A Comparative Study of Beekeeping as an Intervention with Troubled Young People

By

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Abstract

“Although they make up only 11 per cent of the population above the age of criminal responsibility (in England and Wales), in 2009, people in this age group were responsible for 17 per cent of all proven offending” (NAO, 2010:5). Sadly, 56 per cent of these young people are likely to re-offend within one year (NAO, 2010). These trends are not unique; they are common to many countries worldwide (e.g. De Gusti et al, 2009). Arguably then, current government strategies that aim to reduce recidivism including custodial sentences, are not working (Clarke, 2011). However, terms such as ‘criminal offence’ and the age criteria for criminal responsibility vary widely in their definitions between and within countries. Furthermore, reasons why young people re-offend emerge from complex and multi-dimensional needs and risk factors, which themselves vary over time. Attempts at correlations and comparisons are therefore inevitably contentious. Interventions perceived as most effective at reducing recidivism focus on multi-systemic approaches to changing behaviours (e.g. DfES, 2006). This research and its findings, contributes towards a better understanding of these multi-dimensional factors.

This report presents outcomes from a mixed-methods, ethnographic, comparative research project in relation to a four-day intensive outdoor experiential education programme. For the purposes of this report, the programme is called ‘Bee Inspired’ and is specifically for young people defined as ‘at risk’ of offending or re-offending. Bee Inspired is unique because it involves the participants’ immersion in learning the practical skills of beekeeping. The research was based in three countries: the Azores islands (Portuguese-governed), Prince Edward Island, Canada and England, United Kingdom. During the programme, the participants were observed closely and their behaviour, experiences and comments recorded. Additional data were collected through written questionnaires and focus group sessions during and at the completion of the programme.

The outcomes are presented using a method of written ‘vignettes’. This gives voices to the participants, whose perspectives, within research data, are often absent. This report provides evidence of their positive experiences of cognitive, social and emotional development during the Bee Inspired programme; these being intrinsically linked to the programme’s objectives and the researcher’s theoretical and ontological perspectives. The
findings were triangulated; qualitative and quantitative data support previous educational research and produces some new insights. The research tracked the progress of the participants twelve and eighteen months after the completion of the Bee Inspired programme. Out of 45 participants, only three participants re-offended within eighteen months; well below average and expected norms as defined in similar research. In addition to the low re-offending rates, many participants continued their beekeeping practices which *in itself* may contribute to the perceived success of the programme. In conclusion, although small-scale and limited in terms of scope and generalizability, this research illuminates the experiences of young people ‘at risk’ involved in experiential education. The complex and multi-dimensional nature of these experiences relate to individuals’ diverse needs. Further research into experiential education programmes is therefore required, in particular, investigations into why factors specific to beekeeping could provide a way of reducing recidivism amongst some young people at risk.
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## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AEE</td>
<td>Association for Experiential Education (USA)</td>
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<tr>
<td>BCYPS</td>
<td>British Columbia Youth &amp; Probation Services</td>
</tr>
<tr>
<td>CPAG</td>
<td>Child Poverty Action Group</td>
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<tr>
<td>CYPN</td>
<td>Children and Young People Now (UK Charity Network)</td>
</tr>
<tr>
<td>DfE</td>
<td>Dept for Education (UK)</td>
</tr>
<tr>
<td>DfES</td>
<td>Dept for Education and Skills (UK)</td>
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<tr>
<td>DGPJ</td>
<td>Ministry of Justice: The Azores</td>
</tr>
<tr>
<td>DWP</td>
<td>Dept for Work and Pensions (UK)</td>
</tr>
<tr>
<td>FE</td>
<td>Further Education Colleges (UK)</td>
</tr>
<tr>
<td>GCSE</td>
<td>General Certificate of Secondary Education (UK)</td>
</tr>
<tr>
<td>HBAI</td>
<td>Households with Below Average income</td>
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<tr>
<td>ISSP</td>
<td>Intensive Support and Supervision Programme</td>
</tr>
<tr>
<td>JRF</td>
<td>Joseph Rowntree Foundation</td>
</tr>
<tr>
<td>MoJ</td>
<td>Ministry of Justice (UK)</td>
</tr>
<tr>
<td>NACRO</td>
<td>National Association for the Care and Resettlement of Offenders</td>
</tr>
<tr>
<td>NAO</td>
<td>National Audit Office (UK)</td>
</tr>
<tr>
<td>NAYJ</td>
<td>National Association of Youth Justice</td>
</tr>
<tr>
<td>NEET</td>
<td>Not in Education, Employment or Training</td>
</tr>
<tr>
<td>NSEE</td>
<td>National Society for Internships and Experiential Education (US)</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>ONS</td>
<td>Office of National Statistics (UK)</td>
</tr>
<tr>
<td>PASS</td>
<td>Progressive Accountability through Supervision &amp; Support (Canada)</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>WDD</td>
<td>World Development Indicators Database</td>
</tr>
<tr>
<td>YCJA</td>
<td>Youth Criminal Justice Act (Canada)</td>
</tr>
<tr>
<td>YJB</td>
<td>Youth Justice Board (UK)</td>
</tr>
<tr>
<td>YJS</td>
<td>Youth Justice System(s)</td>
</tr>
<tr>
<td>YOT</td>
<td>Youth Offending Team</td>
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**Introduction**

I am interested in young people who are at risk and/or involved in offending and what appears to help them avoid re-offending or becoming involved in offending in the first place. I became interested in this area of practice as a result of several years’ experience as a police officer and realised that punishment – in its traditional forms - often did not have positive outcomes for the young people or the communities in which they lived, i.e. it did not divert them from criminal behaviours. I became aware of a more positive perspective; strategies that aimed to value the innate strengths of these young people, rather than focusing on their perceived deficits.

After leaving the police force in the United Kingdom (UK) I emigrated to Canada and became involved in working with young offenders or those at risk of offending in a different context. Working within the youth enforcement teams at Community Guardians, Metropolitan Toronto Housing (social housing project) in Canada, led to the development of an interest in the possibility of working with these young people in different ways, for example, through experiential education. More specifically, these were ways that combined experiential learning with my own long-standing interest in ecological and environmental issues. I then became involved in a project that was using beekeeping with young people who were at risk or involved in offending. This combined my two interests – working with young people involved in offending to prevent their further involvement and working with these young people in an environmental/ecological context. This is a relatively new and innovative way of working with young offenders and as this report points out, there are no known international comparative studies that have been undertaken using this type of intervention with this group of young people. I became so convinced that this was an effective way of working with young people, and one that would produce positive outcomes for the young people concerned, that I decided to pursue this area of research. This was accomplished using my network of contacts through the non-profit organisation I manage, EnvironmentPlus International CIC, and the International Federation for Experiential Education.

In this report, Chapter One reviews the literature on young people ‘at risk’ of offending and considers the factors that render them vulnerable to (re)offending. It then provides an overview of interventions that aim to address the reasons why young people offend and
evaluates success rates in reducing or preventing offending. The literature review then moves on to consider the differences between these interventions and types of experiential learning interventions that have been tried with this group of young people. It finds that experiential learning programmes produce more positive outcomes for these young people than other types of interventions. The literature review then considers experiential learning interventions of different types including the environment and considers the outcomes for these in relation to the young people concerned.

Chapter Two introduces the study I have conducted. It describes the young people who were involved and where they came from. This was an internationally comparative study of the same intervention provided to young people from different geographical locations. Therefore the background factors of each location from which the young people came are briefly considered which adds important context to the data presented later in this report. After describing the young people who took part in this programme, their backgrounds and the locations from which they came, this chapter moves on to explain the methods used to undertake this research. A variety of methods were employed, appropriate in providing a better understanding of the young people’s experiences. These included observations, focus groups and questionnaires. The ethical issues involved in conducting this study are also described in this chapter. The study makes a contribution to practice by demonstrating the ways in which experiential education programmes such as that discussed here deliver positive outcomes for the young people concerned. It does not claim to be telling the ‘truth’ about what might work for every young offender, but it is making a valid contribution to the debate about how we should work with and respond to these young people. The report also makes a contribution to academic debates in this field by suggesting that ‘what works’ with young people involved or at risk of offending is fluid and complex in nature and definition, and interventions that provide these young people with opportunities to feel positively about themselves can make a positive contribution to their needs within a social context.

In Chapter Three I provide my observations through three vignettes providing an insight into the context of the environment during the three programmes at the three international locations. These comprehensive descriptions and comparisons (together with the Appendix 7), allows a better understanding of the actual everyday experiences of the programme participants. Using the voices of the young people alongside the context
provides an opportunity to open-up a dialogue between the young people and those who are engaged in helping them.

Chapter Four introduces the findings from the study. These are presented in comparative format: young people from Canada, the UK and the Azores Islands are discussed in relation to each other and the differences and similarities in how young people responded to the programme are considered. Within the chapter, the qualitative and quantitative findings have been compared and contrasted where appropriate.

In Chapter Five, I draw my conclusions from this study, suggest the value of such projects for young people involved or at risk of offending and suggest ways in which projects such as this might be developed in practice in different contexts for young people who are ‘at risk’.
Chapter One: Literature Review
Literature Review: The Approach

Carrying out this literature review involved drawing upon various sources of information across the three countries in which the study data was drawn. For the purposes of this study, I visited the following libraries: The British Library at St Pancras, London, Kent County Council library in Maidstone, Kent, the University of the Azores and the Municipal Library in Ponta Delgada, Azores Islands, University of Toronto, and Toronto Metropolitan Libraries in Canada.

Wherever possible, I also used a variety of online search engines and databases including; Google Scholar, Connect, International Bibliography of the Social Sciences (IBSS), Sage Journals and Science Direct. Literature reviews are always limited by resources, and although considerable time and effort was spent in researching the topic, this can never be entirely exhaustive. For example, the use of electronic databases means employing a limited range of keywords, and these vary between databases. Often they only describe the general topic area rather than the specific interests of the researcher and the specific subject being researched. Due to this fact, it is inevitable that some relevant papers may have been inadvertently overlooked. With this in mind, and to ensure as comprehensive a search as possible was made for literature in this area, I also undertook physical searches of papers and documents at the aforementioned libraries and at various government offices such as the Ministry of Children and Youth Services, Toronto, Canada and the security police archive offices in Ponta Delgada, Azores. The visit to the police offices in Ponta Delgada proved especially useful as modern electronic filing and data management is not yet in common use and therefore this manual (time consuming) approach was both appropriate and necessary.

In searching for relevant literature, the inclusion criteria were kept purposely broad. These comprised (amongst other media) English language books, evidence-based, peer reviewed journal articles, research theses and quality newspapers/journals. For the electronic searches, I used a variety of search terms and techniques specific and appropriate to the search engines in question. These included ‘young offenders’, ‘experiential education’, ‘experiential learning’, ‘skills and training in the secure estate’, ‘diversionary interventions’, ‘youth justice board’, ‘youth justice system’, ‘young people’ ‘rehabilitation’ and ‘beekeeping’.
Finally, I also conducted a review of relevant government policies in the three countries over which this research is based. In the UK, publications reviewed were sourced from the Home Office and the Ministry of Justice, the Youth Justice Board (YJB), Barnardos, The Howard League for Penal Reform, the National Association of Youth Justice (NAYJ), the National Association for the Care and Resettlement of Offenders (NACRO) and various research centres such as those at the Institute of Criminology at the University of Cambridge. In the Azores and Portuguese mainland, publications reviewed were sourced from the Ponta Delgada, Azores security police archives, Universidade Nova de Lisboa, Centre de Criminologia, Portugal, Sociedade Portuguesa de Criminologia, Lisboa, Portugal and the Universidade dos Açores, Horta, Azores. In Canada, publications reviewed were sourced from the University of Toronto – Centre for Criminology and Sociolegal Studies, Ministry of Children and Youth Services of the Ontario Government, Université du Québec à Montréal, Procureure générale ministre de la Justice et de la Consommation, Assemblée législative du Nouveau-Brunswick, Fredericton, N.B. and the Family Law Centre / Centre de droit familial, Charlottetown, Prince Edward Island as well as from the Government of Canada: Statistics Canada.

**Introduction**

The literature review is divided into two sections. **Part One** focuses on young people ‘at risk’ of offending in the UK and considers the factors that render them vulnerable. The issues discussed here were found to be common to similar young people in Portugal and Canada and therefore a separate review of these groups of young people is not deemed necessary. **Part Two** of the literature review provides a discussion of the definition and development of ‘experiential learning’ and what this may involve, including examples of previous interventions that have been tried with young people who are at risk of offending. I conclude with a consideration of the reasons why young people may offend or re-offend and therefore the extent to which these interventions can or cannot be considered ‘successful’ in reducing or preventing offending.

**Young people from socially disadvantaged communities in the UK**

Social mobility at the beginning of the twenty-first century is lower than it has been for previous generations, meaning that those who are born into disadvantage are more likely now than ever, to remain so (Blanden and Gibbons, 2006; Margo and Dixon, 2006). At the
same time, the gap between the richest and poorest in terms of disposable income has increased (Paxton and Dixon, 2004), and the numbers of young people living in relative poverty have been increasing, as highlighted in the recent report: *Hard Times: Young people's and Young parent's experiences of living through poverty in Luton.* (Melrose et al, 2011). The definition of poverty varies, but its negative impact is universal:

> “Poverty makes people lives shorter and more brutal than they need to be. Poverty is not simply about going without, it is also about being denied power, respect, good health, education and housing, basic self-esteem and the ability to participate in social activities”

*(Child Poverty Action Group (CPAG), 2011)*

It is well documented that living in poverty is closely associated with a range of negative outcomes such as an increased risk of poor educational outcomes, poor health, being a victim of crime and being criminalised for anti-social behaviour or other types of offending (CPAG, 2011). Furthermore, children and young people growing-up in poverty suffer disadvantage which accumulates over their lifecourse (ibid). For example, as they move into young adulthood they may have lower aspirations and increased risk of experiencing unemployment, low pay and poor health (Hooper et. al. 2007 cited in Melrose et al 2011; Marmot, 2005). Because poverty prevents individuals from reaching their full potential at school this, in turn, limits their employability and therefore their future economic success in employment. The cost to our society is considerable; estimated to be around £25 billion per annum (Joseph Rowntree Foundation (JRF), 2011).

Since 1999, successive UK governments planned to cut child poverty by 50% by 2010 and to eradicate it completely by 2020 (CPAG, 2009). Sadly the 2010 target was missed by one million children and now seems unlikely to become a reality (JRF, 2011). The longevity of these concerns is illustrated by the Child Poverty Action Group which was set-up nearly fifty years ago in 1965. In an annual survey, those households with below average income (HBAI) were shown to be slowly decreasing in the ten years preceding 2005. Indeed, until 2005, it seemed the battle was slowly being won against income poverty. The UK’s Department for Work and Pensions (DWP) announced on 12th May 2011 a 200,000 fall in the number of children living in poverty, from 2.8 million to 2.6 million, before housing costs, and 3.9 million to 3.8 million after housing costs, for the fiscal year 2009/10. In response to these figures, Barnardo’s Chief Executive Officer Anne Marie Carrie said:
“These figures are good news, however they should not be used to hide the reality of the depth of poverty still experienced by millions of families in the UK. We remain concerned that numbers may well rise again due to cuts and the economic downturn – we fear these figures show only a temporary reprieve in the battle against child poverty. We cannot become complacent.”

(Barnados Media Website, 2011)

Indeed, recent figures show that the government strategies so far have been limited in success, with statistics from the 2009/10 HBAI survey showing 22% of UK households currently living in poverty, with 53% of these families having at least one child (CPAG, 2011). The battle against child poverty can be put into context by the following facts:

- Children of low-income families are disadvantaged on a number of measures, including: low educational attainment, high levels of unemployment or low-paid work, high numbers of young people Not in Education, Employment or Training (NEETs), poor physical and mental health and increased risk of involvement in crime (Melrose et al 2011, Sutton et al, 2007).
- Children and young people who receive free school meals were less than half as likely to achieve five good GCSEs as other children in 2006 and despite efforts to change these outcomes, this figure remained unchanged in 2009 (Curtis, 2009b).
- Although young people from low-income backgrounds are at greater risk of entering the Youth Justice System (Action for Children, 2010), it would be reductionist to maintain a correlation between poverty and offending. Many young people living in poverty have factors that prevent or deter them from offending, and we need to discover more about what these factors are and how to tap into them. Research suggests that one of these factors is educational attainment.

According to the Organisation for Economic Co-operation and Development (OECD), the gap between the level of educational achievement for young people from disadvantaged backgrounds compared to those from advantaged backgrounds in the UK is one of the largest in OECD Countries. The UK is currently ranked 28th out of 35 OECD countries, with virtually no change over nearly ten years (OECD, 2002; OECD 2011). If other OECD countries have (with varying degrees of success) limited the impact of disadvantage for their young people, this means that poverty and poor educational outcomes need not inevitably be linked. Therefore, for young people in the UK, other factors must be involved that either reinforce the relationship between economic disadvantage and low
achievement, and/or prevent government strategies from being fully effective. The outcomes reported from this research assist towards providing insights into what these factors may be. In particular, it highlights some distinct differences evident in the UK programme participants compared to the other two international locations, for example the lack of important social capital that young people suffer (Morrissey and Werner-Wilson, 2005).

Even taking into consideration the recent DWP claims of reductions in the numbers of children living in poverty (described above), the overall outlook for poverty and inequality in the UK is described as unstable or ‘bleak’ (Brewer, et al., 2009). Furthermore, during this time of economic turmoil, public sector funds and welfare budgets are under threat of substantial reductions as the UK Government gets to grips with national debt. Undoubtedly, the years ahead will involve many challenges to organisations and individuals involved in trying to tackle child poverty and the recognised wider set of social problems associated with the effects of being born into a low income family. Other comparable countries however, continue to deliver better statistics than the UK, proving that change is possible (CPAG, 2011). Alternative ways of dealing with the causes and effects of child poverty in these current circumstances are urgently needed. This report aims to contribute towards finding these alternatives.

Defining ‘young people’ at 'risk', and what causes them to be at risk?

I have described above some of the social problems associated with poverty and the links between these issues and young people who are defined as ‘at risk’. But when professionals discuss ‘young people at risk’, what do they actually mean? And how does this label affect individuals who may fall into this category? There is a plethora of research on this subject, and for the purposes of this report, I will summarise the most relevant issues for this particular research project. To begin, it is important to outline what is meant by a ‘young person’. Specific age limits are set out in relevant laws or government guidance and these can differ depending upon the specific situation. In the UK there is no single law that defines the age of a child across the UK. In 1991, however, the UK government, as well as other countries such as Portugal and Canada ratified the United Nations Convention on the Rights of the Child, which states that;

“a child means, every human being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier”
In England and Wales the current age of criminal responsibility is 10 years old. In Portugal (including the autonomous region of the Azores Islands) the age of criminal responsibility is 16 years old. In fact in Portugal (including the Azores Islands) Article 19 of the Penal Code as translated into English states “minors under sixteen years old are not subject to formal prosecution”. In Canada the age of criminal responsibility is 12 years old. So although there are some commonalities between the research areas, there are also a broad range of definitions of ‘young person’ in terms of legal responsibility.

So, what is meant by a young person who may be ‘at risk’? What is he or she ‘at risk’ of and why should this be important to us? As McElwee (2007) points out, there is a danger in using these terms as

“One continually hears the terms ‘at risk’, ‘risk’, and ‘risky’ associated with children and youth and their various behaviours but often without much clarity.” And he goes on to note that there are “…several unresolved definitional issues in employing such terminology in relation to children” (McElwee, 2007:6).

The findings of many researchers (e.g. Leather, 2009, Edwards, 2007), argue that specific behaviours, attitudes, or deficiencies observed in young people may (but not always) be initial markers for later problem behaviours. These behaviours may be partly the result of communication and learning difficulties which may or may not have been formally diagnosed, as I will discuss later in this chapter. Research further suggests that the term ‘at risk’, which is often used in the current tense, actually refers to behaviours that can be anticipated in the future, and has different meanings among professions. This is a crucial point to consider as many professionals now work in multi-agency teams within various professional backgrounds and areas of expertise who are all, ostensibly, serving the same groups of young people. Therefore, when one professional deems a young person ‘at risk’ they may be using a different meaning to a fellow professional within the same team. For example:

- **Psychologists, social workers, and counsellors** use the term to refer to individuals who suffer emotional and adjustment problems,
- **Educators** use the term to refer to students who are at risk of dropping out of
mainstream education, those who have not learned the necessary skills to succeed after graduation or finishing school, and those whose progress and current level of education makes their future (school) career problematic,

- **Health professionals** use the term to identify individuals with both physical and psychiatric health problems, and
- **The employment sector** uses the term to refer to individuals who do not have the necessary literacy and numeracy skills to obtain competitive employment and succeed at their jobs.

For the purposes of this report, these various definitions are all highly relevant. They underline that being ‘at risk’ encompasses a very diverse range of factors from health, both mental and physical, to education and communication and what employers look for in young people applying for work. These factors are all inter-related and multi-faceted and the extent to which these factors may or may not be cause/symptoms and/or correlated is outside the scope of this report. I define a young person ‘at risk’ of *all* of these risk factors, because for the purposes of experiential education programmes, it is illogical and impracticable to adopt one or two of these definitions but to disregard the rest. In terms of reducing recidivism, research suggests that an holistic approach is essential in assisting young people at risk. This is because, as I will describe in this report, experiential learning is, by its very nature, integral to an individual’s positive emotional, physical and social development. Henceforth in this report, I use the term 'at risk' to encompass all the factors I mention above.

Young People: risk factors across a number of domains

Risk factors arise from a number of domains, including; family, community, socio-cultural, government policy, and education. Findings highlighted by Tiet & Huizinga (2002) for example, include being a child of parents with mental illness; having a severely criminal father; parental alcoholism; parental loss; institutional upbringing; minority status; and living in urban areas. It has also been documented that certain identified risk factors such as; substance misuse, school exclusion, lack of parental supervision, criminogenic families and socialising with offending peers are highly associated with young offenders developing into 'serious and/or persistent offenders' themselves (Flood-Page et al., 2000; Grimshaw et al., 2011). Several researchers have highlighted that there are a few specific risk factors, including early childhood aggressiveness and association with anti-social peer
groups that appear to be strongly and consistently related to anti-social behaviour and possible future offending in adulthood (Huesman et al., 2002; Rabiner et al., 2005). The reasons for this childhood aggression, may be due to anxieties in effective communication, as many young people at risk, also suffer from learning and understanding difficulties such as Dyslexia or Dyspraxia (Cross, 2004). Therefore, research into risk factors demonstrates that the more risk factors a young person is exposed to, the more likely they are to specifically engage in antisocial and/or offending behaviour (Sprot et al., 2000). Consequently, the term ‘at risk’ can describe a young person’s likelihood of experiencing some form of distress from any number of domains and yet the common theme is the resultant poor outcomes in a variety of life situations such as health, academic achievement, and socio economic status (Leather, 2009, Edwards, 2007).

This research is focussing in particular on young people who have had negative experiences of mainstream education systems and is not concerned with the domain they arise from or the reasons why. Feeling unsupported, disconnected, or even rejected from school are significant risk factors within the educational sector (Coleman, 2007; Cross, 2004; Gerard & Buehler, 2004). These educational risk factors are of particular interest here, as I will explain in more detail in the sections which follow. However, as I explained above, it is not possible to completely isolate a series of risk factors in the hope that addressing these will cause positive change, because the macro environment in which they are situated must also be taken into account. For that reason, this research also considers young people who in addition to the above risk factors, have also experienced domestic violence. This study therefore recognises that it is the combination and accumulation of these risk factor experiences during childhood and adolescence and the subsequent impact they have on young people’s risk of offending or reoffending which matters more than the reason of any particular single risk factor or group of risks.

The short- and long-term outcomes for those at risk can be costly - financially, physically and emotionally - for the individual and for society as a whole, due to the increased demands on public-funded services dealing with young offenders. Increased healthcare demands, social assistance funding, addictions services, and involvement with the youth justice systems are some areas of increased use of public-funded services due to the negative experiences or limited opportunities of youths who are at risk.
Young people and resilience

As I mentioned above, in contrast to these problems, it should also be recognised and celebrated, that not all young people who experience one or many risk factors will go on to offend or develop anti-social behaviours (Little et al., 2004). Indeed, some children may be more resistant to developing offending and/or antisocial behaviour when faced with a combination of risk factors (Carr, 2001; Little et al., 2004). The positive youth development perspective supports the premise that young people with the most troubled histories and from the most disadvantaged of backgrounds can overcome their challenges to experience rewarding personal lives and successful careers (Damon, 2004). This is often referred to as ‘resilience’, which is the quality that enables a young person to thrive in the face of adversity (Damon, 2004; OECD, 2011). But what is ‘resilience’ and how might it be harnessed to help young people at risk?

Resilience has been characterised as one of a cluster of adaptive response patterns that can be identified and learned during childhood and developed over the lifecourse. Persistence, hopefulness, hardiness, goal direction, healthy expectations, success orientation, achievement motivation, educational aspirations, a belief in the future, a sense of participation, a sense of purpose, and a sense of coherence are all terms that are closely associated with resilience (Damon, 2004). But resilience should not be reduced to a set of innate skills that are easily transferable. Goleman (1995) explains that resilience is a complex and multifaceted concept, for example learners may rely on sets of interactions within past and present social and personal contexts (Hoult, 2012) and their developing social capital (DCSF, 2011).

The difficulty in defining resilience stems from a body of literature that covers a variety of risk factors and manifested competences or protective factors across different developmental ages or lifestages as well as domains (Masten & Obradovic, 2006). McElwee (2007:6) concurred; that resilience is described as an outcome that focuses on positive development in people’s lives, covering the emotional, social, physical and material domains (Lee, et. al, 2010). The concept of resiliency may still appear to use a deficit model by assuming that adolescence is fraught with danger and stress, however the perspective that a young person can succeed due to adaptive factors and despite external challenges and barriers may be the early steps in developing the positive youth development perspective (Damon, 2004). Therefore, a person’s ability to successfully handle developmental tasks in the face of adversity suggests resilience is a fundamental
characteristic to either possess or be able to develop (Bottrell, 2009; OECD, 2011). So, by discovering how to develop young people's resilience, further opportunities for strategies to help these vulnerable groups may arise. As I argue in Part Two, resilience can be seen to be one of the many beneficial outcomes from experiential education, and is illustrated in the outcomes from this research (See Chapter Four, Part Two).

**Young people 'at risk' and early school leaving**

Young people who leave school early, for whatever reason, are at greater risk of offending or re-offending. In understanding the factors which may cause a young person to leave school early, we can begin to develop strategies for making their educational experience more likely to encourage them not to (Bamados, 2011). This is important because the more successful a young person's educational experience is, the more likely they are to be later engaged in paid employment. Over the past decade, media have reported concerns by government officials and policy makers about numbers of students leaving school without obtaining a secondary school qualification or a recognised diploma (Ferguson et al., 2005; Satchwell, 2004) and it is these young people who I refer to when I use the term 'early school leavers'. The issue of early school leaving is now seen to be not only an individual or regional problem, but also a serious systemic, social and economic one (Statistics Canada, 2011c; Tilleczek, 2003). Indeed, governments worldwide are involved in trying to address this growing problem (Lane, 2008).

Educational researchers have argued that many risk factors, such as a perceived irrelevant curriculum, negative school climate and negative relationships with teachers and school guidance, personal issues, (un)diagnosed cognitive difficulties, physical or psychological disabilities and lack of supporting equipment, socio-economic factors and family instability can affect early school leaving. (Cross, 2004; Ferguson et al., 2005). Because of this, an holistic approach based on school related and non-school related risk factors must be adopted to understand the early school leaving phenomenon. Interestingly, in research conducted by Satchwell, (2004) and Ferguson et al., (2005), the most common factors voiced by those who did not obtain a secondary school qualification or diploma are school-related rather than non-school related influences. This may indicate an issue with how some young people engage with the educational process. Amongst early school leavers, the most often-cited factors for a negative educational experience and an overriding disaffection with their schooling experience were;
1 a perceived lack of a ‘relevant’ curriculum,
2 a negative experience with a pupil/teacher relationship
3 a lack of adequate counselling, information, advice and guidance available from the school (Satchwell, 2004, Alberta Learning, 2001; Ferguson et al., 2005)

In contrast, Riley and Rustique-Forrester (2002) found that students felt they would have been more positively engaged with their education had teaching and learning accommodated their particular learning needs or styles. It can be surmised, therefore, that early school leavers’ reasons for not being engaged in education are based on their complex needs for a more ‘relevant’ curriculum and one that offers them more differentiated teaching and learning methods.

But what exactly does ‘differentiated learning’ mean? Differentiation is founded on individualising learning in an approach to learning and teaching that centres on the belief that all students differ in their readiness to learn, their interests and their cognitive processes of learning. In order for students to learn through differentiation, educators need to offer multiple teaching and learning strategies through which students can acquire the necessary content and demonstrate their learning to the required standard (Williams, 2002). Hall, (2005), however, points out that even with differentiated learning techniques, success in learning only occurs when students take an active approach to their learning through curriculum negotiation. In negotiating the curriculum, students and teachers collaborate on developing a learning process (within a curriculum) so that it is tailored to meet students’ specific needs in co-planning units, activities and goals. The underlying purpose is to bring about the best possible, most inclusive, learning and educational experiences for any range of learners. In Part Two of this chapter, I explain in detail what different learning needs and styles exist and how these are addressed through experiential education. In Chapter Four, I provide some specific examples of the impact of differentiation upon the learning for the young people who chose to participate in this research.

