INDUSTRIAL HERITAGE SUSTAINABLE TOURISM: A CRITICAL ANALYSIS OF THE INTEGRATION OF CHILDREN’S EDUCATION AND RECREATIONAL SERVICES AT THE NAVIGATION COLLIERY, CRUMLIN.

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B.A (HONS) INTERNATIONAL TOURISM MANAGEMENT

2017
Declaration

I declare that this Dissertation has not already been accepted in substance for any degree and is not concurrently submitted in candidature for any degree. It is the result of my own independent research except where otherwise stated.

Signed (Candidate):
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Date:
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Abstract

This dissertation is a study of how educational tourism can be applied through the principles of sustainable tourism. It will look to see how educational tourism can be integrated at The Navigation Colliery, which is an old coal mining site in Crumlin, South Wales. GLOFA Navigation Cyf (known as the GLOFA Trust), is currently working on the site carrying out a restoration project which is at an early stage of development. The trust relies on funding and is hoping the site can be restored and brought back into use that is beneficial and sustainable for future generations (GLOFA, 2015).

The primary aim of the research project is to discover if this link is viable at The Navigation Colliery and to what extent. It will look to see if the use of industrial heritage can be used to aid this linkage and how this fits in with educational tourism and the principles of sustainable tourism.

The research project consists of five main chapters; an introduction, literature review, methodology, analysis of results and conclusion.

The research looks at a range of literature that is arranged into four main themes. These are discussed throughout all chapters of the study.

The research project undertook primary research through semi-structured interviews which allowed the author to firstly gain strategic ideas, views and opinions as to the viability of the potential linkage of education at The Navigation Colliery site and secondly, to collect reliable informative results.

The data collected was achieved through thematic analysis purposive sampling. The results are presented in a qualitative format using quotes from the participants to the interviews.

This research project shows that the link of educational tourism at The Navigation Colliery site is viable through various strategies whilst highlighting the considerations to take when implementing sustainable tourism.

It illustrates how industrial heritage and local community play a part in the linkage which is discussed throughout.

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Abbreviations

BALC- Butlers Tourist Area Life Cycle
TA- Thematic analysis
LGO- Local government organisation
PTA- Parent teacher association
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Chapter 1: Introduction

1.1 Sustainable tourism and the role of education

This dissertation considers the principles of sustainable tourism, in the context of potential linkage to children’s educational and recreational services having regard to The Navigation Colliery, Crumlin South Wales. (‘The Navigation Colliery’).

Sustainable tourism is ‘a level of tourism activity that can be maintained over the long term because it results in a net benefit for the social, economic, natural and cultural environments of the area in which it takes place’ (Edgell and Chon, 2006, page 198). Via the case study, the author considers how sustainable tourism can benefit the community. In order to be sustainable, tourism should have a positive impact on the social, cultural and economic areas affected such that future tourism management reduces the risk of negative impacts. When looking at sustainable tourism, possible negative impacts that can occur will be discussed: the natural environment being compromised by the activity of tourism; money being made from tourism and no benefit accruing to the local community.

‘Environmentally sustainable tourism demonstrates the importance of natural and cultural resources to a community’s economic and social well-being and can help to preserve them’ (Swarbrooke, 1999, page 10). In Crumlin, the regeneration of The Navigation Colliery will utilise its natural culture and heritage to help benefit the community. This study will especially focus on environment and culture- both key aspects of sustainable tourism. Local people can get involved with projects to achieve this and generally jobs will be available for local people.

1.2 Background and history to The Navigation Colliery, Crumlin

The Navigation Colliery is an old mining site which closed in 1967. Some of the buildings still remain under a preservation order (there are 11 grade two* listed buildings) and through GLOFA Navigation Cyf (known as the GLOFA Trust) the site is in the early stages of a
regeneration project (Navigation Colliery Crumlin, 2016). GLOFA Trust is a charity that is working on the regeneration of the Colliery so that..‘the buildings and site may be brought back into beneficial re-use and safeguarded for future generations’(GLOFA, 2015). They also work with ‘Friends of Navigation’ who are volunteer members of a group with the aim to preserve the buildings. (GLOFA 2015).

There are some significant issues impeding the regeneration project: ‘the pollution rising from the former mineshaft and secondly there is a collapsing culvert beneath the main access road.’ (Crumlin Navigation Colliery, Caerphilly, 2016). These issues mean strategic plans by GLOFA cannot be put in place yet.

1.3 Demographics of Crumlin
Crumlin is situated five miles west of Pontypool in the Ebbw Valley, Caerphilly County, South Wales. (Wales Directory, 2016). The total population of Crumlin is 5,974 with 20.6% of that population being aged 45-95 years. (Profile of Crumlin, census 2011). In the area there are high unemployment rates. For example the census from 2011 shows that out of 2,212 males aged 16-74, 6.6% were unemployed (Profile of Crumlin, 2011).

The Welsh Index of Multiple Deprivation 2011 published by the Welsh government, relating to Crumlin shows ‘this area was ranked 935 out of 1,909 in Wales, where 1 was the most deprived (UK Local Area, 2016); income deprivation being 43% better than 43% areas in Wales and employment being 38% better than areas in Wales (Caerphilly Council, 2006). Through The Navigation Colliery, unemployment rates could be alleviated and general poverty alleviation could be assisted.

1.4 Results from community based research
In May-July 2016, the author carried out research at The Navigation Colliery, undertaking a 20 day placement. The author worked with Cardiff Metropolitan University to conduct a questionnaire for the residents of Crumlin concerning their attitudes to The Navigation Colliery to ascertain views on what the site should be used for, and what was felt would be most beneficial to the community. From this research it was seen the most popular
proposed use for the site was for children’s education and services. Below is a question from the questionnaire on this issue.

**Figure 1.1: Results from Crumlin community based research**

Q9 - Please rank the following in order of priority for Crumlin. (1 being the highest and 9 being the lowest priority.

![Figure 1.1: Results from Crumlin community based research](image)

Source: (Jones, 2016)

This shows a total of 39.73% (58) people considered youth education and training opportunities were the top priority. This research helps to confirm this would be a suitable project and there is further research that can be carried out around the topic of children’s services through sustainable tourism. This research will help sustainable tourism development in the locality in understanding how children in the area can appreciate The Navigation Colliery’s history and natural environment and as a result achieve a better quality of education.
1.6 Rationale

This dissertation will identify educational strategies for The Navigation Colliery which can be implemented within the regeneration project for the use and benefit of the community via sustainable tourism.

The community will benefit from the outcomes identified through this research project, in the long term, as it will help benefit GLOFA Trust’s work and develop the potential for more children’s services in the area. The community will have the chance to engage with The Navigation Colliery project which will also help sustainable tourism principles to be applied through the use of the Colliery. In addition this will attract other potential developments to both The Navigation Colliery, and the area, for children’s services and also in other sectors. Future generations of children in Crumlin should benefit from this study especially as its conclusions identify outcomes which will result in the integration of The Navigation Colliery with the community, providing services to develop and enhance their education and quality of living in the area. GLOFA Trust will also benefit from this research project as it will gain knowledge from both the community and leaders in education as to what should be prioritised when looking at development on The Navigation Colliery as well as general ideas and strategies that may help when implementing plans in the future.

1.7 Structure of research project

After this introduction there are an additional four other main sections. The first section is a literature review which will discuss author’s views, opinions and knowledge on the topic area. Pan, (2017), states it is widely used across disciplines because it offers a snapshot of the state of research on a particular topic.

The second section is on methodology whereby an attempted clear description to the primary data collection methods used will be given alongside justification and rationale for this. According to Kumar, (2008, page 4), research methods or techniques, thus refer to the methods the researcher use in research operations.

The third section will present findings from the research followed by discussion and analysis. The author will present patterns found and reflect upon literature previously reviewed for
links with the results. Rudestam and Newton, 2001, (as cited in Paltridge and Starfield, 2007), express that the discussion chapter is where it should move beyond the data collection stage and integrate the results of the study with existing research and theories. The concluding chapter will sum up all main findings and will finish with recommendations and directions for further research provided by the author.

1.8 Case study Research Method
Data collection has been conducted and analysed in order to obtain high quality research. The resource provided by this case study highlights the potential link of children’s educational and recreational services through sustainable tourism based around The Navigation Colliery. For a children’s project to work in the future the community of Crumlin needs to participate and become shareholders in the project strengthening the connection between the community and the regeneration project.

Therefore the dissertation research project will help to achieve this goal through the following aim and objectives:

1.9 Aims and Objectives

Dissertation Aim:
What are the needs and requirements to develop primary school education on the Natural Environment and History Education (recreational facilities) at Navigation Colliery?

