also high up on the political agenda, particularly after 2004 where the Deputy Prime Minister asked Sir John Egan to undertake a review to ascertain the skills required to deliver the government's sustainable communities agenda. Nevertheless, due to the complexity and interrelatedness of the issues, pupils often struggle with analysis of people and place in assessing the level of sustainability. For pupils to engage with the material in a meaningful way, I believe it is best for them to consider their own local

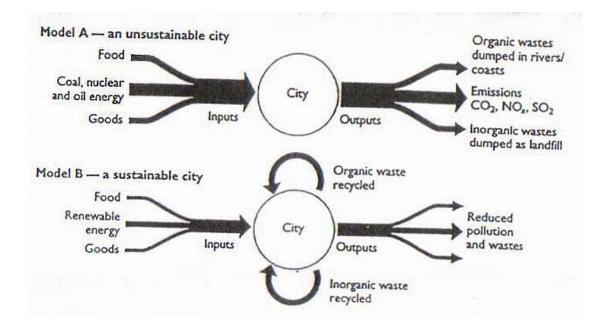
communities. This report examines pupils' assessment of the sustainability of Milton Keynes using a variety of resources.

Defining Sustainability:

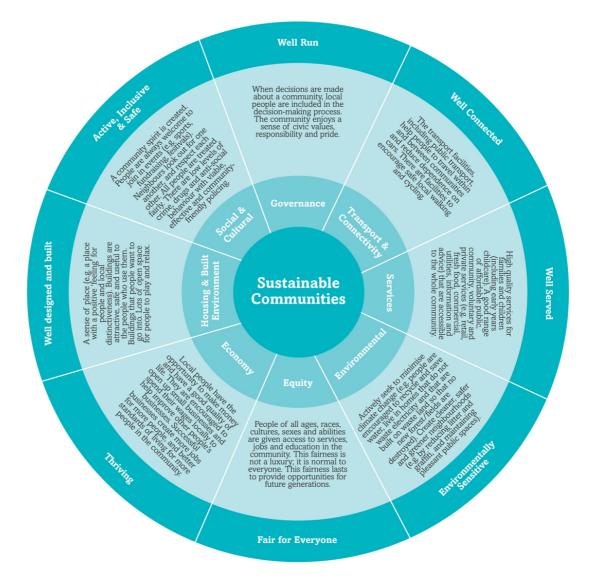
Egan (2004) identifies sustainable communities as meeting the 'diverse needs of existing and future residents, their children and other users' through promoting opportunity and choice. At the heart of the process of being sustainable is

- making effective use of natural resources
- enhancing the environment
- promoting social cohesion and inclusion and
- strengthening economic prosperity

Knifton (2004) uses a system model to compare the characteristics of an unsustainable city with a sustainable one.



This emphasises the environmental aspects to futurity, as opposed to the Egan Review which took a more holistic approach, identifying seven key components of a sustainable community. The Government added an eighth aspect to Egan's analysis; 'fair for all' and the result has been expressed dramatically, commonly referred to as the Egan Wheel:



Milton Keynes: a new City?

Designated in 1967, Milton Keynes was built around the three existing small towns of Stony Stratford, Wolverton and Bletchley. It was established as a counter magnet growth town to London. The new city was laid out on an 'American style' open grid and the planners aimed to have a balance of retail, social and leisure amenities within each grid square. However, as the city is growing up it is clear that the shopping centre at the heart of the new town looms large in MK's regional identity with many 31 million shoppers coming to use the facilities each year.

The population of Milton Keynes of around 220 000 is relatively young with almost 45% aged under 30 and affluent. There were 108568 jobs identified in a survey in

1997 and current estimates are around 130 000. The unemployment rate is very low (under 2 %)

Milton Keynes is a prime location for business; 25 million people live within 2hours drive and transport links are good with a main line railway and the M1 motorway running through the new city.

One of the main features of the city's design was the amount of trees, grass and open space. Milton Keynes was marketed as a 'future city', where the problems of congestion and crowded living were minimised but yet were the level of service provision was high. However, the lack of identity for its residents has been criticised and has been seen a significant contributor to the high suicide rates reported in the 1980s and the over reliance on the car as a primary transport method has been viewed as 'un-environmentally' friendly and unsustainable. Yet at the same time, pioneering recycling schemes, and energy efficient houses have reinforced the town's future city' image. These tensions create a perfect climate for students to examine issues of sustainability.