Young people ‘at risk’ of offending or re-offending are known to leave school at an earlier age than young people not at risk, and they often do so having had a poor personal experience of the education system and with less qualifications and skills. Furthermore, literacy problems seem to be a risk factor for many social difficulties such as
unemployment and criminality (Cross, 2004:70). Indeed, prison systems worldwide contain large proportions of individuals with literacy and/or numeracy difficulties that result from or in, poor communication skills (Prisoners Education Trust, 2009). On leaving school early, many young people will search for employment and research has shown that having a criminal record can create a formidable barrier to employment (Fahey et al. 2006). In the next section, I review the difficulties these young people may face in trying to overcome these multiple challenges.

Young people ‘at risk’ of offending or reoffending and unemployment

Youth unemployment is one of the most pressing economic and social problems confronting young people and the societies they live in and for those young people deemed to be at risk, this is a very serious concern. It is a particular anxiety to those governments whose economy’s labour markets have weakened substantially since 2008, following the near-collapse of worldwide financial markets. The youth joblessness crisis of the early 1980s appears to be repeating itself in 2011, but for somewhat different reasons.

However, the recent economic recession has not been the ‘tipping point’ with respect to unemployment. For some groups, notably young people, unemployment has been rising from as early as the mid-2000s as progress on poverty and average income growth has also slowed from that time, as described above (Brewer, et al., 2009). This means that recession-induced declines in employment are exacerbating a situation that was already suffering a polarisation. For example, not all communities and sections of society experienced the preceding ‘boom’ in employment terms, but all were feeling the effects of the bust, even before the public sector cuts were initiated (Brewer, et al., 2009).

Organisations such as the OECD and the World Bank measure and provide comparative data on unemployment rates worldwide. Recent figures using the World Development Indicators Database (WDD) with the most up-to-date comprehensive breakdown show that although youth unemployment in the UK is by no means the worst globally, it is once again becoming a real and consistent problem. These figures relate to those registered unemployed, however it should be recognised that different countries use different measurement criteria. As of 2005, the rates for unemployed young people aged 15-24 years old, for the three countries covered by this study were: UK 11.6%; Portugal 8.6% and Canada 12.6%. To put these figures into context, the highest rate of any western
country was the Slovak Republic with a rate of 35.2% followed by Poland 35.2%, Italy 27.7%, Greece 29.5% and Spain at 25.5%. (Nationmaster, 2011)

Gender comparative data on unemployment is also available from the countries listed above, which identifies that 10% of the UK figure quoted above, are young females; 19.1% in Portugal and 10.6% in Canada (Nationmaster, 2011). Likewise, in context, the Slovak Republic data shows 28.8%, Poland 39.2%, Italy 27.4%, Greece 34.8% and Spain 23.5%. In comparison with the rates of young males unemployed internationally, again looking at the 2005, comparative figures show that in the UK these contribute 13.4% of the overall unemployment figures, Portugal 13.7% and Canada 14.2%. The Slovak Republic 30.4%, Poland 36.6%, Italy 20.7%, Greece 17.5% and Spain 16.7%. The most recent non-gender comparative figures can be found in a report ‘Youth Unemployment Déjà vu’ by Bell and Blanchflower (2009), which illustrates the following figures for youth unemployment in all the listed countries (with the exception of Canada) based on OECD figures for Quarter 3, 2008: UK 16.7%, Canada n/a, Portugal 17.1%, Slovak Republic 19.4%, Poland 16.1%, Italy 19.5%, Greece 21.3%, Spain 24.2%. In Canada, youth unemployment during the same period was estimated by Statistics Canada at being 13% (Statistics Canada, 2011a).

All three countries in this study were therefore showing an upward trend in youth unemployment. The most recent figures for the UK in April 2011 from the UK DWP, JobcentrePlus, showed that youth unemployment was nearing the 1 million mark, albeit this was slightly down on previous figures and does include those who may be in education. The media have been quick to pick-up on this perceived failure of government policies, e.g. Finch (2011) summed-up in the Guardian:

‘There has been a structural shift in the labour market so employment among under-25s in the past three years has fallen almost 8% while employment for those above retirement age has risen by almost a third. Employers are saying to young jobseekers: “We don't want you, we want your gran.”’ (Finch, J. 2011)

One response to rising youth unemployment has been to return to full-time education (Bell & Blanchflower, 2010; OECD, 2010). The proportion of young people in the UK who are in full-time education increased from 26% in 1993 to 38% in 2007, although this proportion is still well below that of many other countries. Data from the OECD suggests that the proportion of young people who are in school is considerably higher in, for example,
Belgium (60%); Finland (56%); France (61%), Italy (57%); Luxembourg (69%) and Sweden (57%)\(^1\). As I have explained above, young people who are regarded as being at risk are less likely to have the skills to participate in mainstream educational programmes. It is therefore logical to assume that they are also under-represented in English Further Education (FE) programmes, and indeed this has been confirmed (Leitch, 2006). These individuals are potentially applying for a reduced number of employment opportunities, often with less qualifications and skills. They therefore suffer double the disadvantage in trying to compete against other young people who may not be regarded as being at risk, or older individuals with experience.

Perhaps unsurprisingly, young people supervised by Youth Offending Teams (YOTs) in England and Wales are four times more likely to be NEET than those in the general population. Statistics show that 32.9% of 16 and 17 year olds under YOT supervision in 2008/09 were classed as being NEET, compared with 8.3% of the age group overall (Puffett, 2010). In relation to this, a MoJ spokesman said:

"Young people under YOT supervision are some of the most vulnerable in our society and many will come from a disadvantaged background. Therefore a higher proportion will be NEET compared with the entire population of 16- to 17-year-olds". (Children and Young People Now (CYPN), 2011)

In 2009, Rob Allen, director at the International Centre for Prison Studies and former board member of the YJB, said;

"it is a widely held belief in the youth justice sector that getting young people involved with work, training or education can help steer them away from crime. …YOTs should have better relationships with local agencies to help get young people into education or employment. Hopefully YOTs will have a relationship with colleges and local employers willing to take on people who have had some troubles. ...Good YOTs tend to try to develop networks of agencies that provide opportunities for young people." (YJB, 2009a)

Yet, despite this ‘widely held belief’ the evidence presented in this chapter suggests that

\(^1\) Arguably, increased marketization, combined with substantial reductions in government funding for English post-compulsory education is likely to hinder any strategic aspirations to reach these levels (CPU, 2011).
the current strategies are either not working or that the criteria that defines them has been misinterpreted. For example, below is a quote from a young man reflecting on his custodial sentence after experiencing the benefits of an experiential education programme called C-Far:

“Prison doesn’t work. Although it is a punishment, it does not do anything to teach offenders the skills they need or provide the information to become a positive contributing member of the community and to start working on their futures. As a prisoner you are just locked in a cell and faced with violence and segregation, all of which is scary, often forcing people to build mental walls or become more violent simply to survive. This never helped me at all.” CfSJ, 2011a)

In the two years since Rob Allen’s optimistic statement (above), the political landscape has changed dramatically. Unemployment is rising and local councils, training providers, FE colleges and universities are all facing funding cuts and staff reductions. More money was been spent on NEETs in the last ten years than ever, but numbers of NEETs remain at an average of around 1:10 young people (The Young Foundation, 2011) and are as high as 50% in some areas of Northern England (BBC, 2011). A vision of a successful multi-agency approach had hoped to assist YOT’s in meeting the needs and objectives of young people at risk. Unexpectedly, this vision has ended as these services now face the frontline in the current government’s austerity cuts.

I have described above, the issues surrounding unemployment in relation to young people at risk, providing an overview and comparison of the unemployment situation in the Azores Islands, Canada and the UK. Evidently unemployment has an extensive negative impact on the personal and social lives of young people at risk. Research suggests that there are three main reasons why young people offend, or re-offend (Home Office, 2003). These are: material gain, excitement and to relieve boredom. Clearly, if interventions at reducing recidivism are to be successful, then all the risk factors described above which are linked to the needs of these young people need to be addressed. For example, seeking material gain can result from poverty, which can be addressed through paid employment; excitement can be achieved in sport or education rather than through car chases or drug mis-use, and boredom can be relieved through the increased sense of self-worth found in being part of, and contributing to our society. Therefore, because of the unique, personal nature of these risks factors, it is perhaps unsurprising that multi-systemic approaches that
address the holistic needs of young people at risk can be perceived as more effective for some individuals in successfully reducing recidivism (Home Office, 2003). Because of the broad advantages that paid employment provides, it therefore forms a significant aspect of the objectives of intervention strategies.

In order to understand current intervention strategies, it is necessary to briefly explain the different Youth Justice Systems in each of the three locations covered in this research. More specifically, I explain what happens when a young person comes into contact with the justice system in that location. I also describe some of the key features of what each system offers and how it interacts with the young person.

**Youth Justice, an overview of how it works in the Azores Islands**

The Azores Islands are a collection of nine, small, fertile, volcanic islands situated in the centre of the Atlantic Ocean, approximately 1500km from their governing country of mainland Portugal. Their relatively isolated geographical location means that most young offenders (under 18 years old) in the Azores Islands are dealt with through a localized social system2. Young people who have committed crime are supported by using a variety of community-based and focused social services programmes, maintained by voluntary organizations with a strong connection with the church (Roman Catholic Church). Child welfare and child protection appears to be the overall focus of this system. Those young people over 16 years old may be transferred to the adult system if they commit a serious crime. Due to the small size and population of the territory3, literature in relation to crime generally, and especially in relation to youth crime in the Azores Islands is not prevalent.

If a young person commits a crime in the Azores Islands they may be temporarily apprehended by the Police in the first instance, however if they are under 16 years old they are deemed to be under the age of criminal responsibility and therefore are regarded as being within the social services system. Each local area has a panel consisting of social worker, police officer, member of the church and voluntary sector representative. This panel receives funding from the Azorean government to provide intervention and support programmes for young people, and the type of programmes offered is decided locally. The

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2 In Chapter Two, I describe in more detail the context of the youth Diaspora in the Azores. More general contextual information about the Azores can be found in Appendix 4.

3 For example, some islands are sparsely populated and less than 10km in diameter.
term ‘recorded’ is used for those under 16 years old committing a crime, as they cannot be ‘charged’ (DGJP, 2011).

However, in terms of strategies that aim to assist young people at risk, these are limited. In a Roman Catholic newsletter (‘Povocao’) from 2008, an article sought to raise awareness about ‘experiential’ education programmes for young offenders. The church, with funding from the Azores Government, offered a nature programme aimed at protecting one of the native birds (Perola). The article also gave some indication of re-offending rates for young people. It stated (as translated into English from Portuguese):

“this new experiential education model of interactivity, often used in Canada, permits the small group of young people who have involved themselves in the petty crime that often they get themselves into in these islands, to follow an interest and do something useful for themselves and their fellow Azoreans without the need for formal education, in which most of them do not perform well. So far, this has worked well, and the connection with nature helps calm them down and refocus. The church, security police, and government will work together in a social way to ensure this works well. A third of young people who get into trouble in the Azores will normally be in trouble again within a year, we hope to reduce this significantly with the use of this Canadian style programme”. (Martins, 2008)

As explained above, young people who commit serious crimes and are over the age of 16 years, may sometimes be dealt with by the adult courts. The system in mainland Portugal is similar, however the autonomous regions of the Azores Islands and Madeira operate programmes for drug rehabilitation, alcohol awareness, and literacy, on a more localised basis and the autonomous regional governments provide funding. Statistics for young people in the Azores Islands are compiled locally in each of the districts of each of the nine islands, these figures are passed to the Direcção-Geral da Política de Justiça (DGPS) in mainland Portugal which is the department responsible for statistics in relation to crime in all of Portugal including the autonomous islands. The scale of youth offending is unclear because the criteria is subject to interpretations and the subsequent data remains largely unpublished. This is a common problem in comparative research such as that reported here. Most recent statistics in relation to juvenile cases date back to 2004 at which time, during that year, 73 cases of juveniles ‘committing offences’ were brought to the attention of the Azorean authorities across the nine islands. There was no breakdown of ages,
offences, sentences or programmes offered. Sadly, no official figures at all are available with reference to re-offending rates (DGJP, 2011). Generally, the Azores government does not publish figures in relation to offences or re-offending rates in relation to young offenders in the nine islands. This is mainly because culturally these are regarded as ‘social issues’ dealt with locally, until the young person becomes an adult. The figures for adults are also not broken down for the Azores Islands but are incorporated into the overall figures for Portugal. To provide a general overview of the prison population in the Azores: in relation to those convicted of offences in Portugal, (according to the Portuguese Directorate-General of Prison Services) on 15\textsuperscript{th} October 2009, there were 11,573 prisoners and detainees in Portugal's prisons (94.7\% men and 5.3\% women), 95 of whom were youths between 16 and 18 years old (94 boys and one girl). The maximum number of prisoners facilities can accommodate is 11,921. During the year the prison system operated at 95.8\% of capacity. There is a youth prison in Leiria, but elsewhere in the prison system juveniles are sometimes held with adults. Pre-trial detainees are held with convicted criminals (source, US Dept of State, 2011)

**Youth Justice, an overview of how it works in Canada**

In Canada, statistics of crime committed by young people are updated and published by Statistics Canada, and these tend to be comprehensive in nature but are unfortunately often four/five years out of date. Youth correctional services across Canada are the responsibility of the provincial/territorial governments but are subject to the provisions in the Youth Criminal Justice Act (YCJA). The YCJA was developed in 1999 and enacted into law on April 1, 2003 as part of the new strategy for youth justice put forth by Canada’s Department of Justice. This new strategy was used to try and provide a more inclusive framework, which focuses on public awareness, crime prevention, education, child welfare, health, family and the community. This strategy is reflected in the YCJA with its concentration on integrating all areas of young peoples’ lives including their mental health, education and welfare, while placing emphasis on rehabilitation and reintegration as well as the long-term protection of the public (Tustin and Lutes, 2006).

A central component of the YCJA, is the mandate that the youth justice system ‘reserve its most serious intervention for the most serious crimes’. Essentially, the YCJA is an attempt to find “[a] balance on youth justice issues” (Bala et al., 2003), by including provisions that would ensure that the most serious offenders serve longer sentences, while youths who
have committed less serious offences are diverted from youth courts and custodial facilities to community correctional services. The introduction of the YCJA represented a significant change in the way young persons were processed through the Canadian criminal justice system (Tustin and Lutes, 2006).

The most recent figures from Statistics Canada for 12-17 year olds, covers the period of 2006. For the purposes of this report, I summarise the most relevant facts as follows: in 2006, almost 180,000 young people were implicated in a violation of the Criminal Code (excluding traffic offences). The youth crime rate in 2006 was up 3% over the previous year, at 6,885 per 100,000, but remained 6% lower than the rate a decade earlier and 25% below the 1991 peak. In 2006, about 6 in 10 young people, implicated in an offence, did not face charges, but were instead handled outside the formal justice system. In summary then, the use of charges against young people defined as being accused of a crime, declined markedly following the introduction of the Youth Criminal Justice Act (YCJA) in 2003 (Taylor-Butts and Bresson, 2006). This could be argued to be at least partly due to the more holistic, humanistic approach held by the Canadian authorities, which attempts to help young people through means other than conventional criminal justice systems.

Since the introduction of the YCJA, the proportion of accused young people who were cleared by means other than a charge increased for virtually all offences, particularly for young people accused of possession of stolen goods, bail violations, and fraud. Nevertheless, police charges continued to be the norm for offences associated with the most severe penalties, while offences carrying less serious penalties remained among those least likely to result in charges. The violent crime rate among young people in Canada rose 12% over the last decade. Increases in assault rates (the most prevalent type of violent offence for which young people were apprehended) accounted for much of this increase. About 5% of all Criminal Code violations committed by young people involved a weapon. When a weapon was present in a crime, it was most commonly a knife. Crime rates for ‘other’ Criminal Code offences such as ‘mischief’ and ‘disturbing the peace’ rose between 1997 and 2006, while declines in rates for offences such as ‘theft’ and ‘break and enter’ have contributed to the overall drop in property crime rates among young people during this 10-year period (Taylor-Butts and Bresson, 2006).

Young people apprehended for drug crimes in Canada were mostly involved in Cannabis-related offences (84%) and, in 2006, the drug-related offence rate for youth had nearly
doubled from 1997. In 2006, about 1 in 10 youth crimes occurred on school property, with assaults being the most prevalent offence (27%), followed by drug-offences (18%). Weapons were present in about 7% of school crimes; less than 1% of all school crimes involved firearms. Disappointingly, the findings also report that 43% of youth found guilty of an offence will re-offend within one year (Taylor-Butts and Bresson, 2006).

In Canada, a variety of interventions and programmes are available through the YCJA framework which compared to the previous system has added a number of community-based sentences that provide youth court judges with more options for responding to youth offending. A number of provinces make use of programmes offered through other agencies, such as the John Howard Society, to work with high risk youth (website http://www.johnhoward.ca). ‘Experiential education programmes’ (described in full in Part Two) are an option open to the courts, however they would have to be offered through one of the organizations providing services. The majority of organizations do not explicitly define their programmes using the term ‘experiential education’, even though (as will be explained below), that is what they are (Boys and Girls Clubs of Canada, 2008). This therefore limits the possible options available for the court judges.

The Canadian Intensive Support and Supervision Programme (ISSP) is a sentence that is similar to England’s probation service (explained below), but provides more support to the young person as well as closer monitoring (Sutherland et al., 2007). However, there are regional variations: five provinces and territories have opted to make use of the ISSP as a sentence that can be imposed by a judge (British Columbia, Alberta, Quebec, Newfoundland and Labrador, and the Yukon), other provinces such as Nova Scotia have opted to make the programme available to candidates referred by corrections or probation. In addition, there are many residential and attendance programmes offered across Canada that are specifically targeted toward chronic and persistent youth offenders. Camp Trapping in British Columbia is one such residential programme targeted at young male offenders, with referrals to the programme made through British Columbia’s Youth and Probation Services (BCYPS); youth are required to attend as a condition of their probation and the programme offers an environmental education outdoor experience in a very rural location. The PASS (Progressive Accountability through Supervision and Support) programme in Ontario similarly works with youth who are deemed medium to high risk to re-offend, offering services that include anger-management and victim awareness courses, as well as individual, family, and school support (DeGusti et al, 2009).
The numerous programmes, identified in various jurisdictions across Canada, are organised by a typology of three models. These are described in full in Appendix 1.

**Youth Justice, an overview of how it works in England**

In England, the YJB is managed by the Ministry of Justice (MoJ)\(^4\). Research, reports and statistics with reference to crimes committed by young people are updated and published by the Ministry of Justice, and tend to be comprehensive in nature. Tackling youth offending has been at the heart of the criminal justice reforms that have taken place during the past several decades. It developed into a key priority for the Ministry of Justice because youth crime was voiced as a serious concern for many communities across the country and arguably this provided a platform to gain electoral advantage. For instance, surveys regularly confirmed that approximately 70% of all crimes were committed by a small number of young men - almost all of whom began offending in their teens (Herzog, 2010; Mediawatch, 2011). This is a recurring fact, as highlighted many years ago in a statement from the UK Government:

> ‘...all the available evidence suggests that juvenile offenders who can be diverted from the criminal justice system at an early stage in their offending are less likely to re-offend than those who become involved in judicial proceedings.’ (Home Office, 1980: par 3.8)

In fact, this concept is well recognised in part of pan-European legislation with recommendations from the Committee of Ministers of the Council of Europe Recommendation no R [87] 20, holding that Member States should:

> ‘pursue the development of measures for diversion from the juvenile court and for interventions designed to promote the social integration of young people.’

So, far from the perception that young people may ‘grow out’ of their deviant behaviours and should perhaps be disciplined and then provided with extra support and allowed to mature into adulthood, evidence supports the above statement that there is a strong link between young people being involved in crime and then continuing their criminal behaviour into adulthood (Home Office, 2009). This long-established fact has wide

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\(^4\)Due to government austerity cuts, the YJB was under threat of being merged with the MoJ, however this proposal has now been abandoned (BBC, 2011a).
recognition and motivates the aspirations of Member States that their young offenders should be diverted away from the criminal justice system. However, disappointingly, the numbers of effective strategies provided by authorities in the UK (and Portugal), that seek to break this cycle and therefore reduce the likelihood of these young people re-offending remain alarmingly sparse.

Details of the English Justice System in relation to young offenders is detailed in Appendix 2. Currently, the Crime and Disorder Act (1998) lies at the heart of the English youth justice system. Yet, to fully appreciate the radical changes brought about by the Act, I need to first describe events from two years earlier. In 1996, the Audit Commission published a report (Audit Commission, 1996), 'Misspent Youth', which presented a critical review of the youth justice system. One of the main criticisms was the system was too costly, inefficient and ineffective. In May 1997, there was a change of government and New Labour wasted no time in publishing a White Paper; ‘No More Excuses: a New Approach to Tackling Crime’. The title gives away the tone of the changes that the government wanted to make: they wanted an end to what they described as an ‘excuses culture’ and practitioners working with young ‘offenders’ could no longer blame criminal behaviour on the individuals’ disadvantaged background. The White Paper recommended a more hard-hitting approach to young offenders and indeed, within a year of coming into power, the recommendations were largely embodied when the Crime and Disorder Act (1998) became law. Many would agree that the Act marked the start of a new youth justice system in England and also in Wales. Certainly, a number of major changes took place then and more have since followed (e.g. Audit Commission, 2004; 2009).

In summary, the overhaul of the youth justice system which has taken place since 1998, has set out to tackle the issues in three ways: prevent youngsters from falling into crime; provide the criminal justice system with more sentencing choices; focus sentencing on preventing repeat offending (Randall, 2011). Pre-crime prevention aims to identify those young people who are at risk of offending and to try to prevent them from entering the youth justice system in the first place. Local Authority Youth Justice Services across the country do this by their involvement in Preventative Services. There are three main types of pre-crime prevention: a) identifying children and young people who are at risk of offending and provide appropriate support; b) setting up ‘diversionary programmes’ by getting young people involved in positive recreational activities, such as sport or dance, and c) by tackling issues that are known to contribute to offending behaviour. Some
examples of the preventive work that local authority Youth Justice Services contribute to, working in partnership with local and national agencies are tackling violent youth-on-youth crime; reducing criminal damage through anti-graffiti initiatives; school attendance and anti-truancy initiatives such as ‘Safer School Partnerships’ (keeping children in school, off the streets and away from a life of crime); licensing enforcement to reduce under-age drinking; educating young people about the dangers of alcohol; drugs and other misused substances; parenting programmes - supporting the families of young people at risk of offending (Herzog, 2010; Woods, 2010).

Although appearing very different in their approach, there are, however, areas which could be interpreted as comparable between the system in England with the systems in place in the Azores Islands and Canada, but paradoxically also add to the difficulties in comparability. For example, in all three locations there is a framework in place which permits decisions to be made on a localized basis – thereby re-defining what is and is not labeled a ‘criminal offence’. The system in the Azores Islands provides that the young person is not regarded as a criminal, irrespective of the type of activity they may have been involved in, until they are over 16 years old. Even then, up until 18 years old, they still use a ‘child welfare, child protection’ model which is a social process rather than a criminal process.

All three countries offer the opportunity for the use of interventions as a way of preventing and directing young people away from becoming involved in crime and it is clear that in all three countries interventions are used on an ongoing basis. However, I argue that there is a lack of clarity about what interventions should be used and why or when they should be used. In addition, there is often little or no definition or research evidence attached to these particular interventions, which in turn means there is often no guidance on what intervention should or could be used, in any given circumstance. The summaries of each system outlined above show that in all countries there are experiential education opportunities being offered; in Canada and England the ISSP (point nine in Appendix 1) could be regarded as being experientially educational. In the Azores there is evidence of the use of experiential education based on knowledge of it being used successfully in Canada, however within the available literature, overall there is little direct mention of experiential education ‘defined’ per se as an intervention – especially linked specifically to

5 This is unless the young person has committed a serious crime involving violence, when the entire system is predominantly social in nature.
sentencing by the court authorities in the countries mentioned. This is a shortfall that urgently needs to be addressed as I argue in the conclusion of this report.

In England and Wales, 68.6% of all children aged under 18, discharged from prison in 2004 were re-convicted within 1 year (Civitas, 2004). More recent figures from the National Audit Office (NAO) confirm that six years since that report, recidivism statistics have improved but are still higher than other comparable countries at 56% for those young people who receive court sentences and 37% for those with less serious offences (NAO, 2010). In Canada, the rates of re-offending are approx 43%. Even bearing in mind the difficulties in comparability, these are a lamentable set of re-offending figures, and clearly show the demand for governments to invest in more diverse and alternative opportunities for young offenders. The effects of preventing re-offending are two-fold. Not only does it mean further offences are not committed and increasingly strict sanctions, including (costly) incarceration, are avoided, but it also offers positive life chances and successful pathways to adulthood that do not involve crime and which allows for active participation in mainstream society. We know that education and training can help young people develop skills for life and work, and help prevent them from falling into cycles of crime. As I have described above, Governments support this view (e.g. YJB, 2009b). We also know that many young people in the youth justice system face multiple disadvantages, have complex needs and often face overwhelming barriers which may prevent them from engaging in mainstream education, training and employment. What is missing, therefore, is the opportunity to participate in organised education, training and employment which provides a safe, transitional space from the justice system and into mainstream society.

The Youth Crime Action Plan published in July 2008, set out the UK Government's plans to improve education for young people in the Youth Justice System. This legislation aims to place local authorities at the forefront of decision making and provision which is outlined in the Apprenticeships, Skills, Children and Learning Bill and is now law (DCSF, 2009). This promises to be an excellent opportunity, however, it remains to be seen what methods will be used to give effect to this legislation and what opportunities will actually arise for young offenders. Local authorities require evidence-based research about the different options which can have a genuinely positive impact on the lives of young people at risk and offer them the means and motivation to avoid re-offending. Experiential educational programmes could help to fill this void.
But how do I define ‘experiential education’? And what does it mean in practical terms for young people at risk? In Part Two that follows, I describe what ‘experiential education’ means in the context of youth justice systems, and summarise its history and development. I also provide some examples of how it has - and is - being utilised in different environments and circumstances to help young people at risk. Three further specific examples of experiential learning programmes in the UK are included in Appendix 3.
Chapter One: Part Two

In this part of the literature review, I provide an overview of the difference between ‘experiential learning’ and ‘experiential education’; its development from educational theory and some previous interventions that have been tried with young people at risk. Within this and their wider, social contexts, I consider the extent to which these can be regarded as ‘success’ and therefore the potential within experiential educational programmes in reducing or preventing offending. I begin with some definitions:

Working Definitions and Best Practices for Experiential Learning and Experiential Education

Experiential learning can be divided into two different types of learning: ‘learning by yourself’ and ‘experiential education’. The following description by Smith (2003) helps to define the differences. ‘Experiential learning by yourself’ might be called: “nature’s way of learning…It is education that occurs as a direct participation in the events of life” (Houle, 1980:221, quoted in Smith 2003). This may include learning that comes about through reflections on our everyday experiences. Experiential learning by yourself is intrinsically ‘informal’ education and includes learning that is organised by learners in groups or individually, in all types of educational environments.

By contrast, ‘experiential education’ is defined as learning that is structured through programmes delivered by others (Smith, 2003). Experiential education, involves the principles of experiential learning being used to design more formal, experiential education programmes. Here, emphasis is placed on the nature of participants’ subjective experiences which often also requires preparatory and reflective exercises. An experiential educator’s role is to organise and facilitate direct experiences of phenomenon under the assumption that this will lead to genuine (meaningful and long lasting) learning for everyone. They may be described as a ‘reflective agent’ offering a low-tension environment where the opportunities for learning are significant (Pollard, 1996). The foundation of the concept of experiential education is based on Humanistic psychology with principles that support the ideology of individualism and Maslow’s theory of the ‘hierarchy of needs’ (Finger & Asun, 2001). Arguably, this first emerged in children’s education with the beginnings of the Progressivism movement, when educationalists such
as Pestalozzi and Froebel in the 18th and 19th centuries controversially claimed that learning should be student-centred with learners’ experience highly valued. As far back as 1915, there are also parallels with writings by John Dewey (Tennant, 1997), who wrote that there is an “intimate and necessary relation between the processes of actual experience and education” (Dewey, 1963:20). As Smith (Op cit) explains, experiential education can be contrasted against didactic pedagogical approaches in which the teacher’s role is to give information/knowledge to the student; to prescribe study/learning exercises which have the goal of information/knowledge transmission; the focus is more equally balanced and holistic; based upon an individual’s personal development.

The Association for Experiential Education (USA), The National Society for Internships and Experiential Education (USA) and the International Federation for Experiential Education (EU) all contribute to the more formal definition and explanation as to what experiential education is and the principles involved:

“Experiential education is both a philosophy of teaching and teaching methods in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, and clarify values”.

(AEE, 2011)

As a framework, experiential education is defined as: “a process through which a learner constructs knowledge, skill, and value from direct experiences” (Luckmann, 1996:6). But how might this be enacted on a practical level? Well, it is widely accepted that experiential education refers to learning activities that engage the learner directly in the phenomena being studied. Indeed, experiential education may be manifested in many different forms, e.g. internships, field experiences, co-operative education, practical, cross-cultural and international learning, community and public service, and other forms of carefully monitored, experience-based learning. But experiential education is also linked to wider theories of learning styles and explains why terms like ‘individualisation’ and ‘differentiation’ have become familiar to many educators. Before continuing, it is necessary to briefly explain the development of this concept and how it fits into experiential educational programmes.