Dissertation Objectives:
1) To conduct a critical literature review of the role sustainable tourism through the role of sense of place of local heritage in primary school education.
2) Carry out primary research with leaders in primary education to assess the opportunities to utilise The Navigation Colliery, teachers and GLOFA trust volunteers.

3) Critically analyse the views and opinions of staff at The Navigation colliery and teaching staff in local primary school education providers using qualitative semi-structured interviews to discuss how to link children’s services and education through the Navigation Colliery to lay a foundation for future sustainable tourism strategies.

4) Develop final conclusions and make recommendations about future strategies to be developed at The Navigation Colliery, Crumlin.

These objectives are all suitable and achievable for this study. The author will be able to assess the opportunities to utilise The Navigation Colliery through speaking to leaders in education and members of GLOFA Trust to gain further information with them on how this can be linked to primary education whilst incorporating principles of sustainable tourism helping to develop future strategies for this.
Chapter 2: Literature review

2.1 Introduction

A literature review is to set the foundations which the rest of the work is all based and built on (Oliver and Ivonne, 2012). It is conducted so that a wide range of literature from different sources is researched on the topic of study. Initially we can say that review of literature is important because without it you will not acquire an understanding of your topic’ (Hart, 1998, page 1). There are various skills required in order to carry out an effective literature review; such as being able to summarise the literature demonstrating individual skills to search on a topic and carry out concise and accurate summaries of literature demonstrating critical awareness (Hart, 1998).

The following chapter will research different themes within the study, these being; Sustainable Tourism, Education Tourism and Industrial Heritage and local community benefits and collaboration. These themes will allow the author to understand the research topic in greater depth especially when analysing primary research.

2.2 Sustainable Tourism Principles

Swarbrooke, (1999, page 13), states sustainable tourism is economically viable but does not destroy the resources on which the future of tourism will depend. Nagle (1999) puts forward the basic principle of sustainable tourism as tourism operating so that it can continue for regeneration and future use of natural resources; recognising local communities and their culture trying to link their lifestyle with tourism experience. They accept local people are to receive economic benefits and it will help to economically improve the area which it is within. Bramwell et al, (2016, page 1-9), states that sustainable tourism is now seen as a normative orientation that seeks to re-direct societal systems and behaviour on a broad and integrated path toward sustainable development. Sustainable development along with sustainable tourism ensures a destination is not negatively affected and integrates sustainable principles in order to do so. For example, carrying this out by
setting ethical codes and principles as in Canada as early as 1992 to help achieve this. Canadas ‘code of Ethics guidelines for sustainable Tourism’ is shown in figure 2.1.

Figure 2.1: Canada’s code of Ethics Guidelines for Sustainable Tourism

1. Enjoy our diverse natural and cultural heritage and help us to protect and preserve it.
2. Assist us in our conservation efforts through the efficient use of resources including energy and water.
3. Experience the friendliness of our people and the welcoming spirit of our communities. Help us preserve these attributes by respecting our traditions, customs and local regulations.
4. Avoid activities which threaten wildlife or plant population, or which may be potentially damaging to our natural environment.
5. Select tourism products and services which demonstrate social, cultural and environmental sensitivity.

Source: (Edgell and Chon, 2006)

Adventure tourism is an example of Niche tourism. Novelli, (2005, page 3), states that for tourists, niche tourism appears to offer a more meaningful set of experiences. ‘It implies a more sophisticated set of practices that distinguish and differentiate tourists’ (Novelli, 2005, page 5). The two niches being focused on within this study; educational tourism and heritage tourism.

‘Sustainable tourism combines conservation principles with tourism development’ (Eagles, Bowman, and Tao, 2002, page 6). The principles of sustainable tourism mean preserving the natural environment and preserving the landscape and historic features. Vervloet, (as cited in Haan, Duim and Nederlands, 2008), aims to shows what the role of historical associations are within the aim of landscape preservation and to what extent are people aware of the existence of cultural-historical values in the landscape. Results from this research show those with lower education notice only big landmark objects such as castles whereas those with higher education notice more landscape aspects such as lanes. (Haan, Duin and Nederlands, 2008). This shows how historical features can be perceived and that younger aged children take notice of large-scale historical landmarks. Therefore indicating there is a need for land preservation to help provide education for children and general
tourism attractions through historical associations, which can be carried out through the means of sustainable tourism ensuring there is no harm to the environment or attraction.

Industrial heritage and environment help sustainable tourism function as it uses a destinations natural resources whilst preserving them. Xie, (2015, page 127), states industrial heritage tourism encompasses five major components: culture to connect with the past; physical to present authenticity; product to appeal to tourists; experience to relive the history; and sustainability to involve stakeholder’s participation. This demonstrates sustainable tourism principles making the link with the destinations resources using them positively and benefitting the destination so that tourism can continue in the future.

Sustainable Tourism requires looking at various terms in order to minimise potential negative impacts occurring.

Figure 2.2: Relationship between Sustainable Tourism and other terms

![Diagram showing the relationship between Sustainable Tourism and other terms]

Source: (Swarbrooke, 1999)

Figure 2.2 shows a conceptual model of the relationship between sustainable tourism and the other terms that need to be considered when implementing sustainable tourism principles in a destination. Environment friendly and responsible tourism are shown to be key elements in order for tourism to continue being sustainable within a destination using its resources. Edgell and Chon, (2006), put forward the view that if sustainable tourism is
managed correctly it can become the highest aspirations to achieving economic benefits while maintaining socio-cultural, and environment balance. It looks for example at a case study of Edinburgh and how this entails conservation of its heritage through the activity of sustainable tourism. In 1969 a Scottish Tourist Board developed a new tourism policy to help manage tourism sustainably. ‘Fundamentally it is the conservation of urban built heritage resources, which provide to be critical to programmes of tourist development’ (Travis, 2015, page 200). Tourism then was generating a total of £5 million in direct income to Edinburgh showing the economic benefits. (Travis, 2015). Due to the success and interest in tourism as this destination, ‘Conservation planning has thus become comparatively successful’ (Travis, 2015, page 200).

It is important to manage tourism suitably as all aspects can have both local and regional impacts with a knock on impact affecting economies. ‘Changes in tourist flows caused by climate change and environmental degradation will directly affect regional economies and businesses’ (Amelung et al, 2007, page 285-296).

Communities are influenced by tourism due to the level of management carried out and what sustainable principles are applied. This affects aspects such as potential poverty alleviation, general infrastructure to the community, increasing employment rates and education.

2.3 Educational Tourism

Ritche, Carr, and Cooper (2013, page 1), comment that changes in the tourism industry over the last two decades coupled with the changes in education have seen the convergence of these two industries with education facilitating mobility and learning becoming an important part of the tourist experience. Guliani and Rizwan, (2016, page 177), suggest educational tourism developed because of the growing popularity of teaching and learning knowledge and the enchaining of technical competency outside the classroom environment. This means the knowledge of skills needed for practices to put in place, such as how to integrate education with the outdoors. Thesis (2011), explains a key factor determining the effectiveness and implementation of all three (economic, social, environmental) pillars of sustainability in education. Sustainable tourism and education have a strong link and the
principles of sustainable tourism can easily be applied to education. Two of these principles being, supporting local economies and using resources sustainably. Supporting local economies is ‘tourism that supports a wide range of local economic activities and which takes environmental costs and values into account’ (Nagle, 1999, page 127). Nagle, (1999), states using resources sustainably consist of the sustainable use of natural, social and cultural resources.

There is a link with outdoor education and tourism through various activities and use of the environment. Adventure tourism can be used as an educational tool through activities such as rock climbing integrating the environment, adventure, and education leading to a form of educational tourism (Taylor, Varely and Johnson, 2013). An example of the integration of outdoor education and tourism is The California Roundtable. This was founded in 1998 and was based on recreation parks and tourism. The aims of The California Roundtable were to ‘promote and coordinate cooperative efforts between members, improve communication with publics, increase understanding of and support outdoor recreation’ (Leslie, 2009, page 83). This project brought together stakeholders with outdoor recreation and education in California (Leslie, 2009). Therefore demonstrating education and the environment are strongly linked. This means it can be achieved through the principles of sustainable tourism as the activity of outdoor education concerning the environment, can contribute to the preservation and care of popular tourism areas/features. Quay and Seaman, (2014, page 46), state how programmes of education for the environment aim to assist the preservation or improvement of the environment for a particular purpose.

Education and tourism can be linked in different ways through different aspects of tourism, for example culture and heritage tourism- key themes of this study. Culture heritage is of great value for children in terms of education. A review by the UK government on cultural education showed ‘cultural organisations and venues … offer children and young people the opportunity to visit places of specific interest, which can deepen their understanding of the world around them and provide fresh insight into their studies’ (DCMS and DFE, 2012).