Assessing sustainability through Field work:

In many respects, the use of fieldwork for students to gather information to answer the question; 'Is Milton Keynes an example of a sustainable city?' would seem ideal along the lines of Carl Sauer's address to the Association of American Geographers over 40 years ago:

I like to think of any young field group as on a journey of discovery, not as a surveying party ... The student and the leader are in a running exchange of questions and promptings supplied from the changing scene, engaging in a peripatetic form of Socratic dialogue about qualities of and in the landscape. (Sauer, 1976)

However, as we all know fieldwork is often in reality not so Socratic or convivial as this (Daniels, 1992) and alternative provision is needed to bring Geographical issues alive confined to the space of a 45 minute time period! With these constraints a virtual field trip in the form of a series of photographs was used to engage students in the issues.

First of all pupils were given a map of Milton Keynes on an A3 piece of paper; they were asked to annotate their maps with reasons why people would want to live in Milton Keynes, and where possible this information should be based on facts and located correctly on the map. Pupils researched information such as crime rates, average salaries, amount of green space, leisure facilities and so on. After a discussion of these attributes, pupils were introduced to the Egan Wheel. The components of the wheel were explained and examples of each aspect were given. The pupils were then asked to categorise the information they had gathered for task one into a table using the components from the Egan Wheel as headings; an example is shown below:

Danielle

Governance	Transport and Connectivity	Services	Environmental	Equity	Economy	Housing & the Built Environment	Social & Cultural
In June 2004, the office of the Deputy Prime Minister established MK Partnership to forward the growth and development of the city. This Partnership brings together the MK Council, English Partnerships and Local Strategic Partnership representatives from the health community and business sectors. They have full responsibility for a new plan which aims to guide growth and development in Milton Keynes.	Milton Keynes has great transport links to the capital city- London. You can get there in 40 minutes. Milton Keynes has a unique grid system allowing the traffic to flow well, prevents you from getting lost and also enables you to get to the other side of the city in good timing.	Milton Keynes offers a variety of services. Until a few years ago, the city had one of the largest shopping centres in the world. It built Britain's first multiplex cinema and the first real snow indoor ski slope in Europe. It also has one of Europe's first skydiving centres.	Milton Keynes has 9,173,000 square metres of grass; 1,142,000 of shrubs and 210,000 hedges. All of which are pruned regularly by the council and kept in good condition. In Milton Keynes there is Energy World which is a demonstration project of 51 low- energy houses constructed in Shenley Lodge.	A majority of those in Milton Keynes are British- 86.78%. 09.72% of Milton Keynes are White and 1.79% are Mixed. 3.66% are Asian: 2.4& are Black or Black British and 1.42% are Chinese or of another ethnic group.	Milton Keynes has a low unemployment rate, in Dec 2006 there were 3000 people classed as unemployed; it was more common in men and mainly fell into the age group of 20-29 yr olds. Around 219,350 people are employed which is a vast majority of the population. The average wage is £17,557 and is the highest amount in the South East. The average price of a home is £175,337.	The average price of a home is £175,337. The average for a detached house is £273,855; for a semi-detached £163,166; for a terraced £134,459 and for a flat/maisonette £97,160/.	Every so often carnivals take place in the centre of MK celebrating the different cultures that the city shares. Various events are held at Willen Lake regularly where families and friends can go and have fun. They are often child orientated.

Then students were given a number of photographs showing different aspects of life in Milton Keynes or different forms of information about the town. For each photograph (or group of photographs in some cases) they were asked to consider each aspect of the Egan Wheel using the pro-forma below:

Is Milton Keynes a Sustainable Community?						
Photograph Number:						
Location: Description:						
Sustainable?		Explanation:				
1. Well Run?	Y / N					
2. Well Connected?	Y / N					
3. Well Served?	Y / N					
4. Environmentally Sensitive?	Y / N					
5. Fair for Everyone?	Y / N					
6. Thriving?	Y / N					
7. Well designed and built?	Y / N					
8. Active, Inclusive and Safe?	Y / N					

As a final task pupils were asked to consider all of the information they had gathered so far and to write a final report in response to the question:

"Is Milton Keynes an example of a Sustainable Community?"

What worked well?

Preparation:

When collecting the photographs to use with the pupils, we were surprised by the amount of time it took to get enough photos to have a fair representation of Milton Keynes. If this were a real fieldtrip (not a virtual trip) it would have been impossible to complete the task with pupils in one day. It is clear therefore, that virtual fieldwork offers a valuable alternative for Geography teachers. There is a realism of virtual trips that meets the practical demands of teaching and can be used to enrich pupil learning on a regular basis – something that [unfortunately] real fieldwork cannot provide.