**Differentiation and the historical development of ‘learning styles’**

Harari (2005) argues that teaching and learning is so much more than simply applying
knowledge and using appropriate learning materials and methods. What is needed is a better understanding of what helps us succeed in our own learning. Furthermore, Mortiboys (2005) convincingly argues that effective learning encapsulates aspects of differentiation, individualisation and personalisation and develops these further. For instance, the teacher needs to appeal, support and be receptive to, different learners’ motivations, experiences and levels of autonomy. Equally, as I explained in Part One, learners’ understanding and response to a teaching and learning approach is important (Heimlich and Norland, 2002). Educational success stories commonly lie in encouraging innate strengths and providing insights into overcoming potential weaknesses, through knowledge and awareness of learners’ own emotional characteristics (Gardner, 2005; Harari, 2005). Paying attention to this emotional dimension within the learning-teaching exchange has been termed ‘authenticity’ (Frego, 2006), ‘cultural relevance’ (Ladson-Billings, 1995), ‘connectivity’ (Palmer, 1999) or ‘emotional intelligence’ (Gardner, 2005).

Gardner (2005) famously and controversially argued that the traditional definition of intelligence was too narrow. His theory of ‘Multiple Intelligences’ could therefore enable a more accurate assessment of a range of strengths and abilities. His theory has developed substantially over the past few decades into something that educators have utilised around the world. Controversial primarily because of its reductionist approach, Gardner argued that by homing-in on the particular needs of an individual’s particular ‘intelligence’, communication, expression and understanding are enhanced. Below is a simplified list that presents Gardner’s categories of individuals’ abilities into eight different aspects of ‘intelligences’:

1. **Linguistic Intelligence**: those who focus on writing, reading, listening and speaking.
2. **Logical-Mathematic Intelligence**: solving logical puzzles, deriving proofs, performing calculations
3. **Spatial Intelligence**: determining one's orientation in space with a focus on movement or place.
4. **Musical Intelligence**: involved in playing, composing, singing and conducting.
5. **Bodily-Kinaesthetic Intelligence**: bodily movement in performing skilful and purposeful movements (dancers, athletes and surgeons)
6. **Intra-personal Intelligence**: self-understanding - having insight into one's own thoughts, actions and emotions.
7. *Inter-personal functioning*: involved in understanding of others and relations to others. Being high in social skills.

8. *Naturalistic Intelligence* (proposed by Gardner in 1999) involves the ability to understand and work effectively in the natural world.

(adapted from Gardner, 2005: 11)

Gardner’s theory is valid here because it encapsulates the importance of understanding the complexities involved in the relationships with learners, colleagues and managers but also within our personal and social lives. Although the arguments associated for and against Gardner’s theory are beyond the scope of this report (e.g. see Eccelstone, 2007), research into affective learning confirms the use of multi-systemic teaching strategies which address many needs are more successful than those which focus on one or two alone (Edgington, 2008). It could be argued that those young people who may have what Gardner described as ‘Spatial’, ‘Bodily-Kinaesthetic, and/or ‘Naturalistic’ Intelligence(s) are not having their needs addressed through mainstream schools or even in their everyday lives. Opportunities for development communication which is neither verbal nor written are often lacking in mainstream educational environments. But, as I described in Part One of this chapter, because of the multiple difficulties that contribute to putting young people at risk, it is crucial that these types of different learning styles are addressed (Cross, 2004). The broad appeal of experiential education can therefore be interpreted as a way of tapping into these different learning styles, in an attempt to enhance communication and understanding and bring new meanings to the lives of young people, particularly those who are at risk.

In this sense, experiential education serves as an umbrella term for linking diverse practices from a variety of disciplines into a coherent whole. This is because in experiential education, the teacher and student roles evolve into a collaborative mind set with the student having an active voice in learning and meeting the specific learning objectives of the program of study (NSEE, 2011). Likewise, the teacher is also learning and can skilfully reflect to facilitate flexibility in the structure that can enhance the learning experience for everyone involved.

A level of emotional self-awareness is essential for developing effective relationships (Cross, 2004). Just by being aware of our own unique strengths and weaknesses, we promote the potential for more effective learning. Gardner’s ‘Intra-‘ and ‘Inter-personal’
skills listed above, Salovey and Mayer (1990) term ‘emotional intelligence’ and other similar terms such as ‘emotional efficacy’ or ‘emotional literacy’ (Hall, 2008) all serve to highlight to educators the importance of trying to better understand the emotional traits essential to successful teaching and learning (Edgington, 2007). Indeed, the wide appeal of this concept has led to thousands of different self-reporting questionnaires that are often used by employers in recruitment application processes (Mavroveli et al 2007). The principles of experiential education (summarised below) are closely linked to Gardner’s aspects of emotional intelligence in terms of the emotional elements of learning and the interactional relationships between teacher and learner:

- Experiential learning occurs when carefully chosen experiences are supported by personal reflection, critical analysis and synthesis.
- Experiences are structured to require the learner to take initiative, make decisions and be accountable for results.
- Throughout the experiential learning process, the learner is actively engaged in posing questions, investigating, experimenting, being curious, and solving problems, assuming responsibility, being creative and constructing meanings.
- Learners are engaged intellectually, emotionally, socially, soulfully and or physically. This involvement produces a perception that the learning task is authentic.
- The results of the learning are personal and form the basis for future experience and learning. Relationships are developed and nurtured: learner to self, learner to others and learner to the world at large.
- The educator and learner may experience success, failure, adventure, risk-taking and uncertainty, because the outcomes of the experience cannot totally be predicted.
- Opportunities are nurtured for learners and educators to explore and examine their own values.
- The educator’s primary roles include setting suitable experiences, posing problems, setting boundaries, supporting learners, insuring physical and emotional safety, and facilitating the learning process.
- The educator recognizes and encourages spontaneous opportunities for learning.
- Educators strive to be aware of their biases, judgements and pre-conceptions, and how these may influence the learner.
- The design of the learning experience includes the possibility to learn from natural consequences, mistakes and successes.
Another viable and universal definition of experiential learning involving the natural environment, (such as beekeeping) is as follows:

“A systematic experiential group intervention that occurs in a natural setting and employs therapeutic techniques and processes within the context of activities and experiences that contain elements of real or perceived risk (i.e., physical, social and emotional) to facilitate the improvements in the psychological and behavioural functioning of the participant.” (Weston & Tinsley, 1999: 31)

With these definitions in mind, it is important to give some deeper understanding of what experiential education programmes involve, as without this, these definitions can appear to be somewhat abstract. For example, outdoor experiential education programmes use an outdoor setting to provide challenges, and encourage hands-on learning through experience with the aim of facilitating personal, educational and social development (Martin, 2001). But there are, of course, other types of programmes that offer opportunities for practical skill-building and self-expression through participation in various arts disciplines including; music, dance, drama, and visual arts (Heath & Roach, 1999; Daykin et al., 2012). However, without the planned and structured learning outcomes associated with experiential education programmes, these activities arguably cannot be described as entirely ‘educational’ as they lack this important characteristic.

Experiential education is an inter-disciplinary field that includes outdoor/adventure education and encompasses environmental activity programmes mainly concerned with how a learning concept can be represented through activity to best engage participants. Therefore the activities in question become carefully structured experiences through which learning goals may be achieved (Carver, 1996). The learning that results is derived by the participants themselves from interaction with each other and with the experience in question. Leaders do not stand at the front and tell participants what they should learn; rather the participants learn contemporaneously with their participation in the programme and discuss, retrospectively, with each other what they learned through their shared experiences and reflections. One example of this may be through an experiential educational programme in Gloucestershire (REACH), which taught young people the traditional skills of dry-stone walling. With the co-operation of the Probation Service, the
young people successfully learnt their skills through a combination of practice, ‘trial and error’ and watching each other and their facilitator. The objective of the day was to achieve a section of the repair to the wall on which they had all been working (Reachweb.org, 2011).

In practice then, experiential education can be characterised in the following way:

‘Experiential education promotes the development of student agency, belonging and competence by introducing resources and behaviours that allow for active learning, drawing on student experience, authenticity, and connecting lessons to the future in a learning environment that usually values caring, compassion, responsibility, accountability, individuality, creativity and critical thinking’. (Carver 1996:11)

Theoretical literature on outdoor education describes a model of learning that has striking resemblance to Mezirow’s (1991) framework for transformative learning. This model advocates for providing: “a series of challenges where participants may push their comfort zones socially, physically, creatively, emotionally and spiritually” (Martin et al., 2002:18) and this is central to the purpose of experiential education as a means of challenging young people in a way that main stream education provision often cannot. The purpose and reason for embedding these challenges into outdoor experiential education programs is to help participants:

“…recognise and understand their own particular weaknesses, strengths and resources and thus find the wherewithal to master the difficult and the unfamiliar in other environments.” (Hattie et al., 1997:45)

The evidence of positive personal and social development cited by research into experiential education include: increased self-esteem, development of open-mindedness, development of a sense of empathy, decrease in hopelessness, reports of self-understanding, a feeling of belonging, and a positive attitude towards others. Based on this research, this report focuses on youth perceptions of their personal and social development resulting from their participation in experiential education programmes. It also focuses on elements of experiential education programmes the youth themselves identify as being important for their development. I explain this fully in my findings and observations presented in Chapters Three and Four.
It is also suggested by outdoor education theorists that the experience of being away from home and having to rely on one's own personal resources, skills and to some extent the skills of others in the group for progress can change a person's disposition and attitude quite substantially (Moote & Wodearski, 1997; Skogen & Wichstrom, 1996 as cited in Green et. al, 2000). In this environment, outdoor experiences are designed in a cycle of activity, followed by reflection, with incremental increases in the degree of challenges being posed. Within this cycle, there is an explicit emphasis on processing experiences, usually in the form of reflection, debrief, and discussion. The goal of processing is to help participants internalise the meaning of their experience and understand its importance in the context of their daily lives (McKenzie, 2000).

There are several models of processing including the ‘Outward Bound Plus’ model in which the instructor becomes a discussion leader and facilitator and the focus is on recognising similarities between the activities and the participants’ lives (e.g. Outward Bound, 2007). The ‘Metaphoric’ model of outdoor education involves designing experiences so that activities become experiential metaphors for challenges faced by participants in their lives (Bacon, 1987 as cited in McKenzie, 2000). The aforementioned examples of experiential learning follow roughly the same steps as Mezirow’s (2000) model of transformative learning and demonstrate examples of the theory of experiential education being put into practice effectively. Although programme content varies from programme to programme, outdoor experiential education programmes generally include both participant self-development and social development such as team-building, leadership, and communication as explicit aims and outcomes of the programme (Martin, 2001; Martin et al., 2002).

However, the ability to successfully deliver experiential education that is linked to, or uses the natural environment as part of the learning process remains a significant challenge to both researchers and practitioners alike (Berman & Davis-Berman, 2001; Russell, 2001). To illustrate the point, there has been a tendency for outdoor facilitators to arbitrarily apply terms such as “adventure therapy” or relate and associate their activities to a wide range of outdoor programmes using the “Outward Bound” label which often does not accurately describe the activities actually being undertaken. The ability to operate as a truly experiential education provider has been dependent on the capacity to differentiate natural environment-related activities from programmes that are solely adventure - or recreational
- based (Itin, 2001). One way of doing so is to identify characteristics of natural environment programmes that are central to the purpose of delivering experiential education.

For Bernstein (1972) these characteristics include a physical environment with small groups of people with limited artificial or social stimuli. Furthermore, it is likely to be both challenging, risky and unfamiliar to the young people involved (Kimball & Bacon, 1993). It is not, therefore, another urban environment in which they would, after a short period, feel comfortable in, by virtue of their previous experience of living in such an environment. Further, it could be added that the environment should be able to offer situations or experiences that induce fear and/or stress (Weston & Tinsley, 1999). As I explained above, one of the reasons why young people offend is for excitement. Indeed, young people reflecting on criminal behaviour frequently comment on their need for an ‘adrenaline rush’ as a prime motivator for stealing or drug misuse (e.g. Home Office, 2003). An experiential-based learning pedagogy, in the context of a physical environmental experience often provides a new kind of danger which address this need for excitement; one that is delivered by the natural world. Indeed, this is a crucial feature of genuine experiential education, which fosters personal growth (Gass, 1993; Long, 2001). Elements of perceived risk are controlled and delivered to young people in a measured way, so as not to pose unnecessary risks that could in fact have adverse consequences to those on the programme (Pollard, 1996).

Experiential Education – Emotional responsiveness and development through outdoor experiences

Those upholding the bio-medical model of educational psychology would argue that it is the physical aspects of being outside which brings the benefits of experiential education to the learner. For example, through the sun’s rays the body produces Vitamin D, which helps the body to heal through absorbing nutrients. Daylight is also linked to the natural chemical melatonin that helps to create a positive mental state. Furthermore, being physically active and being in a new and perhaps ‘risky’ environment, encourages the body to produce endorphins, which can produce a feeling of well-being; adrenalin (which the body converts into energy during exercise) is a positive way for the body to release stress and anxiety. As I have described above, research confirms that for learning to be effective it should take
place in a relaxed atmosphere of mutual respect. So the physical impact of experiential learning explained above is embedded within the emotional context in which it occurs. Therefore, creating positive emotional reactions through outdoor experiences can provide important stimuli for learning more about a place or an environment and addressing multidimensional aspects of an individual’s learning needs. When these stimuli are properly harnessed, they can be extremely effective for creating learning situations which affect and precede a growth, both intellectually and personally (Kellert, 2002).

Based on this, there is a concept of ‘affective learning’; learning through the effects of an emotional experience, which now needs to be examined. ‘Affective learning’ covers two main concepts; first, the notion of an emotion or feeling being attached to an object or place and secondly, the notion that these feelings and emotions can often affect the acquisition of attitudes and values.

“contact with the natural world, especially during childhood, occupies a surprisingly important place in a child’s emotional responsiveness and development”
(Kellert, 2002:126)

Thus, our physical surroundings have a strong influence on our emotions and likewise, our emotional responses to our physical environment clearly affect our attitudes towards other environments, and the activities within them.

Childhood is a vital time in an individual’s developmental journey. Attitudes and preferences are still becoming established during this time, therefore affective learning has a crucial role to play (Cross, 2004; Eccles et al., 2003; Ward-Thompson et al 2008; Korpela 2002). So, if we accept that young people are open and responsive to affective learning, what exactly are the emotional responses from young peoples’ engagement in affective learning programs? The following is a (non-exhaustive) list of typical emotional responses seen in young people undertaking outdoor recreation activities; delight, elation, wonder, enthusiasm, anticipation, fear, risk, excitement, surprise, freedom, alive, uncertainty, danger, anxiety, determination, nervousness, vulnerability, apprehensiveness, courage, happiness, resentment, worry, pride (Kellert, 2002). Experience of these emotions, whilst undertaking outdoor activities can lead to a number of positive gains and outcomes (again not exhaustive); team-working skills, social communication skills, problem solving, friendship, sharing, turn-taking, respect for others, self control, emotional
resilience, negotiation skills, sense of challenge, sense of achievement, personal accomplishment, confidence, pride and pleasure, cooperation skills, perseverance skills, reliability and trust, self discovery, self efficacy, creativity, environmental appreciation, overcoming adversity, overcoming fear (Beard & Wilson, 2002; Kellert, 2002).

These emotions can perhaps be summed-up-in in a quote from a student who participated in the experiential educational programme reported here:

I will look at things differently now after this course, I can do anything and I am not stupid like I have been told all my life (AC3-5)

In an experiential education programme run by a social enterprise ‘Golden’, young people at risk are provided with an opportunity (amongst others) to learn the skills of beekeeping. The emotional and social benefits are clear to the limited numbers of young people participating in the successful programme. This is partly because it takes place within the inner-city borough of Hackney, London where rural skills such as beekeeping are largely unfamiliar to the young people. One young man progressed from volunteering at the project to making a living from his bees (which are situated on the rooftop of an investment bank). He describes his feelings about the way his life has profoundly changed through the project:

“In a way, I felt excluded before, because in the society we live in, there’s not anything to look up to, there’s a lot of negative stuff going on. I’m going to stay positive and focused because there’s a lot of opportunities out there - but it’s only if you’re willing to go out there and get them, no one’s going to hand it to you, you have to go out and grab it, and that’s what I’ve done”

(Bartholomew, 2011)

Critics’ views of affective learning strategies may be founded on the perspective that the intrinsic emotions are fundamentally subjective, organic or intuitive and therefore should be judged as unsuitable to scientific analysis or measurement. However, I argue this is the very reason that makes it essential to research them further, within the context of experiential education. It is tempting to be sceptical about affective learning and claim that it is a term that is used simply for convenience. However, the emotional aspects of
learning and the formation of ‘emotional intelligence’ is a fundamental part of learners’ motivations, as can be seen in the quotes above and those in the following chapters.

**Young People - Technology versus the natural environment**

Young people are brought up and educated in a world that relies heavily on the use of technology. Environmental theorists have suggested that developing new relationships with nature could direct these individuals towards a greater ethical and moral understanding of natural environments as well as an increased feeling of ‘connectedness’ with society. In particular, young people who need a positive focus or influence in their lives can obtain many benefits from being given an experience of the natural world that challenges their established view of how we use and rely upon technology in our everyday lives (Naess, 2008, Vinning, Merrick, & Price, 2008).

Chawla (2007) points out that the most significant influential factor on an individuals’ feeling of ‘connectedness’ with nature was the amount of time people spent engaging in positive outdoor experiences. This notion that affective learning through an outdoor experience, especially at an early age, can be a means of not just education, but also an opportunity for developing a deeper sense of respect and appreciation for society as a whole. This is summed up convincingly by Suzuki and McConnell (2002:208);

> ‘Above all we need to reclaim our faith in ourselves as creatures of the Earth, living in harmony with all other forms of life.’

This concept of putting ourselves, as living organisms, into context with the other forms of life on Earth is a direct challenge to many young peoples’ understanding and prior experience of their lives (as I describe in the findings in Chapter Three, Vignette One). However, in the beginning of the 21st Century, the challenge is to help children promote more balanced, positive relationships with the natural world around them, instead of focusing their attention on items such as computer games and virtual online relationships.

Although technology should not be considered entirely negative, an over-reliance on it, to the point of engaging with a pseudo-natural world via technology will only serve to further disconnect young people from our natural world. Payne (2003) found a current movement
in educational pedagogy that aspired to replicate nature using computer-generated virtual reality, rather than deal with the 'potential risks' (or the associated bureaucracy e.g. risk-assessment documentation) of experiential field trips. Whilst the intentions are clearly well motivated, this does little to provide ‘real life’ experience of something as basic and fundamental to our very existence as the natural world. Importantly, the element of excitement described above that is often sought by young people at risk can be delivered through the natural world, usually cheaper and more effectively than through technology.

For various reasons, many being beyond the focus of this report, parents have in recent years, become afraid and/or less inclined to allow their children to play outside in their front gardens or on the streets. Parents are combating this fear by keeping children indoors and allowing their children to participate in a sedentary lifestyle which may adversely affect aspects of their physical, mental, emotional, and general health (Active Healthy Kids Canada, 2008; Alliance for Childhood, 2004; Diabetes UK, 2011). Thus, with a growing inclination to keep young people inside and away from any actual or perceived threats and dangers from being outside (most of which are associated not with natural risks but those of a social kind) there is ever more pressure and restriction placed on the opportunities for young people to engage positively with the natural environment. Indeed, young people now regularly rely on technology to provide them with both social and relaxation stimuli (e.g. computer games and social networking websites).

As I explained above, the emotional aspects associated with being outdoors, can be linked to the relaxed, informal, reflective atmosphere that is required for affective learning. However, because main-stream education encourages the use of technology that attempts to simulate the natural world, the opportunity for spending time experiencing the natural environment is severely limited, despite the well-documented benefits of doing so set out in the previous section.

**Intervention Strategies for Young People that are ineffective**

Having described above the importance of the emotional and environmental context and strategies involved in learning, it is perhaps disappointing that for most young people, these factors often do not form a regular part of mainstream education. I argue that for
young people at risk, including the emotional and environmental aspects as a fundamental part of their learning is particularly crucial. The reasons for this, I set out below.

The importance of developing social and emotional skills and the learners’ emotional well-being for effective learning are explicit in the UK national targets in government papers such as Every Child Matters (2004) (DCSF, 2007; 2008; 2011) and associated strategies, for example the ‘Emotional Well-being and Mental Health Toolkit’ (Shears and Young, 2006). These strategies have been globally recognized and in America, for example a similar policy document No Child Left Behind was published in 2001 and progressed further in 2007 (Whitehouse News, 2008). Moreover, many emotional terminologies such as reflexivity and self-motivation (Goleman, 1995) are prominent within the National Teaching Standards:

“Have high expectations [of learners] and a commitment to ensuring that they can achieve their full educational potential and establish fair, respectful, trusting, supportive and constructive relationships.”

(Training and Development Agency Standards, 2008:1)

Self-knowledge enables individuals to ‘make sense of the world’ and to develop their mental health for example their self-esteem, as well as intellectual and emotional well-being. But developing this self-knowledge for example through reflexivity, maybe more difficult for young people at risk, for reasons I have explained in the Part One. Indeed, of the total population of young people of school age, an estimated 30-40% experience some kind of mental health problem, with 25% having a diagnosed disorder (Mind, 2008). The risk factors associated with mental health problems and communication and understanding difficulties are interconnected with other risk factors such as unemployment and criminality (Cross, 2004). Understandably therefore, mental health charities are interested in research which suggests that young people with more developed ‘emotional intelligence’ suffer less stress, better anger-management and considerably better physical health and general well-being (Slaski and Bardzil, 2002). Research also suggests that these individuals benefit from reduced incidents of drug abuse and violence and improved attendance rates in the workplace (Carnwell and Baker, 2007). The sense of control that can be obtained through a better self-knowledge can reduce the perception of risk and uncertainty in a rapidly changing society (Lupton, 1998). Therefore in some ways, it could be argued that the development of theories of learning such as Gardner’s ‘Multiple Intelligences’ has been
in response to this increasing need. However, it is unclear to what extent educational programmes, prison rehabilitation or intervention strategies have incorporated these perspectives in methods and strategies that may have benefitted young people at risk (Garside, 2010).

Arguably the most persuasive example of intervention programmes perceived as ‘ineffective’ comes from a report from Margo and Stevens (2008) entitled ‘Make me a criminal – preventing youth crime’. This review of various UK and International intervention programmes argued that strategies like Anti-Social Behaviour Orders, Juvenile Curfews, Probation, and Boot Camps were 'particularly ineffective' at preventing youth crime or instances of reoffending. In contrast to the focus on relaxed, emotionally sympathetic and differentiated learning strategies and environment, many of these models are built on authoritarian, aggressive, ‘no nonsense’, disciplinary models mainly adapted from North American (adult) detention centres. These are places which use fear as a means of motivating a change of behaviour. Perhaps unsurprisingly, research evidence has shown that rather than reduce crime, these kinds of interventions have the reverse effect: many young people involved in these programmes actually have a increased risk of re-offending (Aos et al 2001). In relation to ASBO's the report also criticises this approach positing that these can be seen as a “governmentally orchestrated moral panic” (as cited in Margo and Stevens 2008).

Margo and Stevens (2008) highlight that once an individual is displaying risk factors or has committed an anti-social act, the nature of the intervention needs to be directed at preventing that behaviour from being repeated rather than on empty, meaningless punishments. The point here is that whilst punishment should properly be regarded as an important component of the criminal justice system, effective measures which divert young people from crime and re-offending are equally important. This issue raises wider controversial and philosophical debates that remain largely unresolved (and are outside the scope of this report). Arguably, penal sanctions must always be accompanied by some form of therapeutic or purposeful designed activity that the offender can engage with. These measures should ideally be proven to provide an opportunity that helps individuals create strategies for themselves so they can avoid re-offending. Only then are these interventions argued to be effective at crime prevention as well as merely punishment (Margot and Stevens 2008).
**Intervention Strategies for Young People that are effective**

As well as looking at ineffective interventions as discussed in the previous section, Margot and Stevens (2008) also highlighted those interventions that are regarded as ‘effective’. Although experiential education and experiential learning were not mentioned explicitly in this report, many of the suggestions could be clearly seen as linked to this area of pedagogy. Margot and Stevens (2008) suggested that many of the risk factors associated with family backgrounds can be influenced by providing support to the early development of children and adolescents. The effective approaches that were raised in the report include: prenatal care; home visits to parents of young children; parenting training; provision of good quality children’s toys; additional educational support, programmes to involve parents in their children’s education. Play and sporting activities for young people were at the forefront of Margot and Stevens (2008) recommendations and this supports Home Office findings (Home Office, 2003). The Children’s Plan (DfE, 2007) for instance, recommended that Government invest in a new programme of supervised play areas in disadvantaged urban areas. Running workshops on sporting activities such as boxing, has also been shown to be an effective way of delivering excitement combined with discipline as a way of keeping young people at risk out of trouble with the law (e.g. Laureus, 2012).

The recommendation from Margot and Stevens (2008) were taken forward by the New Labour government and administration funds may have been provided to meet many of the objectives outlined in the report. However since the economic crisis, the new coalition UK government have made significant funding cutbacks. It is therefore unlikely that the recommendations will be taken forward, particularly at a time when SureStart and existing programmes are under threat, or are being closed down completely (Watt, 2011).

**Interpretations and definitions: ‘what works’ and what doesn’t**

Having described intervention strategies which are perceived as effective or ineffective, I must also highlight the difficulties and limitations of these terms. From macro to micro levels, youth crime statistics are now routinely gathered and analysed by various authorities. However how these statistics are interpreted and compared across continents, countries and communities continues to be a subject of debate. The three main reasons for the complexities involved in comparing and analysing these kinds of statistics are as follows:
1. Youth crime is invariably recorded by rates of youth custody, rather than more general incidents. Criteria for custody varies considerably within and between each country’s legal system.

2. Terminologies and language also varies considerably between countries. For example, as I have explained above, the age brackets that defines ‘youth’ or ‘juvenile’.

3. For complex reasons, crime rates themselves vary by country, which in turn impacts upon reported rates of youth offending.

For the above reasons, it would be misleading to argue that there are any ‘global convergent trends’ (Muncie and Goldson, 2006:2) that can be addressed with a single ‘effective’ intervention. Advocating a positivist approach to these complex problems, for instance through using quasi/experimental methods is therefore futile. Instead we need to focus on providing innovative and wide-ranging programmes that attempt to respond to the diverse needs of individuals. With this in mind, Experiential Education interventions are not punitive or disciplinarian. By their very nature, they are holistic and compassionate towards the needs of individuals; they cross boundaries and promote change and critical reflection – not only for the participants, but for the facilitators, the researchers and others. As Muncie argues “comparative work is always done for a purpose” (2006:4) and as I explain in Chapter Two, the ontological approach of this project is closely linked to the objectives of the research itself.

The advantages of a comparative research study such as this, is that rather than ignoring the social contexts of youth offending, it highlights the complexities within. In presenting ‘vignettes’ of each of the different research sites at each of the three different countries, the cultural differences that are inherent to the social contexts of these young people and their behaviours are opened-up to new interpretations. In this way, this experiential educational intervention could be argued to seek to understand the source of the re-offending, rather than simply the symptoms (Muncie and Goldson, 2006:40; Grimshaw et al., 2011). Having said this, I acknowledge that this intervention and approach would not be appropriate for every young person at risk, as individual's needs differ greatly and also may change over time.

The importance of Experiential Education Programmes
In Appendix 3, I describe some specific examples of experiential education programmes which have been run in three different areas of the the UK by completely different types of
organisations but with the commonality of working with young people at risk or youth who have offended. These types of activities have been replicated simply and effectively by small voluntary sector organisations working across the UK and internationally. UK government strategies for preventing youth crime and dealing with young people already involved in offending increasingly emphasise the importance of education and training. This is because, as I have explained, evidence suggests that gaining education – and specifically basic literacy and numeracy skills - can act as a protective factor against further offending and may facilitate entry into the labour market. Yet after school age, often young people at risk continue to be disengaged from education and training and are highlighted in adult education policy strategies as a priority ‘difficult to reach’ group (Leitch, 2006). As a result, these young people’s literacy and numeracy skills are often well below average, therefore having a detrimental impact on their levels of communication and understanding in everyday life (Cross, 2004). The estimated social and economic benefits of engaging this group of learners in education and training include reducing re-offending rates and facilitating entry into the labour market are significant (DfES 2003). Brazier et al, (2010) argue that young people ‘at risk’ continue to be identified as a priority for addressing low skills levels. Developing effective education and training provision for young people involved in youth crime is a critical and significant challenge (Brazier et al, 2010), but also one that will come with far-reaching benefits on micro and macro levels.