‘Environmental education improves everyday life by protecting human health and encouraging stewardship of natural resources’ (Pandey, 2007, page 19), education is greatly valued for education and is carried out sustainably.
Government legislation, The Environmental Education Act provides support for environmental education in school systems for primary and secondary schools (Pandey, 2007). Kaminski, (2013), proclaims, the focus of most definitions of cultural heritage tourism is upon tourists perceive as ‘heritage places’. Cultural heritage and environment are of high value to educational tourism in providing foundations for it to be carried out as well as resources. Ivanovic, (2008, page 171), suggests the most common type of formal education provided by a heritage site is the field visit. This is as ‘educational visits challenge learners to think critically about practical implications of conservation, the ability to solve practical problems in their daily engagements with heritage, and decisions on heritage issues’ (Tlantlane, 2016). Funds from field visits to sites help to be a management tool that assists in; building funds for preservation and conservation of heritage and gaining increased number of visits helping achieve educational benefits (Ivanovic, 2008). For example the English Heritage organisation have 420 historical places under their management and care. They make abundant efforts through funding and donations towards conservation efforts on all their heritage sites. An example of this is a current project of a cell block in Richmond castle, the development of this cell block to get it open to the public and help future conservation has been supported by the heritage lottery fund. (English Heritage, 2017). This point being relative to this study as The Navigation Colliery is a heritage site which through the means of sustainable tourism can be used with the integration of education whilst conserved for the use of future generations.

There are many aspects to heritage tourism whilst incorporating education which heritage managers face. These being ‘education visitors through entertainment, commodification of cultural heritage and use of interpretation to improve learning amongst visitors’ (Ritchie, Carr and Cooper, 2006, page 58). Today there are increasing numbers of good quality leisure offerings, so attractions such as heritage sites need to ensure they understand how to attract and gain their share in the market. In the UK it was researched that ‘education was the third highest goal of attractions after conservation and accessibility’ (Garrod and Fyall (2000), as cited in Ritchie, Carr and Cooper, 2006, page 58). This shows the scope for educational tourism is an attractive prospect especially when integrating heritage tourism. Revell, 2002, (as cited in Ritchie, Carr and Cooper, 2006), confirm school children in the UK spend two days on field trips each year.
There are advantages for those schools willing to participate in educational tourism outside the classroom. These being, ‘there is an opportunity to promote the non-financial benefits of the visit, including an understanding of, for example, sustainability, environment concerns, social and cultural issues, and issues of race and conflict’ (Ritchie, Carr and Cooper, 2006, page 153). It is shown that a large percentage of schools will only engage in a visit if it adheres with educational curriculum grounds, which is something that destination management organisations need to take into consideration and other managerial roles in this field, for example industrial heritage site managers. (Ritchie, Carr and Cooper, 2006).

The primary school curriculum can help the knowledge of tourism education itself, developing the principles of sustainable tourism. ‘The continuing growth of tourism as a world activity meant that the wider consequences of its development were under closer scrutiny. Inevitably for those involved in tourism education it becomes essential to deal with these issues’ (Airey and Tribe, 2005, page 17). This meaning issues and problems can be carefully considered such as, negative impacts of attraction development in a local community.

Cooper and Latham, 1988, provide requirements that attractions should be meeting in order to cater and supply for the schools. Some of these are ‘Coach or bus access and parking, Catering facilities, logistics for the visit, and teaching space’ (Cooper and Latham, 1988, page 73-75). Aspects like this are important in order for educational tourism to be a success and help develop an attraction.

2.4 Industrial heritage and local community

Brebbia and Hernandez, 2015, page 492), states the definition of industrial heritage as; Industrial heritage involves of the remains of individual culture holding historical, technological, social, architectural and scientific value. Industrial heritage is important and holds value as it provides an important sense of identity (Douet, 2012). Therefore within primary education this can play a big role in being the main focus of education within certain cultural attractions and sites.

Heritage sites often become tourism attractions and can become hard to manage. This is mainly due to the issues and implications in hosting tourism. This interaction between
tourism development and local community is hard to predict as it differs with each destination. This can create problems and cause local residents to think negatively as there is ‘local concern over the impact of tourism development on property prices, access to recreation, traffic congestion, quality of life, salaries and higher prices’ (Peedersen, 2002). An example being in the Netherlands. ‘Cultural history and the preservation of monuments and historical buildings have a regular place in the decision-making process concerning spatial planning’ (de Haan, Van der Duin and Nederlands, 2008, page 63). In the Netherlands the government make a conscious effort to conduct a high level of spatial planning by taking close care of features such as clean water, soil and air, they want to offer a landscape of high-quality (de Haan, Van der Duin and Nederlands, 2008). Figure 2.3 demonstrates the importance of heritage and how it should be managed within tourism.

**Figure 2.3: Heritage tourism supply chain**

![Heritage tourism supply chain](image)

Source: (McCamley and Gilmore, 2016)

“A network of tourism organisations engaged in different activities ranging from the supply of different components of tourism products/services ... to the distribution and marketing of the final tourism product at a specific tourism destination” (Zhang et al., 2009, page 347). Heritage tourism, as mentioned increases visitor numbers to destinations, which means there can be management issues. One issue is hosting tourism, previously discussed.
Sustainable tourism management needs to be carefully focused including all aspects in figure 2.4, in order to limit the potential risk of issues arising.

**Figure 2.4: Sustainable tourism conservation policies and practices**

Source: (Swarbrooke, 1999)

Looking at the conservation policies and practices in the model will help when implementing tourism to industrial heritage, culture and landscape to a destination.

Local community plays a big part in tourism. In addition, figure 2.4 shows that to be managed sustainably, the host community needs to be considered by making sure benefits
from tourism reach the community and that there is control over the local tourism that takes place. For example the town of Burra in South Australia, a heritage town, demonstrates this. The national trust of Australia set objectives such as to ‘work closely with Burra community organisations with shared goals’ (Successful Tourism, 2017).

**Figure 2.5: Butlers Tourist Area Life Cycle**

![Butlers Tourist Area Life Cycle](image)

Source: (Beeton, 2006)

Figure 2.5 highlights Butlers Tourist Area Life cycle, (BALC), which shows stages of a tourism destination which can be applied to a local community in relation to terms of tourism development. (Beeton, 2016). Butler, 1980 (as cited in Beeton, 2016, page 32), highlights this is important as the assumption that tourist areas will always remain tourist areas will always be attractive to tourists appears to be implicit in tourism planning. Local community plays a big part in the management of tourism. This relates strongly to this study as a form of heritage tourism that is for the community and visitors.
2.5 Local community

The community this study is based on is Crumlin, South Wales. In this community unemployment rates are high. For example the 2011 census showed that of a total of 2,212 females and males aged 16-47 the unemployment rate for men is 6.6% and for females is 3.0% (Profile of Crumlin, 2011), higher than the national rate for the same age group (Office for National Statistics, 2017). Tourism brought to this area through principles of sustainable tourism means unemployment rates can be alleviated and the community will benefit through aspects such as development of infrastructure and economic benefit. Employment rates can develop through the regeneration project of The Navigation Colliery once it is complete.

2.6 Conceptual Framework

Figure 2.6 shows the conceptual framework of this study from the literature highlighting key issues, themes and authors in relation to this study.

Figure 2.6: Conceptual Framework

<table>
<thead>
<tr>
<th>Supporting Local Community development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authors;</td>
</tr>
<tr>
<td>Butler, 1980- Presents tourist area life cycle which can be applied to the community showing stages of tourism development in a destination.</td>
</tr>
<tr>
<td>Themes: Community of Crumlin</td>
</tr>
<tr>
<td>• Poverty alleviation- tourism in Crumlin could help community e.g. increase employment rates.</td>
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<tr>
<th>Supporting Sustainable Tourism principles</th>
</tr>
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<tbody>
<tr>
<td>Authors;</td>
</tr>
<tr>
<td>Swarbrooke, 1999- To achieve sustainable tourism Swarbrooke says environmentally friendly, responsible and minimum impact tourism needed to be applied</td>
</tr>
<tr>
<td>Does not harm resources for future generations. Sustains the environment and culture of destinations.</td>
</tr>
<tr>
<td>Nagle, 1999- Sustainable tourism involves recognizing the local community and making sure they receive economic benefits from tourism in their community.</td>
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</tbody>
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<tr>
<th>Environment and cultural Education</th>
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<tbody>
<tr>
<td>Authors;</td>
</tr>
<tr>
<td>Nagle, 1999- Within education, economic activities which carefully consider costs and values of environment.</td>
</tr>
<tr>
<td>Pandey, 2007- States Environmental Education Act, supporting environmental education in schools.</td>
</tr>
<tr>
<td>Ritchie, Carr and Cooper, 2006- Looks at curriculum and facilities needed for educational tourism</td>
</tr>
<tr>
<td>Airey and Tribe, 2005- Benefits of tourism education</td>
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<table>
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<tr>
<th>Themes: Environment and heritage</th>
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<tr>
<td>• Industrial heritage and environment help the function of sustainable tourism.</td>
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<td>• Outdoor education</td>
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<tr>
<td>• Ensures sustainable use of resources.</td>
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<td>• Helps provide conservation</td>
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</table>
2.7 Conclusion

As discussed, there are many forms of tourism that address the potential linkage between children’s recreational and educational services with The Navigation Colliery implemented through the principles of sustainable tourism. This literature review presented the four main themes surrounding this linkage. This allows the reader to consider and be aware of what is needed in order to implement the development of the linkage, recognizing potential issues that could arise from this as well as the benefits sustainable tourism can bring to a destination.
Chapter 3: Methodology

3.1 Introduction

Bhattacharyya, (2006, page 17), states research methodology is a scientific and systematic way to solve research problems. This chapter will explain the research methods carried out for this study and why these were most appropriate. ‘Research methods or techniques, thus refer to the methods the researcher uses in performing research options’ (Kumar, 2008, page 4). This chapter will cover all aspects including ethics, validity, research framework, research and sampling methods.