As a side point, we had an opportunity to share our own experiences of Milton Keynes whilst we travelled around familiar places collecting photographs. We were pleasantly surprised that on our journey through the city we remembered similar experiences at particular locations; key moments where, as children we had experienced a particular emotion such as excitement when playing on the red roundabout at Willen Lake but also danger trying to get off while it was still spinning such was its popularity in the new city. The amazing aspect of this was at the time these experiences had been individual. We did not know each other nor had visited these places together, yet the landscape created shared experience even though we weren't there together!

Delivery:

Pupils were engaged in the task and were genuinely interested in researching their local area. The fact that there was a 'real' audience acted as a great motivator and pupils were keen to complete the work in as much detail as possible. We spent the majority of the first hour researching why Milton Keynes is a good place to live and the pupils were enthused by 'evidence' that supported their personal opinions. This vindication spurred pupils on to ascertain new facts about the City in which they live.

During the photo interpretation there was mixed opinions about the ease of the task: the pupils who did **not** recognise the locations believed that it would be easier to answer the questions if they had prior knowledge of that place. Interestingly, the pupils who **did** recognise the locations believed that prior knowledge was a hindrance because of two reasons: a) They found it hard to be too critical of a place they knew; and b) They found it hard to 'forget' their prior knowledge and base their answers purely on the evidence in the photograph.

One success of the day was that every pupil involved leant something new about Milton Keynes. They even began to consider the way in which they lived in Milton Keynes – i.e. the type of home they had compared to others, how they moved around the city and the potential of doing things 'better'.

The quality of the written work produced, varied considerably. A few pupils were so engrossed that they asked to take their work home to add more to it there – surely an indication of success! The general tone of the reports was very positive with most pupils harbouring a distinct pride of Milton Keynes! One pupil concludes:

"Overall I think that Milton Keynes is the best place to live as you have everything you could ever want in a city... I hope that one day I will buy my own house in Milton Keynes"

The best reports had considered the evidence in great detail and had successfully used the Egan Wheel to structure the final analysis.

What problems emerged?

Preparation:

The problems with the photo interpretation task were mainly to do with preparing the task rather than its delivery. We were very much aware that the images that we could capture would be limited in their use as it is impossible to capture the sounds and peripheral vision of the scene. Also, it was impossible to capture the whole city with a limited selection of photos: we concentrated on Residential, Retail, Open Space, Industry and Leisure. But obviously with only 16 photos needed for the final task, selection was very difficult and 'engineered'. Our own perceptions of the City and understanding of sustainable communities may have influenced our choice of photos.

Another problem that we faced was the weather. The day we conducted our fieldwork to take the photographs, the weather was decidedly and raining – did this result in a misrepresentation of place?

Delivery:

It was evident that some of the criteria that the pupils were judging e.g. governance and equity, were beyond the capabilities of a Year 9 pupil – ideally we would need to spend more time examining the individual aspects of the Egan Wheel before they attempted to apply them to Milton Keynes.

The scale of the task was probably too ambitious for us to do it justice. But scaling down the project further would have required lots of engineering on our part – the selection of places to study would need to be as representative of Milton Keynes as possible, but this would be incredibly difficult to achieve – therefore the validity of the results would be reduced.

Time restrictions will have affected the quality of the work produced. After conducting tasks 1-3 pupils were only left with 30 minutes to write their reports: with hindsight the timings should be adjusted so that pupils could spend more time on this final piece of writing. Whilst the pro-forma using the criteria set out by the Egan Review allowed pupils to structure their notes, it was a little complicated for some pupils and this restricted their learning- some became anxious about not being able to complete every section for each photograph. We suggest that in some contexts the simpler framework outlined below could be sufficient for most purposes:

Photograph no:			-
Location			
Description:			-
Sustainable?		Explanation	
Environmentally	Y / N		
Economically?	Y / N		
Socially?	Y / N		_

Or alternatively, the Headings suggested by Geography teachers at Comberton Village College as cited in CABE's guide on exploring the concept of place could be used: Emplyment; Housing; Education; Community: Infrastructure; Services; Flood Risk; Environmental Effects. Nevertheless, which ever framework is used the pupils involved were able to make an assessment of the sustainability of Milton Keynes because of the photographic resources available to them.

References:

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Acknowledgement:

This piece of collaborative work was made possible by the **Building Sustainable Communities Project**, jointly funded by the Geographical Association (www.geography.org.uk) and the Academy for Sustainable Communities (www.ascskills.org.uk).