Experiential education programmes such as those mentioned above and in Appendix 3, should not be regarded as a ‘soft option’ or that of a romantic view of an entirely open student-centredness (Pollard, 1996). Indeed, one of the reasons for their success is the intrinsic intensive, hard-work and challenging environment (e.g. Life Change UK, 2011) and the (perceived) risks for the young people themselves (Home Office UK, 2003). In conclusion, the significant and positive impact made by many voluntary organisations worldwide, must not be underestimated. Although these relatively low-cost programmes are sometimes perceived as insignificant and ‘under the radar’ (on a national scale), the experiential education opportunities like those highlighted above and in Appendix 3, can dramatically change the lives of young people at risk. These are individuals who may otherwise be unresponsive to traditional mainstream educational opportunities but who can be encouraged to participate and turn their lives in a positive direction. As I have described, this challenge has relevance worldwide. We therefore need to evaluate more closely what works for this particular group of learners - to open up these opportunities to a wider audience.
Literature Review: Conclusions

This is currently a very important time for the UK Youth Justice System. The city riots in England in 2011 have forced up the agenda issues of youth offending, the reasons for it and the possible solutions. The riots graphically showed how there is a real need for interventions for young people at risk. In Manchester, for example, it has been confirmed that 80% of those young people arrested during and after the riots were already known to the police and/or re-offenders, with many living in the most deprived areas of the city (BBC News, 2011b). Indeed, nearly half of all those arrested as a result of the riots had more than five previous criminal convictions (Lewis et al., 2011). There are undoubtedly important lessons that can be learnt from these events that have wider, international relevance. This research is based on an intervention for young people at risk of offending or re-offending. The background of these young people (as I describe in Chapter Three) means that they suffer multiple risk factors from a variety of domains, some of which I have described above and all of which are complex and inter-related. These young people are heavily represented within the Youth Justice Systems in each of the countries where the research was undertaken. The aim of this investigation was whether the intervention of beekeeping experiential education programme was successful in preventing these young people from offending or re-offending.

Church leaders of many different faiths, community leaders, the business community, politicians of different persuasions and young people themselves are calling for interventions as one of the needs that they identify as being a requirement for disaffected youth. Both Ian Duncan Smith MP and Graham Allen MP have both reviewed the need for interventions in England and put forward comprehensive strategies which for various reasons have not been adopted by government. They identify the lack of joined-up thinking or a central adopted strategy as an issue that has arguably reduced effectiveness in this area in England for many years (CfSJ, 2011b). In contrast to this, research into YJS strategies based in the Azores and Canada appear to have an inter-agency approach which is more fully established. For example, as described above, the highly influential Catholic Church in the Azores plays a vital part in helping young offenders. Specific provincial programmes in Canada, such as the PASS programme described in Part One of this chapter, are also closely associated with the communities they serve.

As described above, the UK coalition government has significantly reduced funding over the past 18 months for community groups providing services and interventions across the
country. It could be claimed that this reduction in funding is justified because for many years, there has been a plethora of interventions offered to young people across the country and globally with seemingly little impact on the statistics. Many are small-scale and partly because of this, little or no analysis or research into the effectiveness of many of these interventions has been produced. This is a mistake that cannot afford to be repeated. Funds, time and skilled staff are in ever shorter supply and dissemination of outcomes is costly. Many organizations are unaware of the wider impact or possibilities their strategies carry both nationally and internationally. The Canadian model for example, mirrors the model used in the Azores Islands; the only difference being the Roman Catholic Church is more predominant in the management of the programmes in the Azores. The Canadian province of Quebec in particular has a regulated structure in place whilst the Azores Islands has a more localized approach. Arguably, the Canadian and Azores strategies have an holistic child welfare, protection ideology at their heart. Unfortunately, level of awareness about experiential education programmes are such that in some cases, those providing services are unsure themselves whether they are offering an ‘intervention’ or a ‘general activity’ for young people. Overall, there is a lot to gain from a systematic comparative analysis of the impact of specific interventions based in the Azores, Canada and England, and this is the objective of this research.

Perhaps surprisingly, outside the main-stream educational systems, experiential education is rarely debated in the relevant literature as a defined intervention option. Furthermore, experiential education within the natural world even less so. However, as I have clearly shown in this chapter, there has been, and continues to be, a considerable number of diverse interventions of this type which could either fall into the classification of experiential education or are strategies which could be adapted for use within this sector. It is crucial that if experiential education is to be used to its full potential, interventions using the natural environment such as beekeeping, should clearly promote themselves as an ‘experiential education intervention’. To this end, it is important that they should follow the principles and guidance of at least one of the three main international experiential education lead organizations that I have mentioned above. For the sake of credibility and the efficient use of financial resources, which is even more crucial today than previously, these should be based on and build upon the solid research which shows their effectiveness for reducing offending or re-offending. Only then can experiential educational interventions such as these, begin to make the positive contribution to the lives of young people within the English Youth Justice System and worldwide.
This research study: ‘Beekeeping as a mode of intervention to reduce the risk of offending or re-offending amongst young people in the UK, the Azores and Canada’ has investigated whether beekeeping is an experiential learning opportunity that offers young people an intervention that helps them to develop positively and prevent re-offending.
Chapter Two:
Methodology, Research Design and Rationale
Introduction & Summary of Research Stages

This is a comparative, ethnographic, mixed-methods study of the experiences of young people at risk in an experiential education programme, which involved them in beekeeping (often technically described as ‘apiculture’). The aim of the programme was to reduce the risk of these young people from offending or re-offending. The name of this programme has been changed to protect the identity and confidentiality of those who participated. For the purpose of this research report, I refer to it hereafter as the “Bee Inspired programme”. The same programme content was delivered at each of the three different countries based in The Azores, Canada and England. The research took several stages, these evolved over time, the dates and details of the ten main stages with dates are summarized below and explained in detail in the sections which follow. Each stage of the research process informed the next, for example the Literature Review stage heightened my awareness of the complexities of the youth justice systems and existing interventions in each area where the programmes took place. Also, my experience of observing the Pilot Study Programmes allowed strategies to be used for the main Research observations (explained in detail below).

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<th>Research Stage</th>
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In this chapter, I provide the justification of the research methodology used that informs a coherent, consistent and practical design that fits with the purpose of this research study. I also explain the content and design of the research tools, the nature and context of the population in each location; how it was accessed and sampled. I also address issues such as the role of the researcher, including my assumptions and biases, limitations of the study, ethics, trustworthiness, reliability, validity, authenticity and generalisation. This section, followed by further descriptions later in this report, includes a social, cultural, geographical and ecological description of each of the three international locations where the programme was offered, which includes a description of the Bee Inspired programme and the study participants. Cohen et al (2007) supports the view that methodologies and methods should meet the needs of the research in question. Cohen et al (2000) argue that research design should be determined “by the notion of fitness for purpose” and that there can be: “…no single blueprint. The determining factor should be the purpose of the research” (p.73). And likewise, “[...] the methods and strategies employed in a research programme should always be dictated by the nature of the problem and the kind of data sought” (Verma and Mallick, 1999:74). With this in mind, the methodology of this research is integral to the objectives in seeking the experiences of the young people involved in the Experiential Education intervention. It is the aims and objectives of the research that I now turn to.

**Specific Research Aims**

The aim of this research study is to contribute to a better understanding of whether environmental experiential learning programmes involving beekeeping, can work with Youth Justice Systems to help prevent young people from offending or re-offending. As I have described in the previous chapter, risk factors which are frequently present alongside criminality, such as poor literacy and communication skills, low self-esteem and lack of emotional awareness, are intrinsically linked to these kinds of programmes, which often provide opportunities for personal development in these areas. It is these by-products of experiential learning interventions which contribute to the benefits to individuals and wider society, as I will describe in more detail in Chapter Four of this report.

As I described in Part One of Chapter One, and provide more detail in this chapter, the three international locations where the research took place, have very different ecological, geographical, cultural, social and linguistic features. It is therefore essential that the
research took into account the ways in which different contexts might impact on the outcomes for the young people and what effect this may have had on the research results.

To summarise, the specific aims of this research study were:

1. To evaluate the effectiveness of an experiential learning programme in engaging young people at risk of offending and reducing that risk.

2. To compare the effectiveness of the programme in three different geographical locations with young people from different cultural contexts.

3. To assess the effectiveness of an experiential learning programme involving beekeeping in comparison to other programmes designed to reduce young people’s risk of offending.

This study will help the voluntary organisation offering the ongoing beekeeping programme to understand the views, opinions of the young people participating. It will also take into account the young people's experiences to provide an insight into how changes might be made to provide a service that better meets the needs of young people at risk, by using beekeeping as an intervention. This will also help educate and raise awareness between other institutions and universities who have shown an interest in the research study so that wider benefits may be possible in the future.

**Ethical Considerations (Spring 2009)**

I employed a number of strategies to ensure that all ethical guidelines were met for this study. During the Spring of 2009 and subsequently throughout the research process, I frequently consulted and carefully took into account the suggestions of Miles and Huberman (1994), regarding research ethics. These guidelines include establishing competency boundaries for quality research, obtaining informed consent, minimising harm and risk to participants, establishing honesty, trust and reciprocity, and ensuring privacy, confidentiality and anonymity. I also attended to Flinders’ (2010) ecological considerations that include cultural sensitivity, avoidance of detachment and responsive communication.
In co-operation with the beekeeper instructors from the managing voluntary organisation, I explained the proposed research and the voluntary consent form to the prospective young participants at the three international locations. The participants were informed about this study and were invited to participate. I obtained advanced written and informed consent from the parent/guardians and informed consent from the young people (see Appendix 5). Fortunately, all youth at the locations chose to participate in the study and all of the parents completed consent forms. This meant that I was not placed in a position of having participants that were not part of the research study, which logistically would have been more difficult. All participants confirmed they understood that they could withdraw from the study at any time without penalty or consequences. Lastly, I used pseudonyms for all programme locations and the learning programme name and used codes instead of names for the participants and the beekeeper instructors. This ensures anonymity, privacy and confidentiality.

For reasons of security and non-disclosure of information about participants, no photographs or video recordings of individuals or the group of participants were made during the research study. In England, this issue has been a very sensitive area of debate for the past several years, particularly with reference to children, young people or vulnerable adults. Understandably, individuals are sometimes suspicious of the reasons for recording their behaviour and who might be able to access the recordings. This perceived intrusion into a personal space could be detrimental to the research itself and the findings. For this reason, I decided it was best to omit any use of photography or video recording of individuals at any of the international locations. This may have inadvertently caused additional problems for the research study, for example, it was necessary to take comprehensive notes during the observations, which was time-consuming and could have been interpreted by some participants as intrusive. Some inaccuracies may have occurred either between my observations of what was said, or the typing-up of the vignettes at a later date (or both). It also prevented other researchers from observing the programmes content in the future, which may have potentially added an opportunity for further layers of interpretations to the data. However, as the participants were able themselves to read-through and give feedback to the written material, they were able to confirm the accuracy of the records. This occurred after the observations, when the young people were encouraged to read the comments that they themselves had spoken (but for reasons of confidentiality and sensitivity, not that of others in their group). During the focus group sessions, their comments were written down instantaneously on a flip-chart. As Denzin
(1989) has argued, validity in research is implicit when the participants themselves recognize the authenticity of its outcomes (Denzin, 1989). This is particularly relevant for groups such as those discussed here, who may be excluded, vulnerable or at risk and who are consequently often not heard (Stevenson et al., 2010).

At all times participants had access to my contact details, as well as those of one of the partner institutions should they wish any updates on my progress, or should they have any questions or concerns about the research being undertaken. The final research findings will be made available to all involved. Any written materials, for example my journal notes of observations and the draft and typed notes from the focus-groups, are kept physically locked in a secure cabinet, and/or in a password-protected virtual folder on a secure computer. These notes are kept confidential at all times and will be destroyed in a secure manner when appropriate.

**Researcher Position**

Patton (2002) outlines the kind of information that is required within a research report to establish the credibility of the researcher, particularly “…any personal and professional information that may have affected data collection, analysis and interpretation” (Patton, 2002:566). The personal information I view as most important for this study, is threefold. Firstly, my access/experience within the study sites: (1) Kent, United Kingdom (2) Sao Miguel, Azores Islands (3) Prince Edward Island, Canada. Secondly, my professional experience and knowledge about the voluntary organisation operating the programme; thirdly, the way these two factors (either alone or combined) may have influenced my perspectives, behaviour and interpretations before, during and after the programmes.

At the time of conducting this research, an organisation that I worked with in the voluntary sector was a member of an international network of which the managing voluntary organisation was a member. I therefore had knowledge of their existence, the fact that they offered programmes meeting a recognised standard of provision, and that they had facilitators who were qualified and experienced in beekeeping. This however was the limit of my connection and there was no financial or ethical conflict of interest related to me or to me undertaking research with them. My access to the programme and the three international locations was relatively easy to arrange, due to the international nature of my
work (I regularly work in the vicinity). However, this could also serve to make it difficult for me to be as ‘objective’ as others. For instance I may hold cultural assumptions about some of the research participants, as I work and live in those same communities albeit on a temporary but ongoing basis. My knowledge and awareness of the cultures, communities and local languages (English/French/Portuguese) may have affected people's willingness to be open with me, or about what they thought or experienced (Rubin & Rubin, 2005). Although I view my knowledge of the areas as mainly beneficial to the objectives of the research, it could also be interpreted as a disadvantage when viewed from the perspective of the participants. For example, for those young people who perhaps felt uncomfortable because of their sense of unfamiliarity, I may have otherwise had been viewed as a ‘confidante’, rather than an ‘insider’ within the programme. I reflect upon this issue further in the conclusions of this report (see Chapter Five).

In respect of the final aspect of my position, the integrated methodological approach employed in this study (explained in full below) encouraged me to pay attention to both commonalities and differences regarding the multiple perspectives that I gained access to. This served to illuminate aspects of the programme at each location that I may have otherwise taken for granted. A combination of factors assisted me with becoming aware of my own cultural assumptions regarding the young participants at each location of the environmental experiential programme focused on beekeeping. My extensive reading of the research literature related to this study provided me with an insight, and an awareness of, alternative types of experiential learning opportunities including environmentally-related ones, for young people who had committed an offence and been involved with the youth justice system. However, except the social enterprise organisation, Golden (mentioned in Chapter One), there was no comparable example of an organisation offering a structured programme involving beekeeping for this particular age group of young offenders in the countries researched here.

Within their criteria for promoting the rigour of a new paradigm for inquiry, Lincoln and Guba (1985) cited in Lincoln (1995) include “the commitment of enquiry to fairness (balance of participant views) … (and) the open and democratic sharing of knowledge” (Lincoln, 1998 : 227). I acknowledge that my perspective and experience, which form the foundation of the theoretical framework used in this research has inevitably impacted upon

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6 There is, however, a similar programme for adults running in Chicago, USA. This is briefly discussed within the context of the outcomes of this research in Chapter Five (Conclusions) of this report.
the interpretations presented here. However, this does not make these outcomes any less valid. Indeed, it could be argued that this research is particularly important precisely because of my prior experience and perspectives. The existing policies that I have studied regarding youth offending and recidivism have tended to concentrate on experimenting with different approaches and their perceived comparability and therefore the potential ‘generalizability’ of this ‘evidence-based research’. In particular, over recent decades, political rhetoric in England and Wales has argued that specific interventions, closely monitored within the youth justice system, and aimed primarily at overcoming the challenges of various ‘risk factors’ which are perceived as either effective or not. However, in contrast to this approach, the research reported here, supports the argument that the dichotomy inherent in a language that describes ‘what works’ versus ‘what doesn’t work’, is meaningless (Pitts, 2001). This is because each individual’s needs are different and complex and may change over time. There cannot and should not be a ‘one size fits all’ intervention for young offenders. Furthermore, ‘what works’ may depend upon who is using the term and for what reasons. For instance, participants may find a particular intervention valuable to them personally, but for different reasons, quantitative statistics reported to an authority about that programme may label it as ‘ineffective’. With this in mind, I emphasise that the information gathered and the knowledge generated by this study will be widely shared. My aspirations are that the managing voluntary organisation, the participants, and also organisations offering (or others who may wish to offer) beekeeping with young offenders within the framework of the Youth Justice System internationally may benefit from these findings.

**Action-Orientated Research**

The aims identified above are further explored in this study, because of the different social and cultural backgrounds of the participants. The opportunities for improving the provision through the views, opinions and interactions of the young people are valuable to the project and to the participants’ themselves in providing some ownership and sense of control for these young people. As described above, this is extremely beneficial to all individuals, but perhaps especially for those at risk. In providing this opportunity, it addresses the criteria of quality within the action–orientated paradigm, not only in terms of its usefulness to the young people concerned, but also its contribution towards the greater community. In this case, the greater community potentially consists of the youth justice
system and providers of services, to institutions, universities and the beekeeping fraternity and associations.

The strands of action research are centred on a social justice ideology and are drawn together in the following encompassing definition:

*Action research is a form of collective self-reflective enquiry, undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out. ... The approach is only action research when it is collaborative, though it is important to realise that the action research of the group is achieved through the critically examined action of individual group members.*

(Kemmis and McTaggart 1988:5)

The principles of action research provide a strong emphasis on a co-operative, collaborative, activity (Hill and Kerber, 1967). Kemmis and McTaggart locate this in the work of Lewin, commenting on his commitment to group decision-making. They argue, for example that:

*... those affected by planned changes have the primary responsibility for deciding on courses of critically informed action which seem likely to lead to improvement, and for evaluating the results of strategies tried out in practice...action research is a group activity (and) action research is not individualistic. (To) lapse into individualism is to destroy the critical dynamic of the group.*

(Kemmis and McTaggart 1992:15)

Action research is a member of the 'action-orientated' paradigm (Lincoln, 1998) and its approach to research has significantly contributed to the consultative and youth-focussed commitments within this study. Action research is an approach that values consultation, and involves participants in identifying their “*practical concerns in an immediate problematic situation*...” (Rutman et al., 2005: 154-155). An action research project always involves a strategic intervention that aims to bring about change (Bryman, 2001).
'Action research is concerned equally with changing individuals, on the one hand, and, on the other, the culture of the groups, institutions and societies to which they belong. The culture of a group can be defined in terms of the characteristic substance and forms of the language and discourses, activities and practices, and social relationships and organisation which constitute the interactions of the group.'

(Kemmis and McTaggart 1992:16)

In the processing of this change, action research emphasizes the sharing of skills, knowledge and experience between researcher and research participants so that participants can increasingly maintain ownership of the project (Morsillo & Prilleltensky, 2007). In addition, Lincoln indicates that one of the four indicators of quality within the action–orientated paradigm is “voice” - “...when community involvement is deep and wide many voices are heard” (Lincoln 1998:21). One of the strengths of this research report is the integration of the diverse voices which have formed the development of the research programme and the findings themselves. Because of my perspective (described above and in the Introduction of this report), and my aspirations for the research intervention I acknowledge that the context of the lived experiences of the participants that I observed during the programme, may have influenced interpretations presented in this research. The outcomes could have been unknowingly influenced in some way by my particular interactions, behaviour and observations. However the successes reported as outcomes from this action research (discussed in Chapter Five) provide evidence of the importance of this approach which is rarely-used within this context. The implications for policy and practice that result from these interpretations and the theoretical framework that supports them are discussed in Chapter Five.

The Pilot Study (September-October 2009)

I employed a mixed-methods approach to the Pilot Study, which took place in September and October 2009. The data collection obtained was formed of the following: the combined information acquired from questionnaires (from the final day of the programmes at each of the locations); my personal field observation notes; comments from the young people themselves and comments from their instructors (during focus-group meetings). The research methods were selected and developed with the aim of involving as many youth participants at each international location as possible (with a maximum potential of 15 participants at each location). At all stages of development, this research project actively
sought ways of including experiences, and preferences of youth participants so that they
could fully contribute wherever possible throughout and provide them with choices about
how they shared their thoughts, experiences and opinions.

During the early Autumn of 2009, over a period of one month, I piloted my research study
of young people's participation in environmental experiential learning programmes using
beekeeping with three groups (1) Kent, England (2) Sao Miguel, Azores Islands (3) Prince
Edward Island. Each of the pilot groups at each location had 5 participants. Preparation for
the pilot study was undertaken in consultation with an initial pilot group of young people.
These included members of the beekeeping fraternity and those with an interest in
environmental experiential education and members of the International Federation for
Experiential Education (IFEE), which is an international membership of institutions,
universities, environmental groups. All of these participants have a keen interest in the
aims and outcomes of this study.

I had three main goals for the pilot research study. Firstly, I wanted to become familiar with
the physical and geographical layout of the different locations. I also wanted to fully
understand the processes and logistics of outdoor environmental experiential learning
experiences involving beekeeping. For example, I needed to know about the equipment
used, the distances between the areas that are used and the amount of space available. I
was confident that with a better understanding of the geography and where the
programmes are undertaken, I could be more efficient during data collection and
observation activities during the research study itself.

Secondly, I sought to become familiar with the actual goals and the specific learning
activities relating to beekeeping within the programme. I also wanted to witness the
diversity of the programme from the perspective of social, cultural, linguistic, technical and
environmental aspects. I knew that I needed to move between the three group locations,
rather than staying with one group at one location the entire time. The international groups
inevitably met at different times due to specific national holidays and availability of
instructors. My learned familiarity during these Pilot Programmes, especially of the
structure and logistics, provided me with valuable knowledge required for the main
research programmes that occurred in the following Spring (see the Research Stages
Summary above). For instance, I was able to more easily navigate between locations, to
be more at ease and efficient with my time and not interrupt the programme activities.
Thirdly, I wanted to field test my data collection procedures. The pilot study allowed me to explore, refine and focus my field observation techniques on purposely-selected activities and sites. As I described above, in keeping with the research paradigm, the young people were encouraged to contribute to the development and formation of the research project. With this in mind, they were asked for their input into the survey questionnaire, which was then used for future groups of young people that my research study would be focussing on (Cresswell, 2003). The pilot study greatly assisted the research on many levels. For example, rather than taking hand-written notes of my observations, I later decided upon using an electronic notebook. This eliminated the need for lots of paperwork and enabled my note-taking to become more structured and unobtrusive during the sessions. This strategy also saved time later-on in the research process when ‘writing-up’ my observations. Another example of the changes made as a result of the Pilot Programmes were the questionnaires. The young participants felt the original questionnaire was too long, so I shortened and redrafted it without compromising the information it sought to uncover. Furthermore, the young people at all three locations informed me that given the option, they would rather participate in questions undertaken by way of a focus group activity instead of one-to-one interviews. I was surprised to discover that the beekeeper instructors also preferred this method. Discussion also took place with all participants about the other possible methods of collecting the data. For example, keeping a personal journal or diary of experiences and reflections was one option considered. However, these were rejected by the participants in favour of the focus group approach, which was perceived by them to be a more casual, informal and time-efficient means of collating everyone’s views.

I recognised that there could be some difficulties with the focus group method. For example, being part of a group may prevent some individuals from speaking freely about their experiences, as they may feel embarrassed, intimidated or anxious by others around them (Silverman, 2001). Also, some individuals may not speak truthfully because they may ‘go along’ with the general feelings of the group rather than say something that may be controversial or reveal something about themselves that they would prefer to retain (Silverman, 2001). However, on balance, because of the overwhelming popularity of this request which was formed from the majority of the participants on the Pilot Study, I decided the positive aspects of allowing the young people to choose the feedback method was likely to make more of a valuable contribution to the research overall than the effects
of any disadvantages. If I ignored this request, then I may have risked some young people feeling disenfranchised from the research project, which would go against the fundamental philosophy of the project. When I undertook the formal research study, I therefore arranged focus group activities where I used the questions which I had drafted with the young people’s help. This approach worked very well for my research and helped me to meet all of the aims and objectives of the research project.

The Research Study: Participants & Selection procedures (January to February 2010)

A voluntary organisation manages the beekeeping programmes, and offer fifteen places at each of three different international locations where participants spend four days together in an outdoors camp environment, whilst undertaking the Bee Inspired programme. These programmes occur annually at each location and have been running for the past four years\(^7\). The Main Research took during one of these programmes at each of the locations, during March and May 2010 (see Research Stages Summary above). The setting provides an excellent opportunity to observe the young peoples’ experiences, interactions, behaviour, involvement and emergent expressions. The programme aims to connect participants to nature, through experiential multidisciplinary and hands-on study of natural surroundings. More specifically, the programme aims to teach participants about the ancient craft of beekeeping and associated skills such as the use of honey, honeycomb and beeswax. As discussed above, the ultimate aim of the programme is to reducing the risk of offending or re-offending.

The Participants: Age

Participants were recruited as per the usual procedures for these programmes during January 2010. At the time of recruitment, the participants were aged between fourteen and sixteen years, with a respective approximate overall ratio of 4:2:1. Twenty-six were aged fourteen at the time of the research; twelve aged fifteen; seven aged sixteen years. Fifteen-year-old males and fourteen-year-old females represented the next largest sections, with each section forming between a quarter, and a fifth (respectively 10 and 9) of the entire group. Just over one-eighth (6/45) of the group were sixteen-year-old males.

\(^7\) It should be noted that the future continuation of these programmes is not guaranteed, due to the current economic pressures and the potential risks to funding that this creates.
Older females represented the smallest minority, two being fifteen, one sixteen years old, and together constituting one-fifteenth (3/45) of the group. Approx. two-thirds (11) of participants from the Azores were also aged fourteen, but the other third (4) were all fifteen, with no participants from the Azores aged sixteen. Most UK participants were young: three-fifths (9) were aged fourteen, with fifteen and sixteen-year-olds each constituting one-fifth (3). This fact is sometimes reflected in the outcomes where some of the behaviours of the UK participants could be described as less mature compared to those from the other groups. Examples can be found in Vignette One, Chapter Three and the focus group comments presented in the final section of Chapter Three (discussed in detail in the Conclusion of this report).

The age distribution of participants from Canada was more evenly spread, but still inclined toward younger participants, with fourteen, fifteen and sixteen-year-olds respectively making up two-fifths (6), one-third (5) and one-quarter (4) of the group from Canada. (See Figure Three below). Comparisons between ages/locations are illustrated in Figures 1, 2 and 3 below.

**Participants: Gender**

Approximately three-quarters (33/45) of the group were male; one-quarter (12/45) female. This is reflective of the general situation with regards to the gender differences between young offenders which I described in Chapter One, Part One. Accordingly, younger male participants formed the majority, with fourteen-year-old males representing one-third (17) of the whole group. These details are illustrated in Figure 1 below:

**Figure 1: Pie chart showing composition of group participants by gender and location**
Ethnic Groups

The outcomes from the questionnaires illustrated that the entire group divided approximately into one-third white nationals, one-third Repatriated Azorean, one-third ethnic minorities. It should be noted that these results were based on the participants’ own description of their ethnic group and therefore may also be subject to other interpretations.

All participants from the Azores (15) were Repatriated Azoreans\(^8\): the most numerous single ethnic group overall. White Canadians were the next largest section of the group, representing four-fifths (12/15) of the group from Canada, and just over a quarter (12/45) overall. White British participants formed nearly one-third (4/15) of the group from the UK, and nearly one-tenth (4/45) overall. Together, white national participants (White British and White Canadian) outnumbered Repatriated Azoreans by one, and so also formed approximately one-third (16/45) of the group. The remaining third of the entire group (14/45) were from ethnic minorities, half of which (7/14) were born in the UK (6) and Canada (1). The other half of the participants from ethnic minorities (7/14) – five from the UK, two from Canada – were born overseas.

In direct proportion to the group’s overall male-female ratio – approximately 3:1 (33:12) – of the four White British participants, three quarters (3) were male and one-quarter (1) was female. Female presence was proportionately higher among the twelve White Canadian participants, than among the White British participants, with two-thirds (8) being male and one-third (4) female. Similarly, among the participants from ethnic minorities, nearly two-thirds (9/14) were male and one-third (5/14) female. Despite the majority of ethnic minority participants’ being male, the only participant describing themselves as an ‘ethnic minority’ from Canada, was also born there (female). The two other ethnic minority participants from Canada (but not born there) were both male. Details are presented in Figure Two below:

\(^8\) As explained in Chapter One.
Participants: Location
Participants lived in the United Kingdom, the Azores Islands and Atlantic Canada: a third (15) came from each. Female participation was proportionally higher in the groups from the UK and Canada than overall and this is discussed in more detail below. Of the participants from the UK, two-thirds (10) were male, one-third female (5). This was also true of participants from Canada. From the Azores, participants were almost all male (13/15).
Participants: Disability

Two-fifths (18/45) of the group self-declared as having a physical or mental disability. However, the specific nature of these disabilities was not made clear, nor was it explicitly required by the questionnaire. Over two-thirds (13/18) of these were male and just under one-third (5/18) female. From discussions with the participants and the beekeeper instructors, I understood that the majority of disabilities declared were learning disabilities such as diagnosed Dyslexia. Again, this supports the outcomes of research discussed in Chapter One, which finds that disabilities of all kinds are higher in ‘at risk’ groups, than others. It is likely that, because of the raised awareness in the UK of common learning and communication difficulties such as Dyslexia and Dyspraxia (and their associated assessment pedagogical tools) that diagnosed conditions would be more prevalent amongst the UK participants, compared to that of the more agrarian societies of the Azores and Prince Edwards Island. With this in mind, there may be a more pronounced, compound effect for individuals with these disabilities, because without formal diagnosis and follow-up strategies, there may be more incidents of mis-interpretation and misunderstandings. This may lead to perceived confrontational or deviant behaviours that are more likely to be symptomatic of the frustration and anxiety these young people experience (Cross, 2004).

Half (9/18) of the participants with disabilities were from Canada, approximately one-third (7/18) were from the UK, and the remaining two participants with disabilities were from the Azores. Fourteen and fifteen-year-old participants with disabilities were almost equal in number (respectively 8 and 7), but sixteen-year-olds with disabilities numbered far less (3). There is the possibility that some of the participants have an undiagnosed disability and this would also not be evident in this data. We should also be mindful that declaring a disability of any kind sometimes carries potentially negative social consequences for the individual in terms of stigmatisation from others, or fear of possible negative (or positive) discrimination. For complex, personal reasons, it can also be an opportunity to avoid labeling oneself.