3.2 Interviews

In this study the research methods chosen were semi-structured interviews and questionnaires. Wengarf, (2001, page 5), states

’Semi-structured interviews are designed to have a number of interviewer questions prepared in advance but such prepared questions are designed to be sufficiently open that the subsequent questions of the interviewer cannot be planned in advance but must be improvised in a careful and theorized way’.

The interviews were carried out with five participants as this was the best way for the study to collect the most informative relevant data. The interviews were recorded and transcribed so all information was recorded accurately. The set of interview questions differed in accordance to the job role/status of the participant. All participants have a role within education in some way and are from the relevant area. Interview Questions can be found in appendix D.

The semi-structured interviews were conducted so that a good range of appropriate and in depth information could be obtained. All interviews had 15 pre prepared questions, all similar but varying slightly dependent upon the job role of the participant and how their information would fit the study. Interviews were recorded with a dictaphone and transcribed meaning specific information and quotes could be ascertained when referring to the results of this study. This is a form of convenience sampling. This is when ‘samples are
selected with a view to making life easy for the researcher’ (McCormack and Hill, 1997, page 55). Brewer and Hunter, (1990, page 115) state convenience sampling is associated chiefly with participant observation and experimentation in which frequently studies easily accessible settings and subjects who are close to home. Clark et al., (1997, page 87), states they are convenient precisely because they are by definition at the core of a study’s concerns. Not only this but convenience sampling ‘is most often used where research objectives are inherently qualitative in nature’ (Clark et al., 1997, page 88). The interviews carried out were also a form of convenience sampling as Cardiff Metropolitan University has good contact with GLOFA Trust. The university works with GLOFA Trust on various projects and funding support. A senior lecturer in tourism at the university in 2016 undertook consultant work with the trust with a position of funding and strategic development advisor (The tourism society, 2017). GLOFA Trust are also working with the university to form a hub named ‘the hive’ which aims to ‘connect the real needs of local communities with creative professions, academia, education and business’ (Community blogs, 2017). Below in table 3.2.1 are the interview details with each participant followed by a discussion of each one.

3.2.1 Interview details

Table 3.1: Interview details

<table>
<thead>
<tr>
<th>Participant</th>
<th>Purpose of interview</th>
<th>Location of interview</th>
<th>Length of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local government organization, Respondent 1</td>
<td>To gain information and views from leaders in education and education to assess the opportunities to utilize The Navigation Colliery, (To achieve objective two).</td>
<td>Confidential</td>
<td>00:11:36</td>
</tr>
<tr>
<td>Local government organization, Respondent 2</td>
<td>To gain information and views from leaders in education and education to assess the opportunities to utilize The Navigation Colliery, (To achieve objective two of the study).</td>
<td>Confidential</td>
<td>00:14:25</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Vera Jenkins</td>
<td>Critically analyze the views and opinions of staff at The Navigation colliery to discuss how to link children’s services and education through the Navigation Colliery to lay a foundation for future sustainable tourism strategies. (To achieve objective three of the study).</td>
<td>The Navigation Colliery site, Crumlin</td>
<td>00:07:36</td>
</tr>
<tr>
<td>Pat Smail</td>
<td>Critically analyse the views and opinions of staff at The Navigation colliery to discuss how to link children’s services and education through the</td>
<td>The Navigation Colliery site, Crumlin</td>
<td>00:21:47</td>
</tr>
</tbody>
</table>
Ceri Thompson
To help gain the view of someone working within education and industrial heritage and how the site can be utilized through this for the purpose of education.
National Museum Wales, Cardiff
00:19:29

3.2.2 Local government organization/ education provider
The first two interviews conducted were with members of a local government department. For this research the government viewpoint was very useful as the participants were not directly involved with the restoration project of The Navigation Colliery in Crumlin. This meant there was no bias with answers and a wider source and knowledge could be drawn upon allowing the original questions and answers to develop during the interview.

3.2.3 Visitor attraction
The second two interviews were with two members of GLOFA Trust. The first interviewee was Pat Smail. She is a GLOFA treasurer and has great understanding of the site and the title aims and objectives of this study. Sustainable tourism principles and the integration of education services at the site is something that could be explored in much depth. All the interview questions were specific to The Navigation Colliery whereas the previous
interviews were not as focused and more general to education through heritage and conservation. The second interview with a member of GLOFA Trust was with Vera Jenkins, a trustee of GLOFA Trust. ‘Vera has been, and still is, the leading figure and initial founder of the friends of The Crumlin Navigation Colliery’ (GLOFA, 2015).

### 3.2.4 Primary school/education development

The final interview was with Ceri Thompson, the curator of Big Pit. ‘The Curator (Coal Mining Collections) is responsible for the combined coal mining related collections of Amgueddfa Cymru — National Museum Wales and the National Coal Museum of Wales, Big Pit Colliery (The Coal Mining Collections, 2017).

These people were selected to enable the author to understand how culture, heritage and environment can link with the regeneration project of The Navigation Colliery and how the principles of sustainable tourism can be integrated with children’s services both educational and recreational.

### 3.3 Questionnaires

The other method of research conducted were questionnaires. Remenyi, (2011, page 92), states a questionnaire is

> ‘a data or evidence collecting device that consists of a list or series of specific questions which when answered by an appropriate informant or group of informants, will help lead a researcher to a greater understanding of the research questions.’

This study originally intended to carry out its primary research through another form of a questionnaire.

Questionnaires were designed and distributed to the parent teacher association, (PTA), of a primary school in Crumlin. It comprised 12 questions so was not too long winded, gathering only relevant information. These were to be distributed through the head teacher of the school. Appendix C, sets out the questionnaire.
Mark and Berger, (1996, page 241), declare a questionnaire is a set of questions or items in written form that is self-administrated. The questions were made on the software qualtrics and converted into a word format as it is a paper based questionnaire. By making the questionnaire on qualtrics is was ensured a professional look was given to it and provided an option for thematic analysis. Qualtrics can interpret the data inputted into graphs and charts.

3.4 Thematic analysis and sampling techniques

‘Thematic analysis (TA) is a widely-used qualitative data analysis method. It is one of a cluster of methods that focus on identifying patterned meaning across a dataset’ (The University of Auckland, 2017). Therefore meaning questionnaire results can be easier to analyse if interpreted into graphs or charts. Another reason for choosing to conduct a questionnaire is that it is a form of purposive sampling. ‘A purposive sample is a non-probability sample that is selected based on characteristics of a population and the objective of the study. Purposive sampling is also known as judgmental, selective, or subjective sampling’ (About Education, 2017). This questionnaire was chosen to be given to the selected group as they are relevant to the objectives and characteristics of the study and would present unpredicted answers from a completely different view point to that of the participants of the interviews, allowing results to not seem biased.

The semi-structured interviews conducted in this study, will be analysed and quotes and the most relevant information will be drawn upon in the results chapter. The interviews will be transcribed and set out in Appendix E. A dictaphone is a suitable choice as once transcribed, it is then easier for the data to be organized by various themes and topics (Klenke, 2016).

Unfortunately the head teacher of a primary school in Crumlin had other work commitments on the day arranged to meet to hand over the questionnaires for distribution. The limitations section of this chapter shows how the absence of this research was addressed.
3.5 Qualitative research

As previously stated thematic analysis, (used for interpreting questionnaire results), is included as a part of qualitative data analysis. Both research methods used in this study are forms of qualitative research. Grbich, (2012, page 3), explains qualitative research ‘can help assess the impact of policies on a population; it can give insight into people’s individual experiences; it can help evaluate service provision; and it can enable the exploration of little-known behaviors, attitudes and values.’