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9 This was a potential weakness of the questionnaire and is discussed in detail in the limitations of the study (below) and in the conclusions and recommendations (Chapter Five).
Programme Recruitment Procedures (January to February 2010)

Places are offered completely free of charge to participants and the cost of the programme is covered by charitable donations and the organisation’s surplus funds, which due to its non-profit status, must be used to meet its social aims and objectives. The language of participation and instruction at all three international locations was English, however in the Azores Islands all of the participants were bilingual English/Portuguese. In Prince Edward Island, Canada, all of the participants were bilingual English/French, and in England all the participants were uni-lingual English. (The three beekeeper instructors were each trilingual English/French/Portuguese speaking, and all three instructors facilitated in the programme at each of the three international locations).

Three months prior to a programme commencing at each of the three locations, the voluntary organisation informs key local agencies about the availability of spaces. Organisations such as the local youth service, educational establishments, welfare workers, churches, youth offending teams, charities, community support agencies and those based in the neighbourhood dealing with young offenders, and/or domestic violence issues are all contacted. The programme is open to young people aged 13 to 17 years old. Applicants can apply directly to the voluntary organisation providing the programme, or alternatively a professional or support worker from an agency can make an application on
behalf of the young person. Applicants meeting the age requirement also need to meet all
three of the following criteria: (1) Have been excluded from a mainstream school, be a
student at a referral centre for excluded young people, or be regarded as having been an
habitual truant within the previous twelve months. (2) Have committed a non-violent crime
within the previous twelve months. (3) Have been a victim of domestic violence, or live in a
household where domestic violence has alleged to have occurred within the previous
twelve months. With regards to this research study, all the above criteria applied to the
participants. Additionally, although no detailed information was formally recorded about the
specific background details of each of the participants, my observations and conversations
during the ethnographic part of the research project added some context to this criteria.
For instance, I was aware that many of the young people came from households where
none of the adults were employed and often there were alcohol mis-use issues. In the
case of the Azorean participants however, often the adults were not eligible to receive
benefits (for reasons I have explained in Chapter One, Part One). These households
therefore survived on very low incomes, mainly within the agricultural industry on the
island.

Further to the above criteria, the parents/guardians of the young person must agree to
them participating in the programme, and the young person must also voluntarily agree to
participate. If all of the above criteria are met, places are offered strictly on a first come,
first served basis until all places are filled. The majority of applications are made by a
representative of a support agency on behalf of a young person, the reason for this being
that the programme is always promoted via the local agencies.

All 45 participants of this study applied for the programme through support workers from
their local agencies. In each of the three locations all the available places were allocated
following the above criteria within one month of the programme being promoted in their
locality. The exact nature of the young people’s criminal offence(s) was not recorded or is
not available due to confidentiality issues, however generally, their crimes were classified
as public order offences, or related to petty theft or criminal damage.

The gender mix and age groups of the participants are illustrated in the following tables:
Table One: Summary of Ages and Gender of the All the Participants

<table>
<thead>
<tr>
<th>Age</th>
<th>13 years</th>
<th>14 years</th>
<th>15 years</th>
<th>16 years</th>
<th>17 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>17</td>
<td>10</td>
<td>6</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>26</td>
<td>12</td>
<td>7</td>
<td>0</td>
<td>45</td>
</tr>
</tbody>
</table>

Table One above illustrates a gender imbalance in terms of the numbers of participants. However this is reflected in the wider national and international statistics, which as I explained in Chapter One, illustrates there are fewer female offenders and therefore fewer young people at risk get referred to the programme. This is the case in all three locations. Tables showing the gender break-down for each location are provided below:

Table Two: Ages and Gender of the Participants: Kent

<table>
<thead>
<tr>
<th>Age</th>
<th>13 years</th>
<th>14 years</th>
<th>15 years</th>
<th>16 years</th>
<th>17 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>

Table Two above, presents the number of male and female participants for each of the age groups within the part of the study which was located in Kent, United Kingdom. Only five of the fifteen participants referred to the programme were female which, as I explain in the following section, is reflective of the lower offending rate of females within the England and Wales and more widely in reported statistics. The breakdown of the gender of participants in the Azores and Canadian programmes reflected similar patterns (details supplied below in Tables Three and Four):

Table Three: Ages and Gender of the participants: The Azores

<table>
<thead>
<tr>
<th>Age</th>
<th>13 years</th>
<th>14 years</th>
<th>15 years</th>
<th>16 years</th>
<th>17 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>9</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>
Table Four: Ages and Gender of the Participants: Prince Edward Island, Canada

<table>
<thead>
<tr>
<th>Age</th>
<th>13 years</th>
<th>14 years</th>
<th>15 years</th>
<th>16 years</th>
<th>17 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>

The Location

The programme locations were (1) Kent, UK, (2) Sao Miguel, Azores Islands (Autonomous Region of Portugal – Mid Atlantic Ridge) (3) Prince Edward Island, Canada, the study consisted of a total of forty-five participants.

The locations chosen for the programme in each country are socially and ecologically unique in several ways. Indeed, from an environmental perspective, they are situated within some of the most diverse ecosystems on the planet. This offers the participants valuable examples of the diversity of the communities which is an excellent opportunity to learn about the interconnections between biotic and abiotic elements of the environment and the beekeeping experience. The number of plant and animal species at each of the locations is just one measure of diversity, however each of the locations share a need for pollination by bees to help meet the aims and objectives of the production of local crops.

According to Kellert (2002), the natural world can provide: “young people with an unrivalled source of attraction, stimulation and challenge relevant in both intellectual and emotional development” (Kellert, 2002:121). During the 'Bee Inspired' programme, the young people were often immersed in the diverse and abundant life and environmental experiences linked to beekeeping. For this reason, it was an ideal site to observe and study participants’ emergent expressions and views, as well as their emotional experiences and perceptions of the environmental experiential learning opportunity. The young people also showed an interest in how improvements could be made to provision, or how the provision could be used more widely for those working with groups of similar young people. As explained above, one of the requirements for entry on to the Bee Inspired programme is that the young people have all had issues with school attendance or were described as ‘disengaged from learning’. Thus, the fact that they voluntarily enrolled onto the programme may have had an impact on the outcomes (discussed in the
Conclusion) it may also be an indication that natural world experiences are an attractive alternative, or are of interest to this group of young people. Furthermore, as I explain in the chapters which follow, the relevance of the environmental as well as sociological aspects of this study and its findings were also of interest to the young people.

**The Kent programme**

**Kent (United Kingdom)**  
**Country:** England  
**Region:** South East Region  
**County:** Kent  
**Capital:** Maidstone (County of Kent)  
**Language:** English  
**Religion/s:** Christian (74.6%) Muslim (0.6%) Sikh (0.7%) Others or no affiliation (24.1%)  
**Population:** 1,579,206  
**Climate:** Kent is consistently one of the warmest places in the United Kingdom. The average low in January is 1.5 degrees centigrade, with an average high in August of 21.6 degrees centigrade (BBC Weather, 2011).

**Economic activity**

Kent is sometimes known as the "Garden of England" for its abundance of orchards and hop gardens. However, in the past decade there has been a significant drop in agriculture with industry and services increasing their utilization of the area. By comparison, partly because of its geographical location close to the capital, North Kent is a well-established, heavily industrialised area. For example, cement- and paper making, were important industries in Kent during the 19th and 20th century. From about 1900, several coal pits operated in East Kent but these had all closed by 1986. East Kent continues to offer local people agricultural opportunities and the tourism industry was significantly boosted by the completion of the Channel Tunnel at Folkestone in 1994 which increased competing sea crossings to mainland Europe at Dover. The fisheries used to employ a large number of people in Kent however this now employs less than a few thousand residents with the largest fleet based in Folkestone (Kent County Council (KCC), 2011). Overall, Kent's unemployment figures are below average, however there was a slight rise in 2010/11 (3.9%) of above the national average of 3.2% (KCC, 2012). Despite Kent’s overall relative wealth compared to most other counties in England, it contains some stark contrasts. Life expectancy in the South East is the highest of anywhere in the UK, and educational
achievement is also higher than average, with one third of the working population being educated to level four or above (ONS, 2012). However, there are pockets of severe deprivation. For example, looking at the South East region as a whole, Kent has the largest percentage of workless families (ONS, 2012). Furthermore, four local authorities in Kent have unemployment figures of above the national average (KCC, 2012). One of these authorities is Thanet, with 6% unemployment, which also has the highest number of youth unemployment. Overall in Kent, 30.8% of unemployed claimants are between the ages of 18-24 years, with the largest proportion of these (14.2%), residents in Thanet (KCC, 2012). The recent closure of a large employer in the area; the multi-national pharmaceutical Pfizer, inevitably had considerable impact on these figures.

**Crime Rates**

The South Eastern area of England benefits from well below the national average of crime, with ‘recorded crime’ the third lowest in England (ONS, 2012). However, in areas which are socially deprived, such as Thanet described above, residents are three times more likely to be the victims of crime (ONS, 2012). Overall in England and Wales, 17% of all crime is committed by youth (ONS, 2012). Statistics from 2009 comparing sentencing rates for Kent confirm these patterns; 2,361 individuals in Kent were sentenced per 100,000 population, compared to 3,876 per 100,000 population in Merseyside and 2,886 per 100,000 average across England and Wales as a whole (MoJ, 2009). The national percentage of juveniles (12 - 18 years old) and young people (18 - 20 years old) sentenced has remained fairly stagnant, but statistics show significant changes in types of crime (e.g. sentences for robbery have risen from 8% to 19% between 2000-09) (MoJ, 2009).

As described above, gender-related statistics for young people show that females are less likely to be at risk of offending or re-offending than males. However, there have been significant changes over time. For example, In 1999, 3,605 females of all ages received court sentences for violence compared with 5,031 in 2009 – a rise of 40%. Statistics for this issue after 2008 are less clear due to the introduction of a ‘not stated’ category within the records of the Ministry of Justice (MoJ, 2009). However, among all males, including juveniles, there was a 17.5% rise from 32,376 to 38,054 over the same period. Moreover, statistics from the Youth Justice Board (2004; 2005; 2007; 2009a; 2009b; 2009c) show that the number of violent offences committed by female juveniles has soared by 28% from 8,702 in 2002/3 to 11,155 in 2009/10. Young girls accounted for 29% of all the juvenile
violent offences, which received formal sanctions in 2009/10 compared with 24.9% in 2002/3 (NAO, 2010).

The Azores Programme

Azores Islands (Autonomous Region of Portugal)
Os Açores (Região Autonoma dos Açores)
Country: Republic of Portugal
Region: Atlantic Ocean
Islands: There are nine islands, São Miguel, São Jorge, Faial, Santa Maria, Graciosa, Terceira, Pico, Corvo, Flores
Capital: There are three capitals (1) Angra do Heroismo, Terceira Island (Judiciary and Tribunal) (2) Horta, Faial Island (Seat of the legislature) (3) Ponta Delgada, São Miguel Island (Seat of the President of the Azores Islands and Government Palace of the Azores)
Language: Portuguese (a dialect of Portuguese which uses a mix of Continental and Brazilian usage, generally spoken at speed and with a very heavy accent).
Religion/s: Roman Catholic (96%) Jewish (2%) Other (2%)
Area: 2,346 km² (906 sq mi)
Elevation: Lowest: 0 m (0 ft) Atlantic Ocean Highest: 2,351 m (7,713 ft) Mount Pico
Population: 235,374 (as per 2001 estimate)
Climate: Oceanic subtropical with temperatures averaging 16-24 degrees centigrade

Economic Activity

The population is irregularly distributed throughout the islands of the Azores. The majority of the residents are found on S. Miguel (53%), followed by Terceira (23.5%), Pico (6.4%), Faial (6.3%), Sao Jorge (4.3%), Santa Maria (2.5%), Graciosa (2.2%), Flores (1.8%) and Corvo (0.2%). The active population of the islands which is estimated to be at about 100,000 individuals is divided by economic activity as follows: 22% in the Primary Sector, 26% in the Secondary Sector and 52% in the Tertiary Sector. The Azorean government is one of the biggest employers in the Azores and is involved in general government departments such as education, roads, economy and regeneration but also manages the Azorean airline. Tourism in the Azores is very specialised and relies on those with a love of fauna and flora and the natural world including those who enjoy star gazing. (Due to its isolated location, the Azores is one of the least light-polluted areas of the world). Tourists
are mainly from mainland Portugal followed by Scandinavia. Agriculture and related activity is one of the biggest employers and fishing is also very important. Information about the context and history of the Azorean community is included in Appendix 4.

**Diaspora (Youth)**

On the 7th September 2009 the Azorean government demonstrated a commitment to the young people of the Diaspora communities by funding a new youth organisation representing young people from across the Diaspora which included a website called 'Nova Geração' ('New Generation'). The organisation has called itself 'Plataforma de Entendimento Jovem Acores Comunidades' (PEJAC) which translates into the English: 'Platform of agreement for youth in Azorean Communities'. This organisation is non-profit, funded by the Azorean government with a remit is to promote positive links between Diaspora youth across the communities focussing on exchanges, cultural interactions, language and generally sharing positive Azorean culture and aspirations for youth. The organisation has formally set up a Secretariat, General Assembly and Fiscal Council with Azorean Diaspora members from Brazil, United States of America, Bermuda and Canada having representative positions on the committee (see DGPJ website 2011).

**Diaspora (Crime and the Repatriated)**

There are occasions when Azoreans are repatriated back to the Azores from overseas. There are several reasons for this, but the main reasons are usually due to (1) committing a crime as a non-citizen, in many cases the crimes relate to motoring offences or (2) being in the host country illegally or (3) for children and young people, being returned due to their parents falling into one of the two categories mentioned. At the time of writing, the Nova Geração website does not appear to address the social issues surrounding Azorean Diaspora youth who have been repatriated to the Azores Islands from either the United States of America, Canada or Bermuda, despite this being an important social issue.

There are many cases of Azoreans resident in the USA since emigrating as babies with their parents with legitimate landed residents papers (Green Cards). However, their parents may have failed to apply formally for US citizenship. In adult life, many of these Azorean residents again failed to apply for full US citizenship believing that they were already 'Americans'. Since 1996, if these residents commit a crime and are found guilty and if their sentence falls into a 12 month or more penalty (including a suspended
sentence), the US authorities automatically repatriate them back to the Azores Islands. Often this means that they may arrive in the Azores without money or resources and with little or no Portuguese language skills. Being unable to communicate with other Azoreans makes it very difficult for them to find employment of any kind, and this has often led them to being involved in anti-social activity, further crime, drugs and alcohol abuse, with examples of some individuals attempting suicide. Azoreans refer to these groups of people (and the children of the adults) as 'repatriados' and they have become stigmatised and alienated from their communities. For the past ten years, the Azorean government has been confronted with a large number of 'repatriados', and although the exact numbers are not known, they are understood to be in the thousands. This is because some repatriated individuals may be accompanied back to the Azores from overseas, with their extended family (Rodrigues, 2010).

Randall (2003) helped to raise awareness in both the USA and around the world about the large numbers of people deported and the effect this has on the lives of many individuals, their families and communities such as the Azores Islands.

*The U.S. government calls them criminal aliens, but they are as American as drive-by shootings and crack cocaine. Many came to the United States as children, often in the arms of men and women fleeing poverty and war. They went to school here, but usually not for long. They came of age on city streets from Los Angeles to New York. Eventually they broke the law. In 1996, Congress banished them from America for life and directed immigration agents to hunt them down. The biggest dragnet in U.S. history is now well underway. Already, more than 500,000 have been rounded up and deported, according to government figures, and this year they are being banished at a rate of one every seven minutes to more than 160 countries around the world."* (Randall, 2003:1)

"*In the Azores, a Portuguese archipelago in the North Atlantic, officials said many have been dropped at the airport by U.S. immigration escorts without even the bus fare to get to town. Until the Azoreans established a transition centre for them, some wandered off and were found sleeping at the side of the road."* (Randall, 2003:1)
The desperation of these people is evident in statistics showing that tragically, the number one cause of death is suicide caused by an overdose; “In the Azores, some shoot heroin in front of the police station in Ponta Delgada, hoping to be admitted to a drug treatment centre to get food and clean beds” (Randall, 2003:1). Between 1996, when the deportation legislation in the USA was enacted, until 2003, 1,000 individuals were reportedly deported from the United States and Canada to the Azores. According to Randall (2003), the mortality rate of these individuals in approximately 10%.

Crime Rates

Crime Statistics are compiled annually by the Portuguese Ministry of Internal Administration (PMIA) dependent on figures being received from the Policia de Seguranca Publica (PSP). The figures are normally released as national figures for Portugal. It is therefore very difficult to know exactly the crime statistics in the Azores. I requested a breakdown from the PMIA but was directed to the PSP who in turn directed me back to the PMIA (from my many years experience of working in Portugal, this is not an uncommon outcome). Crime rates in the Azores are generally regarded as very low. For example, the Canadian government confirm on their Travel Advisory website that crime rates are low (Canadian Foreign Affairs, 2011) and the US Department of State website states, in relation to the Azores ‘Pickpocketing and purse snatching are not common occurrences in the Azores. There are no reports of organized crime or gangs.’ (US Dept of State, 2011).

As described earlier and illustrated in Table Three above, only two of the fifteen participants referred to the programme were girls, which, as previously explained reflects the lower offending rate of girls within the Azores Islands. It is worth noting that these islands are very much influenced by the teachings of the Roman Catholic church (96%) which arguably delivers a considerable amount of social control on the lives of women and girls who are obliged to maintain a traditional role within the family and community. The embedded religious culture may reflect on the behaviour of the Azorean girls and therefore may impact on the low referral rates. More detailed information is needed about this issue and further research is required to better understand the complexities involved.

The Prince Edward Island (Canada) programme
Île-du-Prince-Édouard (Canada)
Country: Canada
Region: Atlantic Canada
Province: Prince Edward Island (smallest province in Canada)
Capital: Charlottetown
Language/s: English is the official language, however French is the second language and widely used.
Religion/s: Roman Catholic (47%), Protestant (43%), No Affiliation (6.5%), Other (3.5%)
Area: 5,683.91 km² (2,194.57 sq mi)
Population: 141,551
Climate: Winters are moderately cold, with clashes of cold Arctic air and milder Atlantic air causing frequent temperature swings. From December to April, the island usually has many storms (which may produce rain as well as snow) and blizzards. Springtime temperatures typically remain cool until the sea ice has melted, usually in late April or early May. Summers are moderately warm. Temperatures can range from -10°C to 30°C in summer.
(Statistics Canada, 2011b).

Economic Activity

In the last 30 years there have been major changes in agriculture on Prince Edward Island. As late as 1951 over 90% of all farms on PEI had horses, for a total of 21,000 animals. Today, workhorses are rarely seen, and fields used to produce the huge amount of forage for these animals have been turned to other uses. The number of farms has dropped from 10,137 in 1951 to 2,107 today. At the same time the area in farms has been reduced by 39% although in recent years the area used as cropland and pasture has remained stable. The size of the average farm has increased from 44 ha in 1951 to 119 ha today. The main crop is potatoes which has a turnover of CA$360 million. Cattle and the dairy industry are also major drivers. Fishing employs over 6,000 individuals with a variety of fish, shellfish and lobster offering great potential within the North American market. Almost the entire Tuna catch is exported to Japan where the fish is prized. Forestry is the other economic driver with 50% of the province forested. The island also plays host to over 1 million tourist visitors per year (Prince Edwards Island, 2011).

Crime Rates

The Canadian Centre for Justice Statistics and Statistic Canada (StatsCan) is the most accurate resource for crime statistics across Canada, however the figures can often lag several years behind. I was unable to obtain isolated statistics for Prince Edward Island, hence I use here statistics for Canada as a whole.
The following 2008, StatsCan figures shown in the most up-to-date report on female offenders in Canada, written by Kong and Au Coin (2008), it gives an insight into female youth crime in Canada. Reflecting reports from similar countries, it outlines that females account for a smaller proportion of all offenders across Canada. For example, in 2005, only one in five persons accused by police of a Criminal Code offence were female. For every 100,000 females aged 12 and older in 2005, about 1,100 were accused by police of committing a Criminal Code offence, compared to a rate of about 4,200 for males. When females do offend, they tend to commit theft (other than theft of a motor vehicle), common assault, bail violations and fraud. Females are infrequently repeat offenders and, for those who are, their crimes tend not to escalate in severity. While still quite low compared to male youth, the rate of ‘serious violent crime’ among female youth has more than doubled since 1986 growing from 60 per 100,000 to 132 per 100,000 in 2005. Among female adults, the rate has also grown from 25 to 46 per 100,000. Rates of ‘serious property crime’ among female youth and female adults have declined between 1986 and 2005. Perhaps unsurprisingly then, women in Canadian correctional facilities are few. In 2004/2005, they accounted for only 6% of offenders in provincial/territorial sentenced custody, 4% in federal sentenced custody and 6% remanded into custody to await court appearances (Statistics Canada, 2011a).

I have explained above the details of the socio-economic and physical aspects relevant to the context of each of the three locations where the research took place. Below, I set out the particular methods and tools used during the research which allowed the collection of the data at these locations.

**The Youth Participant Questionnaire (March & May 2010)**

For the quantitative section of this mixed methods study, I used an empirical Youth Participant Questionnaire (see Appendix 5). This was based on the methodology and questionnaires for evaluating outcomes of outdoor programmes used by Marsh, Richards and Barnes (1986a, 1986b) and also Mitchell and Mitchell (1988; 1989). These types of questionnaires have been widely used and the literature indicates they were later developed into the Life Effectiveness Questionnaire (LEQ) and the Review of Personal Effectiveness (ROPE) system. All these uses have proven to be effective at correlating the related variables in connection with outdoor experiential learning (Richards & Neill, 1996).
Furthermore, they are uncorrelated with potential confounds such as verbal ability, social desirability (Mayer & McPherson- Frantz 2004:503).

The Youth Participant Questionnaire consisted of:
(i) A section for personal information in relation to the participant, name, age, gender, ethnic group, disability status, all of this information was coded and placed on the database and later used to compare against other participants from all three international locations.
(ii) Introduction – About You
(iii) Section 1 – Your experience of learning
Several areas of interest with reference to my research were explored. Each participant answered questions relating to their school experience. This was then followed with questions related their beekeeping experience.
Section 2 – Your experience of learning – activity-based beekeeping programme (group participation):
  • Preparation prior to learning
  • Skills acquired through learning
  • Instructor / Teacher
  • Social aspect of learning experience
  • Learning Environment and quality of learning experience
  • On conclusion of the learning experience

The questionnaire is a widely-used and useful instrument for collecting survey information, providing structured, often numerical data, being able to be administered without the presence of the researcher, and often being comparatively straightforward to analyse (Wilson and McLean, 1994). The Youth Participant Questionnaire used for this study compared what young people said about their experiences of school with what they said about their experiences of the beekeeping programme. Questionnaires such as these are often used to move from a generalised area of interest or purpose to a very specific set of features about which direct data can be gathered (Wilson and McLean 1994: 8-9).

Wilson and McLean also stress the importance that the questionnaire:
  • is clear on its purposes
  • is clear on what needs to be included or covered in the questionnaire in order to meet the purposes
• is exhaustive in its coverage of the elements of inclusion
• asks the most appropriate kinds of question
• elicits the most appropriate kinds of data to answer the research purposes and sub questions
• asks for empirical data

(adapted from Cohen, L. et. al., 2007)

The Youth Participant Questionnaire followed these principles, although I understood that questionnaires do have limitations. For example, they often limit the depth of information gathered and therefore the level of understanding. This study therefore complemented the questionnaire with the use of information gathered from the focus groups, observations and other qualitative approaches, which do enable a depth of insight to be gained.

The participants were able to complete the questionnaire when it was convenient for them within a specified period and return it to me during the programme. This procedure was based on best practice because without the researcher being present during the completion of the questionnaire, the participants do not feel coerced and are therefore less likely to be influential on the results (Cohen et al., 2007). 45 participants in the three international locations were asked to complete the questionnaire, 15 in the UK, 15 in the Azores Islands and 15 in Prince Edward Island, Canada. All 45 participants completed and returned the questionnaires which meant that there was a 100% statistical analysis. This was unexpected as often during research questionnaires 50% will not be completed or returned (Bryman, 2011).

The Youth Participant Questionnaire uses a Likert five-point rating scale for the questions (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree). These commonly used rating scales are able to build in a degree of sensitivity and differentiation of response whilst still generating numbers (Cohen et al., 2007: 325). Hannah (2007) considers the Likert scale to serve as a self-coding for explanations of the asked statements. Although rating scales provide useful information, there are limitations, for example, each individual respondent might interpret the rating numbers differently; respondents may not be telling the truth; and there is no forum for respondents to provide personal narrative regarding their thoughts, beliefs, or opinions (Cohen et al., 2007). However, as I explained, in Chapters Three and Four, I present my observations and the
recorded comments from the participants and instructors themselves during the programme, which provide further insights into the research outcomes.

The statistical software package SPSS was used to run statistical analyses, this then resulted in a report being produced, which is discussed further in Chapter Four Part One of this report. A colleague who was conversant with the SPSS software provided me with technical support, and an analysis technique was used to explore and identify simple structure in the data (Tabachnick & Fidell, 2000:597). This reduced a larger number of variables to a smaller number of factors helping to ensure simplification and clarity with reference to the results. The data was also transferred onto an Excel spreadsheet (see Appendix 6) which was the tool used to draft the data analysis section of the report.

**Focus Groups during the programmes (March and May 2010)**

The qualitative data was gathered using focus groups. These enabled me to obtain a fuller view of young people’s perspectives on their programme experiences. This was an aspect of the project’s research design and analyses that was instrumental in achieving a genuinely integrated mixed-methods approach. The goal of qualitative research is to provide deeper meaning to the expression of human experiences and develop understanding of the information provided by the participants (Silverman, 2000). Hatch (1995) believed that qualitative researchers are not worried about the statistical analysis but rather to: “…look to inductively answer research questions by examining students and others who influence them in natural contexts, in interaction with other people and objects in their surroundings” (as cited in Hittleman & Simon, 2002:38). Strauss and Corbin (1990) considers qualitative research to “give the intricate details of phenomena that are difficult to convey with quantitative methods” (p19).

The focus groups were held at each location on the first and fourth day of the programme. All 15 participants at each site participated in the focus group which took place following the final meal and refreshments and were used as a social gathering to reflect on the programme experience. Each focus group had one question. For consistency of approach, the same instructor at all three locations acted as scribe and recorded the feedback to the questions by the group participants, by writing the answers on to a flip-chart ensuring that the written answer was reflective of what had been given by members of the group. The
flip-chart record was then copied on to a word document representation, for research analysis. The two questions from these sessions are listed and explained below:

Focus Group Question 1 (Day one of the programme)

- Why did you choose to apply for a place on the Bee Inspired programme?

Focus Group Question 2 (Day four of the programme)

- In your opinion what have you learnt whilst attending the Bee Inspired programme?

The questions were intended to be exploratory, to permit participants to express their views and opinions and feedback to those running the programme. All participants voluntarily participated and the focus groups took place in an informal, social gathering. The sessions lasted for about one hour. The questions were kept simple and straightforward as had been expressed by the Pilot Study groups; undoubtedly, this helped secure the 100% participation level in these focus group sessions at all three locations.

Observations and ethnographic aspects of the programmes (March & May 2010)

One of the many strengths of this study was that I was not “employed” by the organisation offering the programmes to conduct this research. I presented myself as an ‘outside observer’ conducting research that attempted to better understand, through participants’ experiences, the strengths and weaknesses of this experiential programme. In particular, I wanted to uncover insights that may influence potential future provision for other providers of environmental experiential education programmes using beekeeping. I had not previously met any of the young participants at each of the international locations before and they formed the focus of my observations. Likewise, I had not met the beekeeper instructors prior to the programme. In the style of an ethnographer, I recorded brief observational notes as the young people participated in their environmental experiential learning activities in relation to beekeeping. I documented my impressions of the young people’s experiences in the natural environment and reflected on students’ social, cultural and environmental interactions. These impressions included the verbal and non-verbal cues displayed by the students. After my experiences in the Pilot Study, I used an electronic notepad to takes notes and reflect on my impressions and experiences during each of the programmes. I found this more effective and less obtrusive to the participants than paper-written notes. The reflective nature of the programme and of the research itself
should be emphasised as a learning journey for both the participants, beekeeper instructors and me personally (McKenzie, 2000). The observations and quotations that I collected are described in the vignettes in the following chapter of this report.

For the duration of this study, I was an integral member of the environmental experiential learning programme focused on beekeeping at each one of the international locations. This meant that I participated alongside the young participants in the field undertaking the practical aspects of the programme. As a participant, I engaged in all aspects of the programme with the young people, including the learning activities, hiking trails looking at flowers and plants that bees pollinate, having meals and participating in evening social and cultural activities. In my role as an overt ethnographic researcher, I investigated young people's experiences through the voluntary completion of the youth participation questionnaires, focus groups, observations and a collection of materials used during the learning programme activities. My multiple roles and integration with the young people participating in the programme allowed me to ‘genuinely live’ the experience of the Bee Inspired programme, whilst providing insights during data analysis (Atkinson & Hammersley, 1994). During the programmes, I tried to take a passive role so as not to influence the activities; however, I recognise that my presence as a ‘participant-as-observer’ may have swayed the participants' behaviour and comments in some aspects (Bryman, 2001). For example, some of the comments – non/verbal and written – may have been the result of what the young participants anticipated I wanted to hear/read. Even though there was no incentive to behave in this manner, sometimes individuals’ actions are arbitrary and cannot be explained (Denzin, 1989). However, as I explain in the section headed ‘Researcher Position’ in Chapter Two (above), the qualitative outcomes of this research represent my interpretations of events and are presented here for further interpretation and investigation combined with other longitudinal results and their contexts.

Information-sharing with the managing organisation, the beekeeper instructors and the youth participants was always carefully undertaken to ensure that I was passive and an observer in my role as researcher. I took care to avoid the use of technical jargon that might have excluded either staff or participants in any aspect of the activities or interactions with me, or the programme. I also avoided using an authoritative manner of speaking or behaviour that might have distanced me from them. There were no instances of conflicts or tensions whilst I was observing the participants, either between myself and the young people or the instructors. I hope that this was due to the sensitive way that I
interacted with others during the programmes. For instance, in non-instructional aspects of the programme (which were always carried out in English at all locations), I would interact and communicate in the local language during the social aspects of the programme whether that be in English, French or Portuguese.

As I have explained above, the way that this research report is written is a related issue and it is my intention to make it clear when I am reporting the work or opinions of others and when I am expressing my own opinion, contribution, observations or interpretations. Use of first person terms such as “I”, “me” and “my” will serve to alert the reader to the expression of my own voice. According to Patton (2002) use of the personal voice in research also serves to acknowledge relationship and to foster dialogue.

Furthermore, the researcher is central to the choice of methodology. The survey, questionnaire, or the measurement tape all have their place, but it is the individual researcher, which Richardson (2003) argues is “the instrument” (p52). This led me to be very conscious of my roles and influences over the course of this study, reflecting regularly on my positions, biases and feelings in relation to the participants and our mutual impacts on each other. My strong belief in the benefits of learning outdoors makes me appreciate young people’s emergent experiences and expressions as worthy of study. However, the same strong sense can influence what I see. Being aware of the methods of effective ethnographic observation is important because of the inherent reflective nature of the programme. I repeatedly reflected on this and other aspects of this study, both during and after each of the experiential learning programmes. The effect that my own perceptions of environmental experiential learning, beekeeping, and the natural world had on my impressions of young people participating in the programmes is evident throughout this report. Thus, I must address the issue of trustworthiness in this study. In other words, am I simply verifying my own biases or is there empirical evidence of meaningful connections between this group of young people and their positive experience of their experiential learning through beekeeping? Personal, social, cultural and geographical influences may also affect the overall validity of the study.

**Case Study Vignettes**

The observational notes I described during the beekeeping experience considered whether their experiences might indicate boredom, distress, happiness, agreement,
confusion, or any other emotion (Fraser, 2004:195). This also caused me to record the experiences and accounts of participants, some being detailed and nuanced, others being sparser accounts which have less contextual detail, emotional depth and/or temporal coherence as well as related expressions to the outdoors, experiences and feelings. At the same time, I felt that many experiences were still essential to include in the work because of their poignant importance in the participants’ experience and views. In particular, I was aware of the stark contrast in my perceptions of these young peoples’ ‘normal’ everyday lives, in comparison with their lived experiences during the programme. For example, as I explained in Chapter One, being away from their home environment was in itself, potentially a step towards a profound positive change for them personally (Green et al., 2000). Furthermore, the aspects of their social interaction, in for instance team-building skills, needed to be provided within context, in order to provide meaning to the reader. Following much deliberation and experimentation, I chose to use a method of writing “vignettes” to highlight particular aspects of the study linked to individuals and events (Richardson, 2003). I felt this was the most appropriate in terms of bringing an authentic, accessible description to this report.

**Triangulation**

Triangulation refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings (Bryman, 2001). The data gathered through questionnaires, focus groups and observation was triangulated. I employed triangulation by utilising multiple data sources including survey questionnaires, naturalistic observations, field notes, samples of materials used in the learning, and focus group feedback. In addition, during Bee Inspired, I continuously employed informal member checks with young participants to identify observer error, investigate potential observer misunderstandings and glean new insights into young people’s perception of their environmental experiential learning beekeeping experience. In fact, some researchers have defined this kind of approach as a ‘crystallisation’ rather than triangulation, in a metaphor that attempts to illustrate the multiple facets including the aspects of shade and light, that occurs with diverse accumulations and interpretations of different types of data in ‘thick description’ (Richardson, 1997).

When reflecting upon the data collected for this study, considerations included: a) whether the research actually measured what was intended to be measured (validity) and b) if what
was being measured was what *should* be measured and whether there were any errors, or whether outcomes would be replicated (reliability). For the purposes of the qualitative aspects of this research however, the word ‘validity’ here is problematised through the paradigm of the action-research orientated, interactionist inherent in my approach approach (Denzin, 1989; Richardson, 1997). For example, the discussions in the focus groups were somewhat interpretive, and therefore their validity may not ever be truly consistent (Tashakkori & Cresswell, 2007). These discussions could have been affected by the dynamics of the individuals’ present and one person’s interpretation of a participant’s viewpoint will differ from another researcher’s understanding. Tashakkori and Teddlie (1998) suggest two possibilities for testing for validity. The first being judgemental validity where a researcher asks an expert for their thoughts on the gathered data. The second test suggested is to collect empirical data (empirical validation). This ‘triangulation allows a researcher to test for consistency against other measures of related constructs’ (p. 82). As I explained above, allowing the participants access to the data, is also a way of testing its authenticity.

**Limitations of the study**

To enhance the internal validity of research, Merriam (1998) suggests that the researcher clarify his or her “*assumptions, world view and theoretical orientation*” (Merriam, 1998:205). To do this, I report on some of my assumptions and beliefs about nature and environmental learning that underlie my research. Firstly, I am an individual who trained at the Royal Botanical Gardens in Hamilton, Ontario, Canada and studied horticulture at the University of Guelph, Ontario Agricultural College, Canada. For the past fifteen years I have worked with young people in a variety of experiential learning situations connected to the environment and natural world and I share Lopez’s (2001) view that a naturalist:

> “*knows a local flora and fauna as pieces of an inscrutable mystery, increasingly deep, a unity of organisms, Western culture has been trying to elevate itself above since at least Mesopotamian times. The modern naturalist, in fact, has now become a kind of emissary in this, working to re-establish good relations with all the biological components humanity has excluded from its moral universe*”
>
> (Lopez, 2001:2).
The mixed-methods style of research here, including the Youth Participant Questionnaire, Focus Groups, observations, case study vignettes did help to produce the desired data and information and provided opportunities for me to adjust components of the research as the study developed. Overall, research suggests that the combination of these different approaches is more effective than any single method.

This study allowed me to experience a beekeeping programme run with three different groups in three different countries and although the lingua franca for the programme was English, during social gatherings I was permitted to enter several cultures and also to experience other languages, particularly Portuguese and French. As I have explained above, due to the small numbers of participants in this research, the overall findings of the study are limited. However, the fact that the study benefitted from 100% participation in all aspects of the experiential education programme, including attendance, completion of the questionnaires and participation in all of the focus groups by participants at each location, has helped provide credibility and clarity of analysis in the findings. Conversely, it is also possible that the fact that these participants volunteered to take part in the research, may have either meant that they were already pre-disposed to endeavoring not to re-offend in the future, or that participating in the research itself had an impact on their future behaviour and attitudes towards re-offending\(^\text{10}\). Either way, the outcomes from the research showed a positive impact on the young people at risk and I argue this, in itself, deserves to be investigated further.

Data regarding previous participants on other Bee Inspired programmes, not part of this research project are not available. This is because there is no policy (or funds) that promote any follow-up procedures of the participants after they have completed the programme. This is not unusual, because, as I explained in Chapter One, Part Two there are many experiential education programmes such as the one reported here, which are small-scale but effective. However, often these are not published and there are few joined-up strategies between charities, youth justice systems and other authorities worldwide who support young people at risk. Because of this, the benefits of these programmes are restricted to local knowledge only and the potential wider value of longitudinal data is simply not considered. This is understandable when we consider that often educationalists involved in these programmes are volunteers forced to concentrate on the ‘here and now’,

\(^{10}\) The positive impact of participating in research for the participants themselves has been the subject of an educational project at Leeds Metropolitan University, but is outside the scope of this report (see for example, Stevenson et al., 2010).
when in contrast, academic professionals and government bodies may have different requirements and perspectives.

My mixed-methods approach consisted of evaluation of the questionnaires completed by young participants, feedback from the focus groups and observations with the various aspects of the experiential education programme in each of the three locations where I recorded comments and behaviours of the participants. This helped with recording the experiences of the young people in ‘their’ context, based on ‘their’ individual experiences in the programme that they have participated in, at the particular location where it has occurred. The voices of the learners are heard throughout this report. I have also described the pedagogy of the programme in detail. The point is not to produce results that are context-free, but to explore the context in which these results are formed (Patton, 2002). When interpreted by different individuals, practitioners or other researchers, they will encourage new insights into aspects of this study and thereby create new meanings and possibilities within, alongside and in cooperation with, existing relevant frameworks.

The trustworthiness of relationships between pedagogical aspects of programming and benefits perceived by participants is dependent on the insights and observations of the individual parties involved. These links cannot be validated except by the evaluation of their application in different contexts over time. Triangulation of data collection using mixed methods as described, was used to increase the trustworthiness of insights (Patton, 2002). The study has used a small number of participants and therefore this could be regarded as limiting views, as a larger number of participants could have raised additional issues, highlighted additional insights, or further observations could have been gathered. This circumstance could have limited the inclusion of perspectives of participants with negative experiences of the programme had it been larger in size with more participants, as currently the majority of the participants who took part in the study had shown positive reactions, experiences and feedback. It could also be argued that, as I have explained above, as a participant in the programme myself, although consciously passive in nature, I could have inadvertently influenced some of the surroundings and programme outcomes. However, all researchers, to a greater, or lesser extent will have this type of influence in programmes which are experiential; in which they interact with participants during research being undertaken. The researcher is undoubtedly the main instrument of the research and develops insights, which are of crucial importance (Patton, 2002). As the researcher for this study, I have had to explicitly report my reflexive insights and present my results to
include participant testimony, therefore hopefully increasing the trustworthiness of the findings of the study (McMillan & Schumacher, 2005; Patton, 2002). I found that open dialogue with the staff in the programme at each international location was invaluable in establishing parameters around my participation, which all parties seemed comfortable with as the research was undertaken. It is also hoped that as a participant myself, again albeit passive in nature, helped foster a trusting relationship with those other participants who have been participants at each international location.

Although I did not have a position of facilitator or of authority within the programme, participants’ preconceived ideas of what a researcher does and their view of me as an adult, inevitably affected what they chose to share with me during my observations and focus groups. It is hoped however that my participation in the programmes alongside these young participants, helped and encouraged them to be open and honest about their views and experiences.

**Ontological and Epistemological Considerations**

The aim and research questions of this study, which I outlined at the beginning of this chapter, are essentially concerned with discovery. Knowledge and understanding of perceived reality (in this instance, how experiential learning and beekeeping is understood, and what teaching and learning strategies are used), is largely subjective and can be found in the interpretations made by individuals’ experiences. The fact that these individuals are free to develop their views could be considered a social constructionist approach (Berger and Luckman, 1967). Social reality is therefore said to be socially constructed, that is, that persons and groups interacting together in a social system form, over time, concepts or mental representations of each other's actions, and that these concepts eventually become habituated into reciprocal roles played by the actors in relation to each other (ibid). When these roles are made available to other members of society to enter into and play out, the reciprocal interactions are said to be ‘institutionalised’. During this process of ‘institutionalisation’ meanings become embedded in society as does knowledge and people’s conception (and belief) of what reality is (Denzin, 1989).
During the different aspects of this research (explained above) I inevitably drew comparisons between the different statutory education experiences of the young people at risk (e.g. their past teachers' strategies) and the teaching strategies (e.g. differentiation) of the instructors at their particular experiential beekeeping programme. It is crucial to point out here, that this comparison creates tensions between the different interpretations of individuals’ experiences. For example, my interpretation of events is based partly on my own cultural norms and personal learning experiences (Bryman, 2001). To address these potential tensions, I base my foundations in a symbolic interpretivist ontology and epistemology (Blumer, 1969; Mead, 1934), where social and cultural reality and truth are subject to multiple, diverse and fluid interpretations. Alongside this perspective, I use the logic of induction with a leaning towards a qualitative methodology. It is however, recognised that there may be features of social and cultural reality that are both independent and dependent on individuals, and that both interpretivist and positivist paradigms can sit comfortably together (Pring, 2000). This is a recognition that there is often consensus on what “actually happened” between observers of, and participants in, programmes or events (Bryman, 2001).

Wallace and Poulson (2003) describe five categories of research: knowledge-for-understanding; knowledge-for-critical-evaluation, knowledge-for-action; instrumentalism and reflexive action. Because of my own personal experiences and perspectives, explained above, my observations during this research and subsequent interpretations fall within a context of optimism in investigating whether this programme of beekeeping benefits young people in a way that prevents them from offending or re-offending. I recognize the importance of the opportunity there may be to potentially inform improvement in practice as a result of this research. This research therefore falls within the knowledge-for-understanding category which Gunter (2002) and Gunter and Ribbins (2002) also argue helps to contextualise the research.

**Trustworthiness**

To demonstrate trustworthiness Lincoln and Guba (1985) establish four criteria that must be considered: credibility, transferability, dependability and confirmability. In this section, I discuss each of these criteria in relation to my study. The italicized words in the next few paragraphs are strategies suggested by Lincoln and Guba (1985) and Merriam (1998a) to ensure trustworthiness in research.
Credibility refers to a researcher’s ability to demonstrate that the study is believable from the perspective of the participant in the study and to its critical readers (Lincoln & Guba, 1985). To establish credibility of my findings, I employed three strategies recommended by Lincoln and Guba (1985): prolonged engagement, triangulation and member checking. As previously discussed, I attended three international sessions of the Bee Inspired programme during my pilot research. This prolonged engagement over multiple sessions and allowed me to better understand the Bee Inspired programme and the surrounding cultures and contexts (some of which is described at the beginning of this chapter and will be explored in the chapters which follow). Being in the field with the students for long periods, allowed me to engage in continual observation that helped me to identify both salient and atypical factors relevant to their interaction and beekeeping experiences. Also, by discussing my research with colleagues and pilot youth participants, I was able to probe my biases, reflect on new questions and refine my methodological design (Merriam, 1998).

To further ensure credibility during my study, I also employed triangulation by utilising multiple data sources including survey questionnaires, naturalistic observations, field notes, samples of materials used in the learning, and focus group feedback. In addition, during Bee Inspired, I continuously employed informal member checks with young participants to identify observer error, investigate potential observer misunderstandings and glean new insights into young people’s perception of their environmental experiential learning beekeeping experience.

Transferability refers to the degree to which my findings can inform other situations in similar contexts. To achieve transferability I employed two methods suggested by Lincoln and Guba (1985), ‘thick description’ and ‘purposeful sampling’. By drawing on the survey questionnaires, naturalistic observations, field notes, samples of materials used in the learning and focus group feedback, I was able to generate richly detailed accounts of the learning activities and nature experiences of the young people. These are presented in the three vignettes in the chapter that follows. My purposeful sampling and in-depth examination of Bee Inspired experiences and perceptions of environmental experiential learning involving beekeeping allowed me to create detailed stories of young people’s experiences. Lastly, by providing a detailed description of the study’s context and the assumptions that were central to the research I enable the reader to judge the
transferability of the findings and appropriateness of the fit with their own situation (Merriam, 1998: 211).

To increase the dependability and confirmability of my research, I kept records of my data, findings, interpretations and recommendations. To establish that my findings are supported by my data I employed a technique that Lincoln and Guba (1985), refer to as an inquiry audit (p317). I asked a colleague to serve as an “auditor,” to code a portion of the questionnaires and compare that coding with mine, review my documents and authenticate the decisions and accounts that support my findings (Merriam, 1998:207).

Conclusion

In this chapter, I have outlined the methodological, epistemological and ontological approaches that are all integral to this research study. As I explained, I employed a variety of methods to achieve a diversity of findings from both quantitative and qualitative data, in order to achieve a convincing account of experiential learning programmes that involve beekeeping for young people at risk. Despite, or perhaps because of, the lack of information or understanding of experiential learning programmes for young people at risk, particularly in relation to using beekeeping both nationally (in the UK), in Europe and internationally, this research study has demanded a lot of attention. For example, at the time of writing, several universities, institutes and organisations from countries including Northern Ireland, United States of America, Slovakia, Hungary, Italy, Austria, Serbia and Malta, as well as several Probation Service Trusts and director-level staff within Her Majesty's Prison Service in the United Kingdom, have asked to be kept updated on the findings of this research study.

The following chapter (Chapter Three) details the findings from the study, which begin with the three Vignettes with a detailed description of my observations during the Bee Inspired programme at the three international locations.
Chapter Three: Observations and Three Vignettes
Introduction: The Bee Inspired Vignettes

In this chapter, I tell the story of the Bee Inspired programme as experienced by young people in the three international locations where the research took place. I present this story through a series of narrative vignettes as described in the previous chapter. By sharing narrative vignettes of students’ experiences in beekeeping, I endeavour to deepen the readers’ understanding of how and why aspects of the Bee Inspired experiential learning programme could potentially be a successful intervention that prevents young people at risk from offending or re-offending.

This approach to presenting the learning experiences provides an effective and established way for the reader to engage with the data whilst potentially providing new insights when new interpretations are developed (Denzin, 1989). Indeed, as I explained in the previous chapter, the method of writing vignettes highlights particular aspects of the study linked to individuals and events (Richardson, 2003). Bearing in mind the particular relevance of the programme itinerary and events to the personal and social development of the young people, I felt this was the most appropriate in terms of an authentic, accessible description to this report. Further detailed analysis follows in Chapter Four, where I examine the qualitative data from the focus groups.

For the purposes of this study, I define the Bee Inspired programme by including the entire programme experience from preparation and arrival at each site, through to the conclusion of the programme activities and the departure of each group at each location. The three vignettes are structured around the four days of activities of the programme. I describe and explain the elements and highlights of the programme. When appropriate, within context, as we progress through the itinerary for each day, I log my observations, together with the comments and opinions of the participants and the three beekeeper instructors11. At the end each section I summarise my analysis of the participants’ comments in light of my observations in relation to the existing research I discussed in Chapter One.

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11 The quotes have been coded to protect the identity of the participants and instructors, but allow the reader to determine which location the individual was based at for the research. UK – United Kingdom; AC – The Azores, AC – Canada
Vignette One: Day One

The Itinerary:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>Preparation, meeting point and travel</td>
</tr>
<tr>
<td>AM</td>
<td>Arrival at the site, initial meeting of participants and beekeeper instructors, rules, regulations, do's and don'ts</td>
</tr>
<tr>
<td>PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>PM</td>
<td>Setting up camp and logistics</td>
</tr>
<tr>
<td>PM</td>
<td>Beekeeping - an introduction</td>
</tr>
<tr>
<td>PM</td>
<td>Focus Group 1</td>
</tr>
<tr>
<td>PM</td>
<td>Dinner and to bed</td>
</tr>
</tbody>
</table>

**Day One: Preparation, Meeting Point and Travel**

One month prior to attending the four day Bee Inspired programme, participants received notification through their youth worker (or equivalent) of the time and place to meet the bus which would transport them to the programme site. Each young person had to bring enough casual clothes for four days but were restricted to one bag. In addition they were expected to bring a pair of sturdy footwear and a jacket should it rain, as well as adequate toiletries. The voluntary organisation who managed the programme organised and provided the tents, sleeping bags and all other essential equipment at each site. Each young participant also had to bring one piece of identification and the name and address of one contact in case of emergencies, during their stay on the programme.

**Arrival at Site: Initial Meeting: Participants & Beekeeper Instructors**

At each of the three international locations the minibus transport was to arrive at 1000hrs at the local location where the programme was to be held. This was to give everyone the opportunity to meet up, to introduce each other and to learn what the rules and regulations would be for the programme. Although the majority of young people arrived on the
minibuses provided, some were dropped off at the site by their youth worker or a family member.

At all sites, on arrival the young participants were given the opportunity of meeting in one large group, they then introduced themselves to the rest of the group, and were informed of which sub-group they would belong to for the week. The three sub-groups were each led by one of the three beekeeper instructors and at this point each young participant met their respective instructors. The same three beekeeper instructors attended and facilitated the programme in each country. This was then followed by the participants receiving notification of their tent (all single occupied), which were grouped in three groups consisting of five tents. The young person would be part of the same sub-group throughout the programme. Sleeping bags, ground sheets and bedding were all supplied, as well as a torch and whistle (to use in an emergency).

**The Rules and Regulations**

These were deemed by the beekeeper instructors as being quite simple, straightforward and as follows:

- Mobile (cell) phones to be kept by the instructors and not to be used between 0900hrs (start of the day) and 2000hrs (official end of programme day) except for emergencies or with special permission. It was explained to everyone that the reason for this rule was to ensure everyone was attentive, for reasons of health and safety especially when handling the bees, and to ensure others were not disturbed by distractions.

- Young participants had to attend all aspects of the programme schedule and activities.

- Young participants were informed that they were at the programme to learn about beekeeping and that all young people had the right to their personal privacy, therefore no one was expected to share why they had been in trouble, or any personal issues with anyone at the programme. However, if they wished to speak privately with a member of staff at any time about anything that was troubling them then staff would be more than happy to help.

- Offensive swearing (in any language), aggressive or violent behaviour was not permitted. Any person breaking this rule at the discretion of the instructor could be immediately dismissed from the programme.
• The Beekeeper instructors and other participants had to be referred to at all times by their first names.

• No-one could leave camp without permission from one of the beekeeper instructors, and if this was permitted a full reason had to be given (eg; to visit the village, go for a walk etc..), including details of exactly where the young person was going, the time to be away from camp, and the estimated time to return. The young person also had to be in possession of their mobile (cell) phone and be prepared to be contacted at any time if away from camp.

• All young participants would participate in domestic chores within the camp such as cleaning, preparing wood for the barbecue, preparing and cooking food, collecting firewood wood and keeping the camp-fire going.

• Bee Inspired uses a process which is shortened to the acronym “ICARE” (Integrity, Cooperation, Attitude, Respect, and Esteem). This is adhered to throughout all aspects of the programme by participants and staff. All participants were informed this was not negotiable.

All participants were shown how to enter and use their tents, how to maximise available space and store their bags within the tent, they were also shown the toilet and washing facilities available at each one of the sites, as well as the camp boundaries. The barbecue and camp area were also visited as well as the food preparation areas. Everyone was shown how to raise the alarm if there was a fire anywhere on camp, how to use the available fire extinguishers and what was in the first-aid kits if they needed to be used. There was also an understanding that no smoking was allowed during the programme.

All participants were then given the opportunity to ask any questions if they were unsure of anything.

At this point, the comments of some of the young people at each location reflected their mixed emotions at being given these instructions. In particular, the young people in the Azores were familiar with a more formal, disciplined approach to their learning and seemed to respond positively to the rules:
“These rules are fair enough and they have told us straight up!” AZ3-3

“Well we know where we stand, I expected there would be some things that we could and couldn’t do here” AZ2-1

“I saw the PSP (Polícia de Segurança Pública – Public Security Police) had turned up at the beginning dropping off one of the kids, those Police are ugly to us repatriados, so they know we are here, so we better keep our heads down and enjoy” AZ2-3

In contrast to these comments, at the English programme the young people voiced comments that I interpreted as sceptical about this seemingly unfamiliar, disciplined approach:

“ They even made the rules sound “so...nice...” but I'm not convinced yet, but I'll give it a go for now” UK3-1

“All of the adults here seem nice, but I have the feeling they aren’t stupid, so I will give them a break until I sus the system, but this place is remote man, really remote” UK3-3

Some comments from the UK programme went further than scepticism, by outwardly objecting to the rules that had been set down by their instructors:

“ It’s against my European human rights not to let me use my mobile, we are always together” UK2-5
At the Canadian location, the young people, like the Azoreans, seemed more familiar with the formal, disciplined learning environment. However, there were also comments that made parallels between their learning environment and their views of their wider society:

“Canada is full of regulations, so what are a few more to make your life hell. These guys seem decent though”  

“Bonjour !! Perhaps agents of the GRC (Gendarmerie Royale du Canada)? (Royal Canadian Mounted Police)”

“I like the way this is operated, we know exactly what is happening and they don't seem to be too bad to talk to”

**Day One: Lunch**

The programme organisers had purchased and provided each camp with adequate food supplies to cover the entire number of people at camp for the duration of the four days. The young people had to work with their beekeeper instructor and sub-group to delegate responsibilities for allocated supplies, to make sure that the food was used appropriately to last the four days. Cooking equipment in addition to the onsite barbecue was available as well as plates and utensils. It was also important for each of the young people to help clean, prepare and cook the food, as well as clean-up afterwards. These responsibilities explicitly encouraged the team-working and sharing skills that I described in Chapter One. It also allowed for those who felt they had a particularly helpful skill (e.g. cooking) to add value to their team during the programme. In this way, the young peoples’ personal development needs were nurtured. In particular, transferable skills that are valuable for
their future employability in terms of self-esteem and self-confidence; evident in the following comments from the Azoreans and the Canadian participants:

“Some of these Acadian French kids can be bad so us English are keeping in with them and speaking French to keep the peace, and everyone is happy” AC3-1

“I love a churrasco (barbecue in English), especially chicken and corn, so I am up for that, I will cook” AZ2-2

“I’m the best at churrasco on the islands, let me get started” AZ1-5

“My salad and salsa is the best, I’ll do that bit and the batatas fritas (chips - in English)” AZ1-1

“C’est ma vie (this is my life – in English) – I love barbecues, count me in” AC1-2

“Barbecues are fun” AC2-4

In contrast, comments from the young people on the UK programme were less enthusiastic about their duties and appeared to be reluctant to work as a team:

“People cook for me, not the other way round, I’m making that known now” UK1-4

This perceived defensiveness may perhaps have been due to their immature age (described in the previous chapter) and/or a genuine fear of the unknown. For example, they may have been reluctant to be ‘shown-up’ for their lack of knowledge or skills in front of others in their team, as can be seen from the comments from this more enthusiastic participant:

“I want to cook, but I have never done this before, but I’ll try” UK2-4

However, some participants found this a more difficult aspect of the programme to come to terms with. This may be because they were less resilient to the dramatic changes they were presented with, as I explained in Chapter One, Part Two:
“Why is everything so complicated, why can't they just order food in, why do we have to cook for ourselves, that isn't fair is it? And nothing is the way it should be, nothing is cut up or ready? That's just madness” UK1-5

Setting-up camp and logistics

Following lunch, each subgroup attended their section of the campsite with their allocated beekeeper instructor who again thoroughly went through all aspects of how the tent was erected. For example, how to lay their ground sheets, use the sleeping bags and store clothes and equipment to prevent them getting wet and how to close the tent during the night. Safety and security was also discussed including the use of fires on the camp and how these needed to be a safe distance from the tents, as well as how to use safety equipment such as the fire extinguishers and fire blankets. This meant that each of the young participants had gone through this procedure twice within the first couple of hours.

The comments of some of the young people at this point, reflected their growing confidence and enthusiasm for the programme:

“ We all know what to do and if we don't, just ask and they will help us, I'm quite relieved now as I was a bit worried, and my tent is actually better than home” AC3-3

“ Azoreans can do these things easily, our whole life is about nature and the outdoors life” AZ3-1

The nature of this experiential education programme required it to have a sensitive balance between an approach that was perceived as informal and reflective, but also with clearly defined boundaries as to what was expected from all the participants. In this way, aspects from previous successful experiential education programmes (as mentioned in Part Two of Chapter One) were built upon with the objectives of the programme clearly in mind. Indeed, this approach appeared to have a positive impact on the young people, as one individual commented:
“I’ve learnt more in the last two hours than I have all year, and it seems so easy, these people know how to talk with you rather than at you”  UK1-2

(my emphasis)

From this comment, and others, it was evident that the setting of the rules at the beginning of the programme had set some boundaries and grounded some of the young people. This helped to build rapport and respect between the instructors and the young people allowing them to talk ‘with’ each other. As described in Chapter One, this provides an opportunity for a positive learning environment (Pollard, 1996). For the individual above, this was presumably in contrast to their previous learning experiences (discussed fully in Chapter Four).

The UK participants appeared to find it more difficult than those at the other two locations to settle into the rules and facilities that had been provided. For example, for some there was disappointment at the sleeping arrangements:

“I deserve better than this, a tent?”  UK3-5

Bee Inspired in England

England: the four-day programme commenced 8th March to 11th March 2010.

On arrival of the group at the site, all of the young people stood outside alongside the two mini-buses. There was no talking and everyone stood quietly, the beekeeper instructors approached the group to greet them. One of the beekeeper instructors suggested to the young people that it might be useful for them to introduce themselves to each other, as they would be living and working together during the next four days. After a couple of minutes, there was limited interaction between the young people, for instance, introducing their names and where they were from, to the others in the group. This was in contrast to the other two locations, where the participants were openly engaging with each other, as I describe in the following sections. The reasons for this are unclear, but may be partly due to different cultural norms and also the relatively young ages of the participants in this group (described in Chapter Two).
The atmosphere was subdued. None of the young people seemed to be comfortable, enthusiastic or interacting with each other, or the beekeeper instructors. There were no family members, youth workers, police officers, YOT workers or other professionals present at the arrival point with the young people (even though there had been an open invitation for all these adults to attend the commencement of the programme). This may have had a detrimental impact on the young people and their reluctance to interact with each other due to their lack of self-confidence. The young people informed me that they had all independently met their transport to get to the programme without adult support with the exception of two young people who had met the transport with a parent. The young people continued to wait in silence to be told what to do, with the majority of them either texting, playing music or games on their mobile (cell) phones. The beekeeper instructors asked everyone to meet in one large group at the entrance to the site so that they could introduce the programme and start to follow the pre-arranged itinerary. The beekeeper instructors then started to explain the rules, at which point the young people articulated their discontent, specifically in relation to the restriction on mobile (cell) phone use.