This type of research was appropriate for this study as the interviews and questionnaires were designed to interpret the meaning of people’s answers and their understandings. Some characteristics of this form of research are that it is valid, reliable and is essential to take a holistic view (Grbich, 2012). The methods carried out in the study are hoped to achieve these characteristics in order to provide sound, reliable results when analysed. Both methods have their own forms of analysis. Bogdan and Biklen, 1992, (as cited in Boeije, 2009, page 76) states

‘Data analysis is the process of systematically searching and the interviews transcripts, field notes and other materials that you accumulate to increase your own understanding of them and to enable you to present what you have discovered to others.’

The number of responses to the questionnaire dictates the method of analysis to be used. Analysis will be conducted and quotes and selected information will be drawn upon in the results chapter, similar to the interview data. If a high number of responses are received then thematic analysis shall be used and the data from the questionnaires shall be entered into qualtrics.

The opposite form to the qualitative research methods used in this study, would be quantitative methods. Muijus, (2004, page 1-2) positions

‘In quantitative research, we collect numerical data. This is closely connected to the final part of the definition: analysis is using mathematically bases methods’

These forms of research can be just as effective as they can produce data with much clarity. However quantitative data does not grasp the different meanings things can have
dependent on the person, as well as requiring large sample numbers in order to achieve the most accurate results. (Jones, 2017). This is why for this study, qualitative research methods were more appropriate.

### 3.6 Ethics approval

In order for these research methods to be carried out, ethics approval was required. Different aspects of the ethics application process ensure elements such as potential risks in the research methods are covered, and what steps are to be taken to prevent issues occurring. Appendix A shows the ethics application used for this study which identifies the potential risks associated with the study and how to address them.

#### 3.6.1 Risks

Identified risks to this study include the receipt of a limited response to the questionnaire and when arranging interviews, the potential risk of causing inconvenience to interviewees during their working day. Another risk identified is the confidentiality and security of personal information on the questionnaires and during interviews.

#### 3.6.2 Preventing risks

Various steps were put in place to prevent these risks occurring and limit potential issues. These were to design the questionnaire professionally with well-designed questions ensuring wording and presentation was to the right standard for the participants. All results will be kept secure and used only for the dissertation. Before participants complete the questionnaires, attention is drawn to a statement on the header of these, setting out the terms and confidentiality so the participant is informed at the very beginning of the process so they have the choice to withdraw if they wish. The questionnaire was designed so that the identity of the participant is not revealed and so that anonymity is held throughout.

Without undertaking the process of gaining ethics approval the research methods could not have taken place. Participation consent forms had to be filled in for the interviews to proceed and all participants could choose to have their name and organization kept
anonymous in the study if they wished. Privacy of the interviewers, if they requested anonymity, is kept by these forms being kept in a secure folder on Turnitin. The signed consent forms are held securely for five years as well as the recordings of the interviews.

3.7 Research Limitations

An identified limitation to this study was that one of the participants involved in the primary research was became unavailable despite originally agreeing to participate in the study. The head teacher of a primary school in Crumlin, had work commitments on the day arranged of their interview so unfortunately this interview was unable to be carried out. As well as their non-participation in an interview, it also meant the questionnaires could not be distributed as they were intended to be passed on to the PTA in the school through their offices.

However, despite this the information and research that was not gathered from this limitation was compensated for. This was achieved through the interviews with two members of local government organizations where information and results were collected from a primary school view and perspective. As both members work with many different primary schools, the information provided compensated for information otherwise unavailable enabling the research to still be good quality with no gaps. The views and opinions of parents, which was to be gained through the questionnaires, wasn’t received directly but from the information provided by the two interviews of local government organizations which was enough to support the research.

The interview with Pat Smail also addressed the previously identified limitation. Her role is a treasurer of GLOFA Trust and aside from this she is also volunteer for the Canal and River Trust. Through her various roles, information was provided which supported the perspective of a primary school. This was due to her involvement in working with projects for primary school aged children and knowing how to get parents involved.

Further research was carried out on the role of education. Literature was carefully read and analysed to help gain knowledge on the subject area. For example Ritchie, Carr and Cooper, (2006), looked at in the literature review, discusses considerations of the curriculum as well as facilities required for educational tourism to function. It also helped gain a view from someone who is a leader in education which is what was missing from the primary research.
Another example of authors looked at to obtain further information on this issue were Aiery and Tribe, (2005), whereby the role of tourism education is focused on, allowing the integration of education and managing tourism to be viewed as a viable link. This literature helped to compensate the school interview which did not take place.

3.8 Conclusion

This chapter should have explored and explained all theoretical concepts and methods being taken for this research project, the research methods used for primary data collection and any limitation issues the author faced and how these were dealt with and compensated for.
Chapter 4: Results analysis and discussion

4.1 Introduction

This chapter will review the results of the primary research from this study. The five semi-structured in-depth interviews that were conducted will be analysed showing key findings. This chapter will also highlight patterns found in the results and look at the difference in views to those interviewed.

The framework covered in the literature review will be reviewed to see if it can be adapted after analysis of results. The main points of this study and how they have changed the way the author thinks about this topic shall also be discussed.

Results in this chapter shall be presented in four themes, these being; Educational tourism, Sustainable Tourism, Industrial Heritage and Local community. After each one of these themes will be a discussion on the results rounding up key findings and there will be an ongoing discussion throughout after the presented results.

The author shall analyse links and connections between the results of the research and the literature review to help to see the contribution of this research in the field of the main themes of this study, mainly Educational Tourism and the principles of Sustainable Tourism.

In total there are five interviews discussed in this chapter and each participant will be referenced as shown. There are two participants from a local government organisation, (LGO), and the first participant from this shall be referred to as respondent 1 with the other following as respondent 2. There are two participants from GLOFA trust interviewed. One being Vera Jenkins, (VJ), the chair treasurer of the trust and the other Pat Smail, (PS), a volunteer with the trust as well as undertaking a masters in maths education and being a self-employed social researcher. The final participant being discussed in this chapter is Ceri
Thompson, (CT), who works at a national coal mining museum in Wales as the coal Curator. All questions and participants referenced can be found in appendix D.

4.2 Educational Tourism

The viability of education and how to link this with The Navigation Colliery through the means of sustainable tourism is shown to be very supported by all interviewees and something with strong potential.

4.3 Potential strategies for integration of Educational tourism at The Navigation Colliery

Without the support of Vera Jenkins, who oversees the regeneration project on The Navigation Colliery site, there would not be the potential to integrate educational tourism. Within the policies of GLOFA trust, she states developing children living in Crumlin is part of the organisations sustainable policy

‘Within our policies of GLOFA trust we are an open trust, we work with all manner of organizations and especially education because we value our youngsters and if we can grow our own, which is part of our sustainable policy, obviously our youngsters are our future, so obviously we are intent on involving them as much as we can.’ (VJ, 2017).

Sustainable practices and education can be linked together. This being supported by the findings by Nagle, (1999) whereby he suggests sustainable tourism can be applied to education through supporting economic activities within the community considering values and costs. GLOFA Trust consider links could be made which mean there is already strong viability for development of educational services. These links are how the local primary schools can integrate with The Navigation Colliery and how other leaders in education in the local area can get involved. When asked how it is felt links could be made with schools in the future to make this a success, through GLOFA Vera Jenkins suggests
‘we can offer their school support and we can support the curriculum as it is today and we can provide outdoor places like for the woodland schools for the bug hunting and a role within these wonderful buildings’ (VJ, 2017).

The strategies suggested encompass the environment, education and would involve communication and integration of organisations and schools strengthening local community networking and development. Pat Smail, also working with GLOFA as a treasurer of the Trust, has many strategies in mind to help the potential success of this in the future. One being

‘As we’re still at the development stage, my ideas are that I would like to use the fantastic resource we’ve got here and my particular area of interest is in Maths.’ (PS, 2017).

Linking in the curriculum would encourage many schools to get involved with The Navigation Colliery. It would be an option for an alternative learning environment to give children the chance for school trips helping them learn through aspects such as outdoor education. Pat states when asked how it is felt links could made through herself

‘You’ve got to link it with the curriculum literacy, English and maths, curriculum Cyrmu is key’ (PS, 2017).

The message being conveyed is that education needs to be linked correctly with the curriculum in Wales or schools will not be interested in participating with the site as it won’t benefit the children’s learning. The Navigation Colliery site could link with heritage so has the potential to link the curriculum and Pat Smail states ‘loads of schools go to visit Big Pit etc..this could be another alternative.’ Big Pit is a national coal museum in Wales which is very popular with school trips, this shows the potential the site has in comparison with well-established learning attractions.

The findings from these two participants from GLOFA support those of Kalyni and Nagra, (2013) whereby they express educational tourism developed due to the increasingly popular option of teaching outside the classroom and using other environments.

Respondent 1 from the LGO has the job role of, ‘policy officer of sustainable development, just to explain my previous role was education for sustainable development officer’
Respondent 1 currently runs ‘The Green Flag Program’. The success of the Green flag programmes this participant runs within schools, has 83% of schools involved within their borough. This supporting the findings of the linkage with education and sustainable practice, as the programme is essentially a programme to keep Wales tidy by the use of sustainable practice.

When asked what is thought is important for GLOFA to do to make progress towards the linkage of education with the site, (question 7 in respondent 1’s interview), the participant answered

‘using networks, we’ve got a lot of existing networks up already, so it’s making use of those networks and bombard them with information’ (Respondent 1, 2017).

Making the right contacts and networking appears to be a key strategy emerging from the results in order to create the potential for educational services for children to be created at The Navigation Colliery.

Respondent 2, reinforces this by answering, ‘it’s forging links with the head teachers, creating relationships with them’. This was in relation to the question, what is thought to be most important for GLOFA to do to make the linkage with education to make the site a success through it.

Ceri Thompson, (Curator of Big pit), has extensive knowledge in local mining and heritage starting the role he is in now in 1999. Working with the education sector also, allows him to give an in depth understanding of what is needed in order for education to be successful at the site. He states

‘Hopefully Crumlin would have something like a small learning interpretation centre as part of it, you’d have to have something like that. You need one of them done out so simple things like packed lunches, a classroom of some sort can be on site or at least a place they can sit and talk about things.’ (CT, 2017).

By implementing strategies like this, children’s services both recreational and educational could be provided as a good quality service.
4.4 Sustainable Tourism

The main foci of this study is sustainable tourism. The principles of this being applied to educational tourism and at The Navigation Colliery have proven to be seen key in this linkage being a success.

Respondent 1 reinforces this by stating

‘that’s what the key thing is, securing the funding to get the project running and making sure it’s sustainable.’ (Respondent 1, 2017).

A key principle of sustainability is making sure it is economically viable whilst preserving resources it is using which is stated by Swarbrooke, (1999). Respondent 2, when asked if the integration could be successful and something sustainable for future generations, (question 11), stated

‘the biggest barrier is funding and rebuilding it because it’s such an iconic site.’ (Respondent 2, 2017).

Funding is a key aspect to the potential development of children’s educational and recreational services at The Navigation Colliery and from the results it is seen that secure funding is clearly needed in order for this to sustainably be put into action.

4.5 Viability of Sustainable Tourism Principles

One area that was a key focus of this study was to find out each participants views on the viability of implementing educational tourism at The Navigation Colliery site, through sustainable tourism principles and strategies.

In reference to question 9 when interviewing Vera Jenkins she stated,

‘One of our strategies is to create a tourism link so that people will become proud of where they’re from and that I think is a huge basis for wanting to preserve what you’ve got’ (VJ, 2017).
This demonstrates what is needed for residents of Crumlin in order for them to feel a pride of place of their home community. Through the implementation of sustainable tourism strategies in Crumlin, pride of place is more achievable. This is as an attraction of some form through The Navigation Colliery would be there for use of residents whilst bringing people into the area contributing to factors such as economic benefits for the community.

Every participant had different views as to what is seen most necessary or what is best to do in order to have children’s services at the site.

When asking Pat Smail how important she feels the use of sustainable tourism principles are when applying them to children’s services at the colliery are, (question 12), she stated

‘I think in terms of the future of Wales and tourism and how it’s going to fit globally, tourism is going to be a key part of the economy for the next hundred years and if so, why not help the kids understand that while they’re growing up’ (PS, 2017).

The economy plays a huge role in how viable sustainable tourism is in being implemented in a various destination as financial security is needed in order to continue the running of services and facilities of a tourism attraction sustainability. When asking Ceri Thompson if he thinks the linkage is achievable through sustainable tourism strategies, he answered

‘Places like that need it. Need to make the feeling for people of Crumlin, well actually in this area this is a centre for you, I know it looks run down but Crumlin wouldn’t be there without that basically.’ (CT, 2017).

This is as the area of Crumlin is known to not be wealthiest of areas in the valleys and therefore this would help give residents a pride of place and also lead to community development ensuring the continual process of sustainable tourism has the potential to be applied.

4.6 Industrial Heritage

Industrial heritage is a key theme to this study as it is the main way in which The Navigation Colliery in Crumlin can develop the foundations of a tourism attraction and a main way of involving children’s education through this.
When the researcher interviewed participants from the LGO, they helped provide this information. When asking the respondent 2 from the LGO if there was potential to link The Navigation Colliery with children’s services, (question 6), in reply

‘There is yeah, I mean something steeped in history with some fantastic primary schools right next to it and I’ve done a lot of work with them’ (Respondent 2, 2017).

The history of the site is something primary schools in the area could integrate into the children’s learning therefore meaning the site could be used for field visits to help expand learning out of the classroom on the subject.

Heritage and history of the site has the potential to be integrated. Along with the involvement of schools in the area, it enables strong potential for children’s services, both educational and recreational, to be brought to the site.

When asking respondent 2 from LGO about culture, environment and heritage and which is thought to most likely be the focus there, (question 15), it was answered

‘Heritage would be massive because the valleys are steep in tradition of mine works’ (respondent 2, 2017).

The location of the site has the industrial heritage already there, so it seems this would be the most obvious form of producing some form of educational and tourism product from it.

Respondent 1 from the LGO has similar thoughts and opinions to that of respondent 2. When looking at The Green Flag Programme ran within the 78 primary schools in their borough, it was demonstrated how heritage is involved and how the committee for the programme do this

‘they do community work, they do whole school days of action and they do an eco-code mission statement and they focus on energy, water, recycling, litter, transport, global citizenship, health and school grounds. So they cover quite a lot. So environment but also heritage and culture because of global citizenship’ (Respondent 1).

This shows the sustainable practice also used when implementing the programme. To ensure industrial heritage can be used for education and tourism, sustainable principles
have to be applied as highlighted in the literature review by Swarbrooke, (1999). The model shown by Swarbrooke on sustainable tourism shows the different aspects needed to be taken into consideration when applying sustainable tourism to a destination, which helps industrial heritage sites be managed and conserved correctly for the use of the public. Aspects such as conservation policies and practices, resource use and host community considerations need to be applied to The Navigation Colliery which fit in with the aspects highlighted on Swarbrookes, (1999), model.

4.7 Linking Heritage with education at The Navigation Colliery

Linking heritage and history education to The Navigation Colliery site could be done through various strategies.

Vera Jenkins has been working on The Navigation Colliery site in her position for five years. When asking if Vera thought there was potential to link The Navigation Colliery with children’s services, (question 6), she stated

‘We think it’s viable because as I said our children are our heritage and this is part and parcel of heritage as coal mining is history here and if they don’t understand that and they’re heritage and where they’ve come from, then what we are trying to do is give them a background and backbone to grow’ (VJ, 2017).

The history of coal mining is shown to prove a resource that can be used for education for children and the site can be developed through this. In reference to question 7 when asking what one of the main focuses for the site could be, environment and heritage were strongly highlighted with Vera Jenkins saying

‘Through heritage, through heritage stories’ (VJ, 2017).

This shows the clear link between heritage and education that can be made. As the site is in very early stages of development there is time for ideas and plans like these to be developed. This would be a way to engage children with the sites history with the potential for family history to become a focus, potentially involving family members with the site increasing community support and engagement.
Pat Smail identifies the use and importance of industrial heritage also which helps develop the themes of this study. Highlighted from this interview also shows the strong link to education with Pat Smail expressing

‘It links really well with curriculum cymru because your also linking it with heritage’ (PS, 2017).

This is being said in regards to the site becoming a success in the future. Curriculum Cymru is the curriculum of what is required in schools in Wales and an element to this is history. The curriculum for schools in wales regarding history in the literature review highlights how history is a focus for children when learning, helping them have a greater understanding of where they live. If this is used when applied to The Navigation Colliery, it will encompass the themes of education, heritage and community.

Ceri Thomspon explained some of the strategies for children’s services he has provided in the past saying

‘We try to talk through the museum part of it because we want to use history as part of the job. I’m not a historian so I tend to work with objects, get people’s stories and just try to keep the coal industry alive a certain way’ (CT, 2017).

These successful strategies show the importance of heritage in education and it is a viable resourceful element to integrate.

4.8 Local community

The local community of this study is Crumlin, located in the Ebbw valley in South Wales. When asking whether children’s services could fit in with community development and well-being for the community the participants all had the similar view of this being a success.