The young people who were part of UK programme had great difficulty in understanding why they could not be in possession of their mobile (cell) phones during the main part of the day, which was one of the programme rules. Some of the young people became quite agitated and angry and at least three of them, male and female participants became tearful. Two of them become so emotional that they were shaking as well as crying and needed at least thirty minutes to calm themselves down and refocus. It was apparent that many of these young people were talking about their mobile phones as if the phones were their friends rather than the phone as being a means of communicating with others. This supports international research that suggests the special social/cultural significance of mobile 'phones, because for some they form a status symbol, as well as a life-line to communicating with their friendship network (see for example, Bell, 2006). As I explained in Chapter One, Part Two, there is an over-reliance upon technology like mobile phones which has arguably alienated young people from their natural and social environments. However, we must be wary of placing the blame for this behaviour upon the young people themselves, for as one beekeeper instructor observed:
“The young people have been sent on this programme with little preparation, assistance or support by the adult parents and professionals who are supposed to be caring for them. We have been together for about one hour, however it is quite clear to all of the instructors that the majority of them are very immature, lacking any sense of self discipline, they are generally rude, and are completely unprepared for the programme”

BKI-2

It was evident from my observations of the UK located programme that there was a lack of parental or professional/youth workers involvement in preparing the young people. This was despite the fact that the voluntary organisation had clearly described the programme structure with all the adults in advance, with a request that young people should be prepared to actively participate in all aspects of the programme as outlined in the itinerary. The reasons for this lack of adult involvement in the preparation and commencement of the Bee Inspired programme are diverse. As I explained in Chapter One, Part One, poverty plays a large part in the lives of these young people, and undoubtedly creates a stressful environment for their parents/guardians, which in turn, often leads to the social and emotional needs of these young people being neglected. Furthermore, many of the households that these young people came from suffered from alcohol or drug mis-use issues or other social problems that may have prevented full support from the adults. The funding restrictions placed on the professionals employed to support these young people, also severely limit the time and resources available for them.

The rules and regulations briefing was completed with the UK group after the small group of young people who were upset had calmed down and re-focused on the session. The mobile phones had been handed to the beekeeper instructors for safe-keeping. The remaining part of the session was subdued. The young people began to build a rapport with the beekeeper instructors after the group accepted the rules and regulations. However, as this beekeeper instructor noted, their social skills were extremely underdeveloped:

“The words, ‘please’, ‘thank you’, ‘[…]’, are completely missing from the vocabulary of these young people.” BKI-3
The initial lunch at the United Kingdom programme was a difficult process. The young people were under the impression that they would be ‘served’, when in fact they were expected ‘to work’ together to organise lunch. It appeared from my observations of this group that no-one was clear what to do, so they remained stationary. Many of the young people stated that they had never had a barbecue or made meals before. It was possible that the lack of practical skills that I observed in the UK group were an example of the neglect they had suffered in their past. For complex reasons, as I described in Chapter One, Part One, it is often the case that young people at risk may not have the advantages or access to the social and practical skills that are needed for everyday survival or future employability.

However, to overcome the difficulties of this particular group, and in contrast to the other two programmes, the beekeeper instructors split the young people into three groups of five accompanied by an instructor with each group responsible for particular tasks. This system worked well and after two and a half hours (double the time expected) the group had prepared an eaten together a healthy and nutritious lunch. The young people were very excited at having completed the task successfully. Everyone worked together to clean up afterwards, with several young people clearly stating that they didn't have any experience cleaning-up. The evidence of effective teamwork skills showed that the young people had already matured in their attitude towards their participation in the programme and gained basic and crucial life-skills. The sense of achievement in working together proved to the young people what was possible with support and assistance from those around them.

“The majority of these young people have not had even basic skills in preparing food, cooking, barbecues, laying tables, or even cleaning-up. When supported they have shown that they are very capable, have worked well individually and as a team, and are actually proud of themselves. This exercise and experience has helped everyone to become friends and significantly reduced the awkwardness and tensions that was in place on their arrival. I am sure this group of young people will do well after some initial concerns and reservations on my part.” BK1-3

When the food was ready and the group sat together to eat and drink, for the first time the young people were all talking together, with the main topic being about how good they were at cooking. This was quite surprising to me at that time, considering that several
hours previously at the beginning of the lunch the young people were quite negative about their abilities and interest in lunch.

Due to the difficulties over lunch explained above, the afternoon session in England started about ninety minutes late. The UK young people had clearly bonded with the beekeeper instructors over lunch as the atmosphere was friendly and respectful, and the young people unanimously agreed that none of them had experienced camping. This illustrated to me and to the instructors, what an alien environment the programme must have seemed to the young people, who perhaps felt vulnerable in their lack of practical skills and experience with basic tasks such as cooking and cleaning. The programme had taken them away from their comfort zone and into a new environment which perhaps explained the rather negative comments at the very beginning of the UK programme. According to the research I described in Chapter One and included in Appendix 3 on effective experiential educational interventions, this was an important element which contributed towards the successful outcome of this programme.

To help the young people feel more comfortable with their tasks, the beekeeper instructors talked the group through each aspect of how the tents were set up, the reason for spacing the tents and keeping all fires well away from the tents. The young people also learned how to use the fire equipment. The group became enthusiastic, even though there were comments from some of the young people based on their surprise that they would be living outside. The beekeeper instructors had to spend more time on this exercise than was originally planned due to the lack of previous experience of the young people. At the end of the session, the young people indicated that they understood what had been explained to them and there were no outstanding queries. The level of patience required by the beekeeper instructors is evident in this comment:

“
I was taken aback by the complete lack of knowledge or understanding about camping. The fact that one of the youngsters didn't realise camping meant staying outdoors in a tent, or how to turn on and off a torch light, says it all. I am now sure they are all much the wiser, however we are starting at absolute basics with this group and they need a lot of support”

BK1-1

The afternoon session on bees commenced almost two hours late due to the earlier delays. The beekeeper instructors, with the help of the young people, prepared some
drinks and snacks which helped everyone to relax and prepare for the following session. This illustrated the flexible, reactive approach integral to the programme, which provided the young people with the positive, informal learning atmosphere I described in Chapter One.

The young people were all seated quietly as the beekeeper instructors started the session and from the outset there was full engagement from the participants. This was a significant contrast to the negative behaviour witnessed at the beginning of the day. The young people asked questions relating to the session and talked freely and almost everyone looked relaxed and happy. The visual materials of diagrams and photographs (see Appendix 7) of the honeybee were of some considerable interest to the young people and together with the examples of the dead honeybees for comparison provided an intense investigative learning experience. Several of the young people raised the point that they were happy that the programme was interesting and that they liked the technical aspect of the programme which made them feel “respected” - a term used several times by several different participants. These comments link the theory of experiential learning (as I explained in Chapter One, Part Two) to its practical application; equality and teamwork are integral to the ethos of the Bee Inspired programme.

“A great surprise, the entire group has excelled and all of the young people have done very well. They have learned quickly and their questions have been focused and relevant. They have let it be known that they like the fact that we are involving them in the technical aspects as it is clear that normally for whatever reason they do not have the opportunity to be involved in learning technical information even when interacting in an experiential activity” BK1-2

Several young people expressed concern about being stung by bees following the news that each hive contained between 20-30,000 bees, which caused great concern amongst those within the group. The beekeeper instructors informed them that this would be covered later in the programme schedule but that if they listened carefully to their beekeeper instructor and followed through with their instructions, then this would significantly reduce the chance of being stung but that this was:

“an occupational hazard” BKI-2
This comment was accepted by the young people.

“We are all impressed how well, and quickly all of these young people have become interested in the session. They have been very well behaved and respectful and are really getting into it and enjoying themselves. This easily could have gone the opposite way based on this morning’s experience” BK1-1

The learning atmosphere is integral to experiential educational programmes and this was evident at the end the first day in the UK where everyone was in good spirits and several of the young people thanking the beekeeper instructors for the session and their help. The contrast in the young people’s demeanor was stark and illustrated by this comment from the Beekeeper:

“What a turnaround we have had, the kids have enjoyed themselves and the fact that a few of them have thanked us is a real achievement as they were so unhappy earlier in the day. It is now all looking good for the rest of the programme.” BK1-3

Arguably, this change came about because of the atmosphere and environment of the programme. By virtue that they are living in the outdoors, which is the setting in which they are undertaking their environmental beekeeping experience, the young people are embedded in the curriculum itself. The young participants spend their programme time learning to observe, ask questions, look for details, look for evidence that supports their thinking, organizing and ultimately understanding the scientific and practical aspects of beekeeping.

The afternoon programme had run over schedule by about two hours and it was now time to organise dinner. The young people looked tired as it had been a long day, however they worked in the same groups as they had been placed in earlier in the day, and very quickly they were organising dinner which was prepared in half the time of lunch and everyone seemed pleased with the results. This illustrated that the young people had learned their newly acquired team-working skills and were growing in confidence through getting to know each other better and understanding the strategies of the programme. These are skills which are crucial for the young people to harness if they are to progress their careers
through development of their employability skills and thereby improve their prospects of staying out of trouble with the law.

During dinner, the young people were talking about the days’ events with each other and the beekeeper instructors. The question of the mobile phones cropped up during the conversation and all of the young people had their phones returned to them temporarily. However, surprisingly the majority of them continued to socialise with the group, and even those who did check their phones returned to the group to socialise soon afterwards. This was perhaps evidence that even within this short time-frame, the young people were learning to be less reliant upon their technology for supplying a virtual social world of friends. They were genuinely engaged in the immediate interaction between their new friends, which was for some apparently a novel experience. This was expressed through a question from one of the young people to the beekeeper instructors, which intrigued the group. The young person asked why the beekeeper instructors shook hands with everyone they met. The instructor explained:

“People shake hands, always with the right hand when they meet as a form of greeting or acknowledgement of each other and as a matter of respect. It’s a great way to make good friends and keep them.”  BK1-2

The above question revealed that many of the young people had little understanding of social communication but were interested in learning and were also trusting the beekeeper instructors to assist them in this learning journey. It seemed from these comments and my observations, that it was the very basic skills, those which most of us take for granted, such as preparing a simple meal to eat together, cleaning-up and shaking hands when greeting someone, which were missing from these young people’s experience and knowledge.

Interestingly, the most contentious rule - the one which prevented mobile phone use - became less of a problem for these young people once the reasons had been fully explained to them:

“It looks as if the bee programme has won the argument with reference to the cell phone issue after all and peace has been restored”  BK1-1
Before the young people retired for the night, I was intrigued to watch all of them shaking hands with everyone else in the group - including the beekeeper instructors. In one day, the programme had already made a significant impact, not least in providing these young people with a better understanding of a taken-for-granted, cultural norm in the UK, that for many of us is an everyday occurrence.

**Bee Inspired in the Azores Islands**

The Azores Islands four day programme commenced 15th March to 18th March 2010.

On arrival, in stark contrast to the difficulties encountered by the UK participants, the group of Azorean young people quickly introduced themselves in traditional Azorean style by shaking hands and hugging each other. All the young people were from the repatriado group of young people living in the Azores Islands (explained in Chapter One). There was English and Portuguese (Azorian dialect) being spoken as well as ‘Portuglais’ a term used locally for those who speak a mixture of Portuguese and English often used by those repatriados who do not speak Portuguese well. This group of young people seemed quite relaxed with each other as well as about the programme. In contrast to the United Kingdom programme, I noticed that in addition to the fifteen young people, there were about sixty other people present. These people consisted of various family members, youth workers, a priest, a police officer and various officials. There was a party atmosphere with everyone chatting and one of the young people playing a musical accordion. After about an hour all the visitors left the site to permit the programme to start.

On arrival at the site before being told the rules and regulations all of the young Azoreans were asking which leader was to be in charge of the mobile (cell) phones. It appeared that, again in stark contrast to the UK group, these young people had already anticipated the rule that did not allow them to use their mobile phones during the programme. I was informed by the young people, that at school in the Azores as well as during any community activity programmes, it was not acceptable to have a mobile phone in your presence. This then meant that when the young people were informed later about the rules and regulations, there was no conflict or disagreement with reference to this issue, as articulated by the Beekeeper:
“There is no problem here with the cell phone issue which was experienced in England. All of the youngsters have handed in their phones, and everyone is in good spirits”

BK1-3

The initial lunch at the Azores programme was efficiently organised by the young participants in conjunction with the beekeeper instructors. Unlike the UK participants, the young Azorean participants seemed to have confidence with their duties at the camp and enthusiastically organised themselves into groups to clean, prepare the food and equipment, to cook, serve and to clean-up afterwards. The young people did not need to be shown any of the roles and fully understood how to start the barbecue and to use the other equipment. There was no arguing or disagreements and everyone seemed to work well together. It was clear that team-working within this culture was already well-established and that the young people therefore adapted readily to the environment they were presented with. This may have been partly because of the team-work required for the many agricultural tasks that are common within this environment. This was a completely opposite experience to my observation of the UK group, who as I explained above, at the beginning of their programme, lacked all these basic skills and the basic communication skills that allowed them to introduce themselves to each other.

“This group of youngsters are working together well and efficiently preparing lunch. We haven't had to give any explanations, they are just happily getting on with the tasks and the food looks good.” BK1-1

The young people on the Azorean programme had an advantage compared to the UK young people, because they already had the knowledge, skills and self-confidence that allowed them to fully participate in the programme right from the very beginning. Support from their family and friends had also provided an enthusiastic attitude towards what the programme could potentially provide for them. These factors allowed the positive, informal learning atmosphere to develop from an earlier stage, as explained by the comment from a Beekeeper:

“This group like all the practical aspects of camping and are happily asking questions and checking out the tents. There has been little for us instructors to do or explain, thus far everyone is fine” BK1-2
The use of the visual learning materials had a similar positive impact on the Azorean group of young people as that of the UK group. Their engagement with the learning material was arguably evidence that the young people were able to tap into the different learning strategies to gain the understanding that was required from the photographs and real bees. The young people articulated their consistent enthusiasm for the programme, through their comments and also their body language, e.g. through clapping at the end of each session. All the group appeared genuinely interested in the topic, as described by one of the Beekeeper instructors:

“Several of the youngsters have said they like the session using the comparison between the photo and looking at the actual bees, this has gone down well and kept everyone interested and focused. This system using technical information in an experiential module works well”. BK1-3

“We have a smart, interested and proactive group of young people here who are strongly independent and want to learn about all aspects of what we are offering, which is very satisfying to see” BK1-3

As I described in Chapter One, even with the different teaching strategies adopted to address the different learning styles, it is equally necessary for the learner to be engaged with the topic, materials and the facilitator. Here this is evident, because by the end of the afternoon session in the Azores Islands, all the young people cheered and clapped at what they had achieved together. Many of them got up and shook hands with the instructors, congratulating them for such an interesting session. This positive atmosphere had an impact on the beekeeping instructors who recognized the importance of building rapport and respect between themselves and the young people for the benefit of their learning environment. Commenting how rewarding it was to be involved in the programme, the following were noted from the beekeepers:

“A happy and enthusiastic group, and a pleasure to work with, they are all very well behaved and self-disciplined” BK1-1

“The Azores is such an amazing and beautiful place which is reflected in the young people with us today, it is a pleasure to be here” BK1-2
In contrast to the struggles that the UK group encountered with preparing their meals, the young Azorean people continued to efficiently organize themselves and prepare dinner for the evening. The pattern of the young accordianist playing music in the background was now well-established and accepted by the group, who often joined-in with spontaneous singing. I observed that the entire group had bonded well within the first day, even though they were all from different communities in the islands. Their self-confidence in the practical skills required for the camping experience and their social skills at getting to know one another and working effectively as a team, were completely missing from my observations of the UK group. These are skills that are recognised as crucial when seeking employment, and with this in mind, it was arguably other risk factors, described in Chapter One, which were potentially preventing these young people from staying out of trouble with the law. It is unclear what these factors might be, however, it is possible that the complex cultural difficulties, including self-identity and language and communication difficulties that I explained in Chapter One may play an important part. Upon reflecting on the days events, one beekeeper instructor noted:

“This first day in the Azores has gone better than could have been expected. The young people are well behaved, very sociable and friendly and they all work together to achieve objectives. The only thing which stands out is the language, some speak Portuguese well, others only a little, and some speak both English and Portuguese at the same time which means there are two languages always on the go but everyone is managing to cope. I am confident about this group doing well as they are all very interested” BK1-1

**Bee Inspired in Prince Edward Island, Canada**

The Canadian four-day programme in Prince Edward Island commenced 3rd May to 6th May 2010.

We had been informed that the Canadian group of young people would be arriving in one of two mini-buses, or they would be dropped-off at the site by an adult. At 1000hrs - the scheduled arrival time - no-one had arrived. Culturally, there is a somewhat relaxed attitude to time on the island, and it was over an hour before all the participants had finally arrived. Similar to the observations of the Azores group - in contrast to the UK programme
- the young people all voluntarily introducing each other. Both French and English were heard equally with individuals changing language in mid-sentence.

The fifteen young participants were accompanied by 37 adults who were parents, juvenile justice workers, police officers and youth workers. Like my observations in the Azores, I could see that generally there was a good rapport between the young people and these adults, something that was absent from the UK programme. Like the Azores programme, there was also a general atmosphere of excitement. The adults all showed a great interest in the programme, asking the beekeeper instructors lots of questions about the structure and activities. Comments from the beekeeper instructors at this point included two aspects that had a common theme from the Azores programme, i.e. the level of enthusiasm that the participants (and their adult support) had for the programme and the language issues:

“The group of young people arrived with a small army of adults all very interested in the programme which was very encouraging. The young people themselves are excited and are already socialising with each other and we haven't even started yet, so all looks very promising, let's see what happens.” BK1-2

“All of the instructors speak English, French and Portuguese however we are struggling with the French dialect and accent here and how very quickly everyone speaks, but hopefully this will sort itself out once we get more exposure to the language. The young people are clearly bilingual and switch quickly to and fro, we will need to ensure the sessions are in English as agreed.” BK1-3

All of the young people gathered together in one group with the beekeeper instructors and suddenly everyone started to speak only in English. The young people were all very excited and enthusiastic. The instructors explained the rules and regulations and at that point all of the young people started to hand their cell phones to the instructors with one of them saying this was normal practice in Prince Edward Island and Nova Scotia. In contrast again to the UK programme, there were no disagreements or arguments with any of the young people with reference to the rules or regulations. The perception of young peoples’ over-reliance on technology that I described in Chapter One, appeared to only be the case for the UK participants. Arguably this may be partly due to the adult support available to
the Azores and Canadian cohorts, which was visibly absent from the UK programme. Further research is required into the significance of this aspect of my observations, as I discuss in my Chapter Five in this report. The session passed quite quickly which helped the schedule to catch-up by about thirty minutes, as the programme was running about two hours behind.

“All of the young people without exception are polite, respectful, attentive and full of life. There has been no negative reaction towards the rules and regulations for the programme. Let's see how lunch pans out” BK1-1

Lunch in Prince Edward Island started well with each of the young participants placed in a group of five. There was then a heated disagreement which broke out in very loud French which the beekeeper instructors attended to. The French Acadian young people were quite clear that they wanted to be placed together and not in a majority English-speaking group. This was an unexpected issue, considering everyone spoke English and the programme was in English. Reasons for this event could be partly due to self-identity and cultural norms; it was apparent that some of the young people did not feel comfortable being labeled as ‘English-speaking’, even though the session was informal and English was the accepted common language. This raises the question of whether the Azorean young people would find it easier to engage with their education if this identity issue was addressed.

The beekeeper instructors assisted in reaching an agreement with all of the English and French-speaking youngsters by re-organising the groups by random selection. Even though, through this procedure, the linguistic structure of the groups hardly altered, everyone seemed happy about the outcome. The reason for the disagreement was unclear, but as one of the beekeeper instructors pointed out, this may have been the result of some individuals seeking identification from others for their cultural differences:

“There was no rhyme or reason to why there was a dispute between the French Acadian kids and English-speaking ones about the linguistic make up of the groups, not unless they were trying to make a cultural statement, but everyone is now content but nothing has really changed in the language make up in each of the groups as far as I can see?” BK1-2
Further research is required into the significance of this aspect of the programme (discussed further in the Conclusion).

The three groups then voluntarily organised themselves into work-groups without delegation by the beekeeper instructors. It was evident that during the preparation stage for lunch that all the young people were now speaking French but when a beekeeper instructor would approach they would switch to English, although the substance of the actual conversations stayed exactly the same. They all shared their language skills and seemed unaware of the significance these skills may have for them in terms of employability. This was something that these Canadian participants also shared with the Azorean young people. Their self-confidence and social, language and practical skills would all be extremely valuable within a workplace environment. These were all skills that the UK young people had difficulties with. This is discussed further in the following chapter.

The participants had an opportunity to utilise their skills at preparing and cooking the food and working as a team. this was valuable practice for transferable skills that are required for the workplace.

“These youngsters have excellent skills in preparing food, most have them have said how they love barbecues and have done this type of thing before, and they have done a great job with lunch we have all been very impressed” BK1-1

Generally, the atmosphere during the programme, and especially during mealtimes was very upbeat and it was a similar atmosphere to my experiences in the Azores Islands (e.g. with music and song). As I describe in Chapter One, this kind of optimistic atmosphere enhances the positive emotions that allow a constructive, relaxed approach to learning allowing the learners to create new, contextualized meanings.

The afternoon session ran several hours late due to earlier delays. The introduction to the beekeeping session started with the young people showing a great interest and questioning the beekeeper instructors step-by-step, as they progressed through the session. Occasionally there had to be some translation into French for some technical points of the lesson, however the vast majority of the session and interactivity was in English. The conduct and behaviour of all the participants was exemplary and they
showed a great interest in every aspect. The technical information provided by the instructors was received well and the young people moved quickly through the session with all questions being relevant and focused. The coloured diagrams of the bee made a distinct impression on the young people, who I observed took a particular and unusual interest in it. The enthusiasm and interest in these learning materials and the nature of the knowledge it was conveying to the young people was consistent across all three locations:

“Cool, awesome, none of us could believe that this was the way it was going to be, not boring, really liked to see the real bee and the picture thing was really amazing.” AC3-1

“When she gave me the photo, I was thinking it was homework or something, but this made me feel she thought I was smart.” AC2-3

“Couldn't believe at first that this photo showed the inside of this little bee, the picture tells you so much.” UK1-1

“Why couldn't they do this in school, it’s so easy to learn like this.” UK2-3

“All of us want to know the next bit, but they aren't giving away all the secrets just yet.” AZ2-4

“I'm a bee scientist!!! not a loser” AZ3-5

The above quotes illustrate how visual and kinaesthetic learning strategies can be so effective. These learning materials and methods, delivered by the beekeeper instructors, encouraged the participants to engage with the subject of study. The diagrams provided accessible information with minimal text and the dead bees themselves provided a kinaesthetic application for the contextual understanding of the diagram. As pointed out by participant UK2-3 (above) this was recognised by all the participants as a different approach than that usually undertaken in mainstream classroom settings, as explained in Chapter One Part Two. It could be argued that this non-verbal tactic with limited text helped to address the different learning styles or difficulties of the participants and therefore provided them with an opportunity for creating new meanings (Gardner, 2005).
The demeanour of the young people showed that they were relaxed, confidently asking questions, smiling and the relationship between the young people and the beekeeper instructors was one of mutual respect and trust. The qualities in this learner-facilitator relationship, and the positive impact it has on affective learning strategies is well-established in the literature I referred to in Chapter One.

“The young people are learning quickly and we are pleased with their input and how well they have done. All of them without exception have contributed towards a very successful session.” BK1-3

The session in Canada concluded with the young people giving a round of applause to the beekeeper instructors, which expressed their gratitude for the learning that they had achieved. This was very similar to behaviours I had observed happening at the end of the first day in the Azores Islands and illustrated the appreciation of the young people for having the opportunity of being included in the programme. The personal significance of being invited to be a participant in this programme, and perhaps being included within a piece of research about young people at risk, was recognised by all the young people (although this seemed to take longer for the UK Participants than the other two locations). For example later in the UK Programme:

“[...] this isn’t what we thought it was going to be, just a bit of fun, this is important and could change things for us I think” UK3-5

Summary: Day One (all programme locations)

The beekeeper instructors continually assess the progression of the group as they reach each step of the programme. I observed that they methodically check with each and every participant that they understand what they are learning, and empower them to become actively involved by praising and encouraging them; something that often is not possible in mainstream school environments. This raises their self-esteem and encouraged them to participate in other aspects of the programme, like the cooking and cleaning tasks that for some were difficult, new skills.

Beekeeper Instructors working with different groups could be seen to be delivering the programme as designed, although the time-frames varied, thus giving integrity, as the same process and delivery was provided seamlessly at all three international locations.
Repetition of tasks and the learning experience was constantly evident and once the participants had undertaken tasks several times they mastered what was being asked of them.

Beekeeper instructors used several techniques to engage young people such as empowering those whose attention was temporarily distracted, by immediately giving that participant a leading role in part of the activity without drawing attention to the observed distraction. This was done very quickly and almost always led to a willing participation and interest by the young people. Beekeeper instructors were seen to be giving equal contact time to participants and were not seen to be favouring any particular individual – they managed to be friendly with all participants but at the same time detached and focussed on the experiential learning. This sharing was done on a rotational basis ensuring at one point all the young people were leading one aspect of the delivery. This ensured engagement throughout the programme. This worked well in all three countries, however I recognised that great skill, patience and quick-thinking was required by each of the instructors and that over an extended period of time, this was an exhausting experience for them.

It was evident to me that the beekeeper instructors required techniques of engagement which required empathy as well as humour and professional discipline in addition to excellent communication and relationship building. Fluency in the languages used (although English was the language of instruction) was also a great asset to them and the programme as a whole, as well as great knowledge, skill and passion for the subject of beekeeping. In the following chapter, I examine how this contributed to the positive outcomes for the participants in each of the groups observed in each of the three countries.

The nature of the relationship between the beekeeper instructors and the participants was intriguing. Each instructor had a very friendly disposition, but all had a professional mild disciplinary aspect about them, and it was plain to see that they were full of praise and support, however negative activity or comments were immediately and very quickly dealt with. The setting of boundaries at the beginning of the course was extremely effective in containing any poor behaviour and it was likely that these kinds of rules were unfamiliar to many of these young people, for the complex reasons I set out in Chapter One. I observed the cognitive-behavioural approach of the beekeepers to the behaviour management to be
particularly effective. For example, any young person not engaged in the learning would be asked to immediately reflect on his/her behaviour with a reminder that this was a ‘team’ and that all members had to work together “like the bees”. This appeared to foster a need in the young people to be on their beekeepers’ side. Even the most difficult characters conformed and their good behaviour was positively reinforced at all times.

Beekeeper instructors embed cognitive skills within the experiential beekeeping experience for example by using the visual learning materials with the dead bee to study its anatomy in detail. In this way, the young people were using their newly acquired knowledge in a practical way and in context. As I described in Chapter One, Part Two, like other effective experiential education programmes, from the example of the comments below, this assisted with raising their confidence, not only with their self-esteem, but with their ability to learn.

“I never thought I could learn this stuff, but it’s no problem” UK3-3

The beekeeper instructors were actively working with young participants to solve everyday problems from cooking, cleaning, to setting-up tents and during the actual experiential beekeeping classes this created a positive learning environment.
Vignette Two: Day Two

Itinerary:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>Getting up and breakfast</td>
</tr>
<tr>
<td>AM</td>
<td>Starting the learning, introduction to the day</td>
</tr>
<tr>
<td>AM</td>
<td>The Respiratory System of honeybees</td>
</tr>
<tr>
<td>PM</td>
<td>Bee requirements (including building a kit hive)</td>
</tr>
<tr>
<td>PM</td>
<td>The Digestive System of honeybees</td>
</tr>
<tr>
<td>PM</td>
<td>Dinner, social session and to bed</td>
</tr>
</tbody>
</table>

The day began with mixed emotions from each of the three different locations. I recognised the importance of the different cultural contexts that each of the young people had experienced prior to participating in the programme. For example some of the Canadian and UK participants were not used to getting up early and preparing for a full day of activities:

“Yesterday was really tiring, we worked all day and this morning I feel too tired to think.” AC1-3

“They expect us to make breakfast, why can’t they serve us?” UK3-4

“We were all up first thing but the instructors weren’t up until seven?” AZ2-1

Bee Inspired uses a strategy called “ICARE” (Integrity, Cooperation, Attitude, Respect, and Esteem) throughout all aspects of the programme with participants and staff bound by the process. The beekeeper instructors talk about this with the participants every morning,
evening, and when things are not going too well, as a guiding force for good. I saw how this works well as everyone has signed up to the process from the outset. ICARE leaflets are stuck up at various points around the camp to ensure everyone remembers the principles involved:

“Why must we get up so early, we could have started late, when I complained I was reminded of “ICARE” they have it all worked out here.”  UK1-5

The reluctance by the UK participants to start early was in contrast to the Azorean participants, who perhaps because of their rural farming backgrounds and duties, were accustomed to starting early:

“I wanted to start earlier as we always get up really early to milk the cows, all this waiting makes me worried and bored and its already six-thirty”  AZ3-3

As well as the challenges of an early start, the content of the food supplies was also very different to that which the UK participants were used to eating. For example:

“I don’t like all this healthy stuff, bacon and eggs and sausages and beans and things like that would have been better than all this fancy stuff”  UK2-4

In contrast to the Azorean participants, who obviously enjoyed the healthy breakfast:

“The breakfast was great, they had everything you could want”  AZ1-1

However, these differing views of the food and the schedule did not appear to detract from the overall excitement from all the groups about the continuation of the programme:

“I am really looking forward to the beekeeping today and the others are too”  AC1-4

And the importance to the young people of the team-working atmosphere that each group, in their different ways, had developed over the previous days activities:

“No one in the group is saying much this morning after us all getting on well yesterday?”  AC2-3
For some participants, the evidence of their disadvantaged backgrounds was very apparent. The participants made explicit reference to the poverty I described in Chapter One, Part One. For example:

“The tent is much more clean and comfortable than my house, I could live here all the time, why some of them are complaining I don't understand”  UK1-4

For young people in the UK this is a particular issue, as I explained previously, there is a correlation between the poverty experienced by these young people and their educational achievement which is not present in other similar countries.