4.9 Role of children’s services in relation to this dissertation

Respondent 2 from the LGO when answering the above responded

‘Yes, it’s making it an attraction, and getting the community involved, obviously there are partners in the community as well’ (Respondent 2, 2017).
This implied there is greater community support needed in order for this to be success for the community. Respondent 1 from the LGO agreed by answering

‘Brilliant opportunities for your local community to be involved, it’s quite a deprived area so the volunteering, because people are out of work, will give them aspirations and confidence and can obviously help get them back into work’ (Respondent 1, 2017).

Being a fairly deprived area means this would improve the general well-being for the community by eventually providing more jobs leading to a better quality of life. This supports the findings in the literature review of the Census from 2011, stating the low number of employment rates for males and females (Profile of Crumlin, 2011).

Nagle, (1999), states how sustainable tourism can recognise local communities so their lifestyle can be linked with tourism facilities and services being developed in their area and that they should receive the economic benefits from this.

When asking Vera Jenkins if she thinks this would help the community of Crumlin develop (question 12), she answered

‘Yes and as the children grow and they’re understanding grows they’re pride of place grows, then obviously the community will become far more sustainable’ (VJ, 2017).

Through creating pride of place, it will ensure the running of sustainable tourism principles in the destination as the community will be more encouraged to support the development of this. Vera Jenkins also expressed

‘Education could be the link from school education to the community and how the community values education and how education should value the community’ (VJ, 2017).

When referring back to Butlers Tourist Area Life cycle, it can be seen to show the different phases of a tourism destination which can then be applied to the community in terms of different stages of tourism development. When applying Crumlin to this model, it is in the early stages as the site of The Navigation Colliery only started the first stages of development in the last few years and restoration building is yet to commence via the Regeneration work. Therefore it is still in the involvement and exploration stages which
once have been completed, will allow the site to move onto the development phase of the cycle. By applying the community of Crumlin to the cycle, it can enable full engagement of the community with the work at the site meaning potential jobs for community members therefore using sustainable tourism principles when positively involving the community.

When asking Ceri Thompson, if he felt the integration of children’s services to The Navigation Colliery through the principles of sustainable tourism would be something that would help the community of Crumlin develop, (question 12), he suggested in order for this to be achieved

‘You need something there, some sort of centre’ (CT, 2017).

When asking how Ceri felt he could make links himself with education at the site, (question 10), he expressed

‘Hopefully Crumlin would have something like a small learning interpretation centre as part of it’ (CT, 2017).

This shows the sort of centre he feels would be best suited to the site in order for educational tourism to be successfully implemented. A learning interpretation centre would have the opportunity to encompass educational activities and learning displays and be a facility available to schools on trips of families visiting.

A common response and thought with the participants is that a centre of some form needs to be developed at the site for community use. Respondent 2 from the LGO, (in reference to question 12), adds

‘I think it would, I’ve seen it happen in other places where buildings have become sort of the hub and people visit it’ (Respondent 2, 2017).

This demonstrates there is some form of community centre on the site, it could help increase community engagement. Ceri Thompson also stated

‘From my experience school trips are great but they don’t take as much in as if they visited with a grandparent so having the parents or grandparents with them would be good’ (CT, 2017).
Education integrated with The Navigation Colliery site would generally be associated with school trips. However if the services/facilities provided there are made into something that can be used as a family resource also, it again helps with the implementation of sustainable tourism as the resource of the site is being used by all. Also by providing something that can be used by families, it helps strengthen the local community and increases people wanting to support activity at the site.

4.10 Discussion of findings from results

At the beginning stages of this study when analysing the literature, the four main themes of the dissertation were established including: Sustainable Tourism, Industrial heritage, Education and local community development. All four themes were apparent in the results from the interviews carried out however some came through more dominant than others.

The investigation about the role of local community development had a lot more depth to it then was initially discussed in the literature review. From all the participants interviewed, it was seen they all felt without local community support and engagement the potential linkage for children’s services being integrated at The Navigation Colliery site through the means of sustainable tourism, would be more limited. The involvement of families was a key point put forward by one participant. By making the facilities at The Navigation Colliery something families could engage with together, by offering a tourism attraction they could visit and enjoy, would help the site develop as well as engaging the local community more. A strategy suggested for this integration was a community centre of some form which would close links to form with the local community of Crumlin.

A theme that came through from the interviews that wasn’t selected as a key focus originally, was poverty alleviation. This theme emerged from the results in relation to asking whether this potential project would benefit the quality of children’s life-style. This shows the participants feel the life-style the children have at the moment could be improved. Respondent 2, (in reference to question 14), from the LGO pointed out

‘The biggest barrier is always going to be money, that is a concern of mine because it’s such a beautiful iconic place and it needs that tender loving care and I just wonder where the money is going to come from’ (Respondent 2, 2017).
Funding restoration is a key issue with the regeneration project at the site and something that needs to be overcome in order to plan future developments.

Whilst respondent 1 queried ‘it’s quite a deprived area’. The current regeneration project at The Navigation Colliery site relies on funding, so to implement educational services and plan these for the future, the economic viability of this needs close attention. Pat Smail remarks ‘I’ve spent a lot of time working in the valleys and sometimes I think if I saw this every morning I would think I’ve been forgotten by the world’ (PS, 2017).

This view shows that the need of something in Crumlin to give pride of place and help develop the area is strongly needed. This would help with poverty alleviation by in time creating jobs, improving education, developing the areas infrastructure and improving education whilst integrating it with the community and being sustainable for the community.

4.10.1 Difference between views and authors views

In the literature review Ivanovic, (2008), expresses his views that the most common type of education through heritage sites are field studies. However when interviewing Ceri Thompson, he stated

‘From my experience school trips are great but they don’t take as much in as if they visited with a grandparent so having the parents or grandparents with them would be good’ (CT, 2017).

It could be argued either way in which children experience a better form of education when either on a field trip with school or a family trip. Both ways provide a way of educational tourism and are helping an attraction/service remain sustainable.

4.10.2 Conceptual Framework

The framework first reviewed within the literature review highlighted key themes and main points that are most relevant within the discussed themes. This helped when analysing the
results as it could be seen what main issues or themes were missing from the conceptual framework.

Figure 2.6, as seen in the literature review shows the conceptual framework to this study which highlights the key themes and authors from the literature. When referring to this after the analysis of the results, it can be seen other themes becoming apparent. Other aspects to the study were shown to be a prominent theme from the results after analysis of the interviews. After the analysis of results, another box should be added to the conceptual framework which is shown below of the theme poverty alleviation.

![Figure 4.1: Reviewed conceptual framework](image)

<table>
<thead>
<tr>
<th>Poverty alleviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment rates created through sustainable development at The Navigation Colliery</td>
</tr>
<tr>
<td>Issue of funding</td>
</tr>
<tr>
<td>Creating barriers for potential development</td>
</tr>
<tr>
<td>Education linking values to the community- linking local community and educational tourism</td>
</tr>
<tr>
<td>Pride of place from potential development of The Navigation colliery</td>
</tr>
</tbody>
</table>

Source: Jones (2017)

One of the participants said through the linkage of children’s services at The Navigation Colliery, it would help create jobs for the community. There would be jobs created in the building of the facilities and organisation of this. After this stage there would be jobs created for; educational activities to be run for field trips, design and creation of potential learning centres and general staff at the site to help with the day to day jobs and maintenance needed there.
The issue of funding for the current regeneration project and potential future projects, is significant. Without sufficient funds the site’s development will not be viable or achieve the planned completion.

The development of The Navigation Colliery would help poverty alleviation within in Crumlin by the gradual development of better quality infrastructure and the expansion of current local businesses.

From all the interviews, it is shown that pride of place is something that from this linkage will be created. This is needed in the destination as it currently does not hold this status, shown through most interview results.

Poverty alleviation can be linked with tourism. A tourism attraction being developed in Crumlin means the economic status of the area in time is likely to increase through further development of other businesses that may move to the area or expand existing services/facilities. This also links as tourism allows jobs to be created and can contribute to the areas infrastructure improving.
Chapter 5: Conclusion

5.1 Introduction
The following chapter ties together the different themes discussed throughout this research project. It will also provide an overview of the main findings. This will be presented by firstly a summary of findings discussing various aspects of the study followed by directions for further research and recommendations for how to achieve this.

5.2 Review of Aims and Objectives
The title of this study is ‘Industrial Heritage Sustainable Tourism: A Critical Analysis of the Integration of Children’s Education and Recreational Services at Navigation Colliery, Crumlin.’ Throughout this study the researcher has followed aims and objectives stated in the introduction in order to carry out an effective critical analysis. The research question, ‘What are the needs and requirements to develop primary school education on the Natural Environment and History Education (recreational facilities) at Navigation Colliery?’, of the project was also answered by compliance in addressing the objectives set.

The first objective set was; to conduct a critical literature review of the role of sustainable tourism through the sense of place of local heritage in primary school education. This was achieved through the literature review which was composed of the four main themes. All of this linked in to the first objective as well as helping answer the research question.

Sustainable tourism literature focused on the principles of implementing this which helped when considering the viability of the principles being applied to The Navigation Colliery site alongside educational services.

The educational tourism literature discussed, provided great depth into how educational tourism can be applied and different methods for this. It also highlighted some similarities
with principles of sustainable tourism and demonstrated how heritage and local community can be a part of educational tourism.

The strong link of these themes, provided an early positive insight into the integration of children’s educational and recreational services at The Navigation Colliery.

The second objective to this research project was; ‘Carry out primary research with leaders in education to assess the opportunities to utilise The Navigation Colliery, teachers and GLOFA Trust volunteers.’ As discussed in the methodology chapter, the interview planned with a head teacher unfortunately did not take place. However the missing information was compensated for in the study. To achieve this objective, extra literature in respect of the educational tourism theme was reviewed. The other interviews that were conducted provided the author with much more depth concerning role of education than anticipated so the objective was still met. All interviews provided results that showed methods and strategies for suggestions on integrating children’s services at the colliery.

The third objective was; ‘Critically analyse the views and opinions of staff at the colliery and teaching staff in local primary school and education providers using qualitative semi structured interviews to discuss how to link children’s services and education through the Navigation Colliery to lay a foundation for future sustainable tourism strategies.’ All semi structured interviews considered the importance of sustainable principles when discussing the link between children’s services and The Navigation Colliery. All participants agreed sustainability plays a major role and the use of heritage, culture and environment at and of the site could provide this sustainably.

The final objective to the study was; Develop final conclusions and make recommendations about future strategies to be developed at The Navigation Colliery, Crumlin. This will be discussed further within this chapter.

Conclusions and recommendations for future strategies to be implemented at The Navigation Colliery, derived from the interviews carried out which all provided idea on methods for this of a high standard. Each participant also said how they felt personally they could help achieve and support the linkage.
5.3 Summary of Main findings

All research conducted related to the question of whether the linkage of children’s services with The Navigation Colliery is viable. All participants to the interviews were carefully chosen and had relevant strategy suggestions for the potential of children’s services at the site. The interviews also helped identify how the linkage would be possible, for example through aspects such as heritage and environment. The participant’s knowledge of working with children, education, tourism and the community provided detailed answers and information relevant to all themes in the literature review. This gave the author an understanding of the principles, possible strategies and barriers to be taken into consideration when addressing the issue.

It is apparent there were some overlaps with participant’s answers to the interview questions. The four themes discussed within the literature review can be seen within the results which is why it fit to discuss the results in this format.

When looking at the results in the context of the theme of industrial heritage, it was found that all participants found this a viable linkage to make through The Navigation site in relation to education. The history of the site carries much potential for this as well as a general tourist attraction. The local community have a history of family connections to the site therefore meaning as a tourist attraction it will integrate the community and give them something to become involved with. Through the site, there is potential for learning to be carried out giving an alternative experience to learning in a class room environment.

Local community was proven to be a key factor to the study. All interviews highlighted how it was felt community should be taken into consideration and integrated when considering the potential linkage. Without the support of the community this linkage was seen not to be as viable as it requires support in order to develop especially as the site is at very early stages of development. It was indicated that successful implementation would give the community a strong pride of place and help the quality of life improve in the area.
Sustainable tourism was something all participants agreed was important and the principles of it should be applied in order to make the linkage a success. This way the community will not be negatively affected and in time, it will receive benefits such as economic advantages.

As The Navigation Colliery will not only be used for education, it emphasised how important sustainable tourism is in order to create an attraction that will be available to used future generations. To quote Ceri Thompson

‘You need to be sustainable these days, everything is about sustainability’ (CT, 2017).

The results showed that in order for successful development of education tourism at The Navigation Colliery, sustainable principles should be implemented.

Educational tourism being implemented through the principles of sustainable tourism has strong potential. The site can incorporate environment, culture and heritage which were all elements highlighted in the interviews linking education to the site.

A way to link this with sustainable tourism is to make the attraction family oriented. Families would be able to make visits with children and this would add to school trips for educational tourism. The results also showed that through environment, culture and, especially, heritage, it can take account of school’s curriculum making schools further afield more inclined to visit.

The biggest barrier apparent from the results was the provision of funding for the site. If this is alleviated from the results there is no reason for children’s services at The Navigation Colliery, implemented through sustainable tourism principles, to not be a successful project.

5.4 Reflection of conceptual framework

When reflecting on the frame work, figure 4.1, poverty alleviation came up as a theme after analysis of results, linking in with local community. If the linkage of children’s services at The Navigation Colliery was successfully implemented, the community would benefit. The site would become an attraction within Crumlin providing jobs for local people as well as bringing many new visitors into the area. As noted above, the census of Crumlin from 2011, shows 6.6% of males were unemployed so this project could help increase employment to help alleviate poverty related issues. It would help provide a pride of place for local
residents which is something from the results that is felt is needed within the community of Crumlin. Heritage can also play a part in alleviating poverty as it is through heritage the site could be used for educational tourism and to create some form of attraction. The site is still at early stages of development but this is a potential project for The Navigation Colliery and the results show it to be a viable project.

5.5 **Wider scope to study**

When looking at the wider picture of this study it can be shown the linkage of children’s services with The Navigation Colliery can be supported by policies such as the national curriculum for primary schools in Wales. There is a compulsory element to the curriculum of history which aims to ‘develop knowledge and understanding of the cultural, economic, environmental, historical and linguistic characteristics of Wales’ (Wles.gov, 2017). The Navigation Colliery site is steeped in history for Crumlin, so through using this is can be linked well. ‘History contributes to the curriculum Cymreig by making local and Welsh history a focus of the study.’ (Wales.gov, 2017).

5.6 **Directions for further research**

Despite the limitation of not having an interview with a primary school head teacher, this did not impact the results of this research project as the information was compensated through other interviews with leaders in education and extensive further research around the topic of educational tourism.

However, further research with leaders in education, specifically in primary schools would provide additional information to help develop the research project and potentially establish direct links with primary schools in Crumlin to integrate with educational tourism at The Navigation Colliery.

Another limitation to this study was that the questionnaire created for primary research, was not completed. This would have been of benefit as the questionnaires were designed for a parent teacher association of a local primary school. Although interviews were carried out with leaders in education and from tourism heritage attractions, there was no direct
parental views provided. This was a weakness to the research design so directions for further research would be to gain information, views, opinions and potential strategies from parents in the local community of Crumlin. This would help involve the community more and give more depth to the results of the primary research already attained.

5.7 Recommendations for organisations

After analysis of results and reflection upon the research project, the author has recommendations to help the link between GLOFA Trust and primary schools in Crumlin to help the linkage of educational tourism take place at the site through the means of sustainable tourism principles.

For GLOFA trust, the author recommends making links with primary schools in Crumlin and parent teacher associations there so they are making strong contacts to help with development on the site, whilst also a way of linking the community in some ways. The author also recommends GLOFA take into consideration potential funding barriers with the site’s regeneration, also highlighted in the results from interviews carried out. The author also recommends GLOFA Trust make connections with other leaders in education such as authoritative figures interviewed. Respondent 2 from the LGO presents this as an opportunity by suggesting

‘Potentially we could provide traineeships up there as well for young people learning a trade and things and they get a qualification out of it and get paid as well through funding so we could even look at putting trainees up there to work there on projects’ (Respondent 2, 2017).

This shows that there are potential links to be made. The coals curator of Big Pit, explained how he felt he could make links by stating

‘Hopefully Crumlin would have something like a small learning interpretation centre as part of it, you’d have to have something like that. You need one of them done out so simple things like packed lunches, a classroom of some sort can be on site or at least a place they can sit and talk about things. So we could give them a hand with
Again, this shows there are people within the education industry willing to get involved with the potential project.

Primary schools within Crumlin also need to provide support to this in order for further developments to be made. They also need to establish strong relationships with GLOFA Trust in order to utilise their facilities to benefit children’s education, and help support educational tourism and the community.

5.8 Contribution to the area of study

This study contributes to the future development of The Navigation Colliery. The author feels the primary research conducted has provided scope for GLOFA Trust to develop contacts and strategies for the potential linkage of children’s educational and recreational services to the site.

It could be argued that this study has gained strong understanding of the principles of sustainable tourism and what it entails for a destination when an attraction is being developed. It has looked to explain the links of different forms of tourism and how they can be effective and applied sustainably.

This research project has been a fulfilling learning experience which has helped the author grow strongly as a researcher and also as an individual, learning skills to develop and use throughout future research, work and career.
References