Throughout the sessions the instructors gave very descriptive detail and used the visual learning materials to assist the participants make sense of the bee anatomy detail. These visual learning materials seemed to carry particular significance for the young people as a way of creating meanings. The young participants were encouraged to ask questions throughout the sessions. Many of the participants commented on how much they had learnt and their perceived difference in the teaching strategies that were used, compared to their experience in mainstream education. It was noteworthy that these comments were common across all three different locations, indicating that despite the inevitable diverse teaching strategies delivered by different teachers in very different settings, there was something unique about the combined strategies that the Bee Inspired programme offered, that was particularly appealing to these young people.

“School could explain difficult things to us in this way and we would understand”  UK2-3

“My teachers couldn’t teach me this the way these people do”  UK1-1

“I never really thought I could learn this type of stuff, but it’s no problem”  UK3-3

“I now know I can learn anything if it is done right ”  AC3-5

“The instructors take their time, explain everything slowly and repeat everything several times in different ways and use the colour photos to print out the things we need to know and how it all works, this is an easy way to know things, and you can ask as many questions as you like and they don’t rush you.”  UK2-5
The combination of strategies that made the Bee Inspired programme unique are founded in the Experiential Education Intervention programmes that I explained in Chapter One. For example, the kinaesthetic, ‘hands-on’ approach to applying the theory of the bees anatomy is essential to the learning experience for these young people. Young participants are outdoors and doing physical as well as mental work. The beekeeping programme is an opportunity for them to shine because the learning objectives are challenging. The resulting positive rapport between the instructors and the young people also provided a constructive learning atmosphere for everyone.

“You need to listen to everything, it’s intense” AZ3-2

“All of us are finding this difficult but interesting…and we are all understanding so far” UK2-3

For many participants, there was a sense of surprise about their emotional experiences of learning in this way:

“If anyone who knew me at home was told I was learning about the Respiratory System they wouldn’t believe you, but it’s fun” AZ1-3

“First, I was a bit confused why I was learning about the Respiratory System but it now makes sense to understand how something operates, we all need to breath” AC3-4

“Learning the technical and confusing stuff makes the experience of doing the beekeeping more real as now we know how these little things work” AZ3-5

Indeed, for at least one young person, they wanted to maintain their newly acquired knowledge for themselves.

“I will not be telling people I know all this when I get home, but I want to keep doing this as it is really interesting” AC1-5
It is unclear from this quote, whether this young person wanted to keep their knowledge secret because of the emotional significance of their personal learning experience and/or perhaps it was the perceived status of bee keeping as a skilled craft that this individual was beginning to identify with. Indeed, the issue of self-identity and negative self-image was also present amongst these emotions. For example, the following quote demonstrates the conscious awareness of the young person’s perceived stigma being labeled as a young person ‘at risk’ and all that this entails and a change towards a positive learning experience for the group as a whole:

“I am surprised, considering the type of kids that are here, that we are all actually quiet and listening and learning this stuff”  
AC2-4

Indeed, self-image plays an important part in these young people’s perceptions of their learning, which is why developing a positive self-belief is so important to contributing towards their self-confidence. For example:

“The fact that most of us were thick hasn’t stopped them from treating us as if we were clever, and it works as most of us are now acting and sounding clever, including me!”
UK3-2

“You need to be smart to be a beekeeper, there is no way this is for stupid kids”  
AC3-1

At one point in the programme, the young participants were involved in creating a bee hive. They were very enthusiastic about their involvement in the actual beekeeping and to use the new knowledge they had acquired from the previous sessions. Young participants through Bee Inspired have a tangible science experience and explore nature and people in a different structural setting from their normal school experience. It allows them to see education as something other than texts and tests. For example:

“Wow! What’s coming next? We all loved putting the hive together like a puzzle, it was great fun and we all helped each other and worked together”  
AC3-2

“Beekeeping is fascinating”  
AZ3-4
“There are so many things to learn, you wouldn’t believe there was so much involved in beekeeping, you need to know how to keep safe, where the bees need to be to be happy and what equipment you need.” **UK1-5**

The young people from all the three locations continued to demonstrate engagement with the learning process and this helped to maintain their interest throughout the sessions in the programme:

“Every day there is just more to learn, I hope I can remember it all, but we actually do things so you remember better” **UK3-5**

“Lots of things to learn and we haven’t even started yet” **AZ2-2**

The young peoples’ continual engagement and conscientious attention throughout each of the sessions provided another opportunity for them to achieve improved self-confidence and self-esteem. This was because their learning objectives within the programme were continually being completed. By building success in small, achievable steps, the young people experienced personal successes in their learning journeys. This arguably enabled them to visualize future successes which perhaps were previously perceived as unobtainable. As I described in Chapter One, improving self-confidence can encourage young people to try new things and this includes attending training courses and applying for jobs which research suggests will assist these young people stay away from criminal behaviour:

“This was the last session before we are due to meet the bees at the hives for our first real meeting, we are worried but now feel we know about the bees which is good” **AC2-5**

“The bee thing is just about to happen, the tension is rising but the sessions have helped us to understand lots of things and we trust the beekeeper instructors to help us” **AZ2-3**

“The digestive system was easy to understand compared to some of the other things we have learned” **AZ2-4**
‘Learning has become quite easy for us, but I think actually doing the beekeeping will be the big test” UK1-3

“There is fear and excitement in the air now that the beekeeping session is about to start but we feel we are ready” UK2-1

“There has been a big build up to the beekeeping session to meet the bees, I hope it is to be worth it as we are all ready” AC1-1

“The beekeeper instructors have helped us through each bit of this, now we need them to show us how to do this for real, everyone is up for it” AC3-3

“We asked ourselves why we would want to know about all these things about the bees like the respiratory and digestive systems, now it makes more sense and when we see these bees we will know what is going on, so it makes sense” AC2-1

The profound personal significance of all that the programme had delivered for the young people was articulated by this quote:

“Now we have learned all of these things the last few days, now we are going to meet the bees we feel we really know a lot about them, this isn’t what we thought it was going to be, just a bit of fun, this is important and could change things for us I think” UK3-5

There were also comments that related to the wider context of what the young people were now learning. For example, the fact that what they were learning may be useful to them for their future careers:

“You could make a great job out of this, and it would be interesting” AC2-2
Anticipation of perceived danger

During one of the lessons, it was stressed to the young people, how important it is for a beekeeper to always stay calm and in control, and to always ensure that they think about safety, such as wearing their protective suit, gloves and good shoes. The perceived risks inherent in beekeeping were also articulated later at the focus group meetings, however, at this point, some of the participants commented on their initial feelings towards this risk and uncertainty (explained fully in Chapter 5) and set the scene for the shared anticipation of the perceived danger (and its inherent excitement) that they faced:

“ When they said each hive had about 40,000 we couldn't believe it, no one said a thing, we all just looked at each other” UK2-1

“Heck that's a lot of bees to face up to” AC1-1

Indeed, I observed a dramatic over-exaggeration of the perceived risks by many of the young people, illustrated by comments such as this:

“I was worried about the bees, but 30,000 plus means we must listen to what they are saying, one wrong move could be fatal” UK1-1

“I'm glad we have done all of this getting ready first, because this is a lot more intense and responsible than I ever imagined, I will stick like glue by the instructor” AC3-2

“These guys are cool, anyone that can face 30,000 bees, each with their own stinging weapon must have guts, or be mad, either way they deserve respect, buddy” AZ3-2

“ Nothing is worrying me apart from the number of these bees we have to manage, it’s just terrifying, one of the scariest things I can ever remember, and I haven't done it yet, we are all a bit edgy even the big guy looks nervous” AZ1-3

As I explained in Chapter One, a reason why young people at risk engage in criminal behaviour is often related to thrill-seeking in the adrenalin rush experienced in exciting
risk-taking behaviour. It was apparent from the young people’s comments, and my observation of their fearful reaction, that their perception of the inherent danger that the bees posed (i.e. the threat of their sting) provided a new and uncontrollable dynamic of risk, danger and uncertainty that was beyond anyone’s control (even the beekeepers’). This is discussed in more detail in the following chapter.

This element of risk may have contributed to one of the most striking things about my observations of the beekeeping lesson: that of the positive engagement with the subject and the young peoples’ enthusiasm for learning. From the comments afterwards, there appeared mixed feelings about why the first two sessions were so successful. For instance, language difficulties had previously been a problem for some participants’ learning, whilst for others, the coloured diagrams (see Appendix 7) provided a valuable tool for understanding the technical elements involved in the programme. The element of excitement which retained interest (described above) was an homogenous factor. Again, this illustrates how the different learning styles were addressed in a relaxed and informal atmosphere that encouraged active discussion and involvement.

“The bee photocards are just awesome, what a great way to share information, and making something so difficult so easy” AZ1-4

“I thought, no way, there is no way I am going to get this, but actually I understood everything as it seemed to make sense, step-by-step and it was clearly explained and pointed out on the photo” UK1-1

“How can that little thing be so technical? It’s good to know how it all works” AC2-2

“I thought the others would jump ship and take me with them, but everyone is happy and we are all talking and making friends” AZ1-2

“This has helped my English, at school they don’t care we speak French at home and in the street. When we have a problem here they quickly translate into French to help out – that’s smart, they’re smart, and we then get the point” AC3-4
There were also references to the respect and rapport between the instructors and the participants, for example:

“Why shouldn’t we know this technical stuff? These bee teachers tell us everything in an easy, no nonsense way like adults.” AZ3-4

_Vignette Two: Day three_

The itinerary:

- Getting up and breakfast (AM)
- Starting the learning, introduction to the day (AM)
- The Nervous System of honeybees (AM)
- Larva (AM)
- Sting (AM)
- Lunch
- Visiting the Beehives and the basics of beekeeping (PM)

As explained in Chapter Two, specific details of the young people’s learning disabilities were not captured by the questionnaire\(^{12}\). However, as I explained in Chapter One, research confirms that many young people at risk suffer from complex communication and language difficulties (e.g. Cross, 2004). Using teaching strategies which focus on visual or kinesthetic learning techniques can be extremely beneficial for these young people in helping them to engage with learning. Many who do not do well in a classroom setting, excel at outdoor experiential learning programmes such as Bee Inspired. For example, in the quotes below the young people articulate how they understood the detail of the

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\(^{12}\) As discussed later, further research into this area would benefit from a more detailed investigation into the details of any participants’ disabilities and also their learning preferences, prior to the experiential learning programme.
honeybee’s anatomy, and how enjoyable the process had been for them:

“Quite a few of us were interested in the fact that if the head is cut off it still keeps moving, now we know why” AZ1-4

“You would think that this would be too difficult to learn but it’s easy with the photo and the instructor explaining” AZ2-2

“Without having the coloured photo it would be impossible to understand this, but it’s very easy” UK1-4

“Honey seems a long way off at the moment but building the hive was really enjoyable to me and the others” UK1-2

One of the sessions of the days’ programme provided details of the bees sting, in terms of its anatomy and potential physical impact on humans (see Appendix 7 for full details). With the details of ‘the sting’ in mind, the participants became consciously aware of the perceived risks of working with the bees. However, this session allowed them to better understand these uncertainties, which offered a sense of context to their previous fears. As I mentioned above and I explain in more detail in Chapter Five, the risk factors were strongly linked to the affectivity of the young peoples’ learning.

“I am glad that we weren’t told about this until the last days, as I would have been too scared to continue, now I know why we have to be careful and wear the suits properly as we have been told to.” AC2-2

“What the hell, we didn’t know about this, probably a good thing, we were right to be scared” AC3-4
“After learning what to do I am less scared about being stung” AZ2-5

For some participants it was the beekeeping itself which offered the unique sense of risk and inherent danger that they perhaps found an attractive aspect to the learning process itself:

“I think we all like beekeeping because it is interesting but also because of the risks which gives this the edge over other things” UK3-2

“Respect or get stung” UK2-1

“we all had to prove to the instructors that we knew what to look for and what to do immediately if someone looked as if they were in anaphylactic shock, we would all do the right thing straight away, they made sure we understood it all, we had to go over it several times, over and over so we don’t forget” UK 3-3

The afternoon session on this day provided an opportunity for the young people to physically come into contact with the bees and to do some maintenance on the inhabited hives. I observed the following comments from the participants which illustrated how important this experience had been for the young people. This appeared to be a consistent experience across the three locations. For instance, this session had provided an unique opportunity to bring together all the aspects of their learning objectives over the previous sessions:

“Putting on the suit and getting ready was fantastic, really awesome, I will never forget how I was feeling and no one got stung” AC1-2
“No other type of class is like this, my heart was pounding, boom, boom and I wasn’t at all sure what was going to happen next.” AZ1-5

“My whole body was shaking as I thought that this was going to be scary but I loved it, we were all okay, no one was stung as we did everything we were told” AZ1-2

“The beekeepers were friendly but serious all the time, checking we were all wrapped up, I think that helped us realise we needed to listen” AC2-4

“No one misbehaved as we were all rather excited, afraid, worried, a little bit of everything.” AC3-3

“Actually seeing the bees and hearing them was cool, awesome, terrific” AZ3-1

There were also comments from the young people that re-confirmed the results from the quantitative data (Chapter Four, Part One) that provided evidence of a reluctance from many of the participants to be with others when learning:

“At last, something I can do well and I actually like, and I don’t need to be with other people if I don’t want to, which I prefer” UK2-5

But the positive aspects of the learning experience were often explicitly spoken and linked to the fact that for many of the participants the difference between this and other learning experiences was the positive personal sense of achievement:

“At last it’s over, but like the others I have decided I want to keep doing this and I am not scared anymore” UK3-4
“There has been WAY more to learn here than any of us thought possible, this is like doing a Diploma” AC1-4

“The sounds of the bees was amazing, really cool and comforting at the same time” AC2-3

The Bee Inspired programme is less prescriptive than a typical school setting. Because there is “no clock on the wall,” the beekeeper instructors can, and do, use their emotional intelligence and limit/extend activities based on the young people’s interest and needs. The beekeeper instructors follow a schedule, but it is somewhat less restrictive than that of the regular school day (e.g., they can extend a session for an extra twenty minutes or more if the young participants are interested in something particular, often described, “at that ‘ah-ha’ moment” of learning. They can also change direction completely if something is not working or engaging the participants. This can be done seamlessly and works well in maintaining the attention of the participants). The teaching strategies also included repeating important aspects of the information many times to the participants, this, together with the dramatic impact of the visual learning materials seemed to have a positive effect on their ability to retain the information about the bees:

“I feel as if I have been doing beekeeping for years, there has been so much information and things to learn, but I have remembered most of it” UK3-3

The Bee Inspired programme environment is set up for young participants to succeed and feel good about what they can do from the outset. The instructor beekeeper to young participant ratio of 1:5 definitely helps. The young participants appear to pick-up on that and think ‘ok, this is an environment where everyone gets noticed, and I can shine here.’ As can be seen in the following quotes:

“This programme is in touch, it talks about something and repeats it so many times you just know it naturally, it’s better than normal learning for me” UK1-1

In line with other behaviourist learning strategies, when participants do something right, they get recognized. One success builds on another; answering questions or making
observations; exhibiting some good table manners at meals; keeping the tent tidy; helping to build the camp fire; cleaning the dishes and preparing breakfast - these duties all help score praise points from the beekeeper instructors which the young people were perhaps not used to receiving and were therefore greatly valued by them.

Days 2 and 3 in all three locations
I continued to observe the clear-cut contrasts that were evident at the beginning of the programmes between the behaviours of the UK participants, compared to those of the Azoreans and the Canadian groups. For example, the beekeeper instructors had to help prepare breakfast with the UK young people, and because most of the group usually never ate breakfast, explained how to make certain items and also the reason for eating healthy food. The beekeeper instructors were at times quite surprised and disappointed by the regular negative comments from the UK young people who were very demanding and expected everything to be done for them, and appeared to have little knowledge or skills of how to undertake basic chores and responsibilities. For example:

“The young people from the UK surely do complain a lot, about almost everything. We have had issues with the fact that they have difficulty in getting up out of their beds in the mornings. They have initially had to be shown how to do almost everything, they have been unable to undertake even the simplest chores without guidance and support, we have been pleased with their progress though, they are quick learners”. BK-2

“The UK youngsters have struggled to understand that they are not here to be served, but to actually participate in the activities. It has been a hard lesson for many of them. It is apparent that at home many of them do not participate in chores or have responsibilities” BK-1

Even by day three of the programme great effort was still required by the UK young people, to be awake, washed and dressed and prepared for the day ahead by the expected time of 0800hrs. The beekeepers encouraged this small but important achievement with lots of praise. The significance of the apparent lack of self-motivation amongst these young people is likely to have had an impact on their everyday lives. The discipline of a structured day at school (or work) would not be easy to integrate with these young people’s current attitudes. Furthermore, it seemed that the physical absence and
perceived lack of support in relation to the Bee Inspired programme from adults such as parents, guardians or social workers, would compound the difficulties for these young people.

In contrast, in the Azores Islands the young participants were all up by 0500hrs. This is normal practice in their culture as most young people are either employed on farms or assist with household chores before going to school. The beekeeper instructors awoke at 0700hrs and were pleased to discover that every preparation for the day had already been fully completed by the young people.

“It is evident that many of the Azorean youngsters come from economically challenged and difficult backgrounds but they all know how to do chores, from cleaning, cooking and keeping their tents tidy, they without exception have no difficulties with chores, they all work together and they are generally polite.” BK-3

“The Azorean youngsters are a little rough round the edges but it would be hard to find nicer, more respectful, and hard working youngsters, nothing is too much” BK-1

Despite the excellent rapport between the instructors and the young people in the Azorean group, illustrated by the comment above, the early starts proved an area for some tension between them. As the young people were keen to start earlier than the schedule outlined, a compromise was agreed so that for the remaining days of the programme the start time would be 0600hrs rather than 0800hrs.

“The Azorean youngsters have issues with the instructors as they are all up and about at about 0500hrs and we don’t rise until 0700hrs, we are discussing a joint venture of rising at 0600hrs. This is obviously a cultural thing as in the UK we couldn’t get the youngsters out of their beds, the Azoreans often get up to milk cows early, so we have learned.” BK-2

The UK group of young people did not have the deeply embedded cultural attitudes of the Azorean participants in that without the contexts of these agricultural duties and the importance of maintaining the family unit, maintaining their self-motivation was challenging. The perceived lack of any adult support for the young people from the UK
location compared to that of the other two locations, was pointed-out by a beekeeper instructor:

“We have not received any calls from parents or professionals asking how these UK youngsters are doing? And we haven’t had any of the youngsters asking about their parents or workers during their time here. It is almost as if they have no connections with these adults who are supposed to be at the forefront of their lives”.  BK-2

In stark contrast to the lack of adult support for the UK young people, the Azorean young people appeared to have an excellent community network:

“There have been numerous telephone calls and messages to us over the last days from workers, parents, the police and the priest anxious to know how the (Azorean) youngsters are doing and did we need any help?. There is surely a very close community spirit here which is evident in the way the young people work together and treat everyone with a basic level of respect”  BK-2

As I explained at the beginning of Chapter Two, all the young people on the programme came from troubled backgrounds, for instance, they may have parents with alcohol dependency and/or been violent. However, it was apparent from the different levels of communication from the adults in the three different locations, that the nature of the family structure and its interaction was significantly different for the UK young people. For example, later in the UK programme, one of the young people made a direct comparison with the bees and his/her own experience of being part of a family:

“I want to see the bees again tomorrow and make sure that everything is okay, they depend on us to help them I suppose it’s like having one massive family depending on you, but like kids they can turn on you”  AZ3-3

In Prince Edward Island, the Canadian young participants were up promptly at 0700hrs. In contrast to the Azorean young people, who took initiative and delegated the duties amongst themselves, without the help of the instructors, the Canadian participants waited to be instructed about their duties for preparing breakfast. They showed little emotion and no opinions or comments were uttered. However the tasks were efficiently completed and on being praised for their efforts it was evident that they were unanimously delighted that their efforts had been recognised. It seemed that rather than take initiative themselves,
these group of young people, in contrast to other two groups, were used to taking instructions from adults and thrived in a highly structured, disciplined environment. This was arguably because, contrary to the other groups, this approach matched their prior experiences.

Day three of the programme saw the young participants attending the apiary at each location where they were given the chance to “meet” the bees. Meeting the bees was a key aspiration of the majority of the young participants who had, during the past days learnt a lot of information about bees and bee-keeping. I observed at all three locations the trepidation felt and articulated by the young people when finally they were given the opportunity of approaching the bees.

The instructors were very aware of the young peoples’ fear, but did not mention their apprehension, concentrating instead on ensuring the participants understood what was expected of them during the beekeeping session and made sure that all of the participants were properly protected with their bee-suits. Each group went through the session successfully. Fortunately, no-one was stung at any of the three locations, which arguably may illustrate the competence of the young people in adapting their behaviours towards the bees and following instructions. Many of the young people were very excited about their experience and were very positive in their feedback about the beekeeping session (as per the focus group findings) and this was the case in the UK, Azores and in Canada. The beekeeper instructors felt that the sessions had gone well in all three locations and they were impressed by the participation, the skills, the interest shown, and the conduct of the youngsters. The young people were making very positive statements about their experiences on the programme and their expectations of continuing with bee-keeping beyond the programme.

The Bee Inspired programme maintains specific standards of behaviour that are expected from all participants and beekeeper instructors act immediately on the slightest sign of discontent or bad behaviour, and the young participants almost without exception respond to the tight conduct rules in place. The rules are promoted as being a ‘joint pact’ between the participants and the programme. The programme ethos saw even the most reluctant of young people participate in all aspects of the activities, chores, learning, social gatherings etc. However, perhaps not surprisingly given my previous observations, the issue of behaviour management was more prominent during the UK programme:
“The conduct of the UK youngsters has been really good over the last two days but the instructors all need to constantly jump in and calm them down and remind them of the “ICARE” (Integrity, Cooperation, Attitude, Respect, and Esteem) rules that they have agreed to, including the issue of swearing. This does work with them, but clearly if we didn’t have this in place these youngsters would be more than a handful.” BK-3

The social skills of the young people at the UK programme was also a problem. This included the constant use of bad language which could be offensive to many and may be preventing these young people from progressing in their educational and professional careers. As I explained in Chapter One, Part One, this is a disadvantage which these young people cannot afford.

“The issue with mobile telephones has not resurfaced over the last days as they all seem too busy but the UK youngsters are struggling with bad language. Every few words seem to be swear words which are against the rules here. They are all self regulating and controlling themselves with this but it begs the question what the parents, workers and schools are doing with these youngsters, as they are unable to string a sentence together without swear words included. As this is a particular issue with all of them we have decided to try and regulate this by encouraging them to recognise the negative aspects to their lives of using bad language continuously. Many of them were unaware they were actually swearing all the time”. BK-1

The normalization of bad language for these young people plays a part in preventing them from effectively communicating with those around them – including their teachers and youth workers. Without reminders from adults about what is and is not acceptable behaviour, it is easy to see how these behaviours would not change and may therefore potentially hold them back from successfully interacting in job interviews or meetings with social workers.

“The UK youngsters have excelled with the practical aspects of the programme, building hives and anything physical, once they are shown they are easily motivated to working hard to complete the tasks. They have also flourished learning some of the technical aspects of the sessions using the photos. Many of them are surprised at how well they have achieved things so far. Overall they are doing well.” BK-3
“The young Azoreans have struggled with some aspects of the technical learning in the sessions but with repetition they have picked up all the main themes. With reference to the physical or practical aspects to the sessions all the Azoreans have excelled.” BK-1

“The lunch and dinner periods continue to be very sociable and great fun, the Azorean young people have a great sense of humour and an ability to talk at length about anything” BK-3

The young people in Prince Edward Island have really worked hard and contributed towards all aspects of the programme as requested, it has taken several days for them to relax and socialise, however they behave very well and are very disciplined. BK3

The young Canadians are experienced with reference to cleaning, cooking and most of the chores that they are asked to do. They are generally well behaved and well spoken, they take directions seriously and they are very focussed with excellent participation during the sessions. BK-1

The young Canadians talk about their workers, their teachers and their parents quite often and normally in a positive way, although they have made it clear that they like the experiential aspects of this programme, we get the feeling that they do not dislike their school experience here in Canada. BK-2

The Canadian professionals and some of the parents and guardians have called us to ask how the young people and the programme are going. In fact we have also had several who have turned up temporarily at camp (unobtrusively) which we have found to be supportive towards the young people and our efforts. BK-2
Many of the Canadian young people are showing positive signs of their confidence increasing and most definitely they are all socialising better than when they first came here. All of them are very well disciplined and never refuse to carry out a request, they continually say Sir, Monsieur, Mam, Madame to the instructors and they are all very polite almost all the time which is not what we were expecting. **BK-3**

The intense nature of the Bee Inspired programme schedule definitely helps to reduce behaviour problems and encourage interest among young participants as they are busy from the minute they get up through until they go to bed exhausted at the end of the day. The closing comments from the young people illustrate this:

**“I think I will sleep well tonight as I am really tired”** **AZ2-4**

**“I have enjoyed today even more than the other days”** **UK2-4**

**Vignette Three: Day 4 (final day)**

Getting up and breakfast (AM)

Starting the learning, introduction to the day (AM)

Meeting the bees – reviewing progress (AM)

Reflection session, feedback (Focus Group 2 ) (AM)

Lunch, Final goodbyes and returning home (PM)
**Day Four (final day) in the all three locations**

In contrast to the beginning of the programme, the final day in the UK saw all of the young participants up, washed and dressed and preparing breakfast just after 0700hrs. Making breakfast no longer seemed to be regarded as a chore by the participants. I witnessed all participants actively involved in both the preparation as well as the social aspect of the session, this was quite a contrast compared to the first breakfast when the young participants were unable to prepare the breakfast through lack of experience, knowledge and skills or in some cases a personal reluctance. Indeed, it was evident from listening to the young people that they generally had no regular schedule at home (e.g., homework, bed times, chores). For example:

**“We all make breakfast, sit, talk, and this is the way it should be, back home I have never done it.”** UK2-2

**“All of us can cook and make the breakfast, a couple of days ago we didn’t know what to do.”** UK1-3

For some of the UK, and in contrast to the other participants in the other two locations, the fact that the programme offered them some personal safety and security away from the perceived danger of their everyday lives was significant:

**“Everyone here was very safe because of the strict way this camp is, we were pleased with this and it made the whole experience much more enjoyable, no drugs, no violence, no bullies, no smoking, no drunks, it may sound boring but it was far from it”** UK1-4

It is interesting to compare this comment to the perceived danger of the bees that I explained above. Perhaps the different kind of ‘danger’ perceived to be offered by the bees, was the important factor in the learning experience for these young people from the UK. This is discussed fully in the following chapter.

At this stage in the programme, it was evident that everyone in the UK programme was working together as a team, and the group had bonded together with good social
relationships between the participants and also with the adults present. Many of the participants openly admitted to the group how they felt that they had benefitted from the programme. They also commented that they had made new friends and several of them felt that they were good at beekeeping and wanted to continue.

“Beekeeping is for me, I like the fact that I can do it by myself but can have friends who understand the difficult points, unlike normal kids who just waste their time on unimportant things”  UK3-1

“I have a feeling beekeeping is like drugs, drink, sex, and religion, its addictive but if you need to be an addict it’s a good fix”  UK3-5

“It would be fair to say that most of us will probably be doing beekeeping from now onwards, I have that feeling”  UK2-4

Bee Inspired participants all interact with one another throughout each day of the programme, living, eating, socialising, and learning together. They are deliberately combined with participants from other sub-groups during breakfast, lunch and dinner and social occasions. This clearly assists young participants who have difficulty creating positive peer relationships as it gives them a fresh start or second chance in making friends.

“I will miss eating breakfast and dinner with all my new family here, I can’t face going back.”  AZ1-5

“These people are the friends I have always wanted, this is our last breakfast but I will keep in touch.”  AC1-5

“We are arguing now about who will do jobs, when we first came no one wanted to do anything”  AC3-2
In the Azores, as before, the young participants were up and ready at dawn and the beekeeper instructors were also up and about just before six in the morning. The breakfast was all prepared by six-thirty. In Prince Edward Island, Canada the young participants approached breakfast the way they had from the start of the programme. Everyone was up, ready and breakfast prepared on schedule. In all locations, there were comments from the young people which illustrated their enthusiasm for the day’s learning: ahead of them:

“All of us were excited about meeting the bees again” AC2-1

“Yesterday with the bees was fantastic and it was worth all the efforts, today will let us know if we are still as interested” AZ2-2

The Canadian participants all had very controlled, polite and subdued attitudes, which had been evident to me and the other adults throughout the entire programme. In contrast to the other two programmes, there was a detached feeling between each of them and between them and the beekeeper instructors, which was hard to explain or define. During one of the discussions, one of the young participants made a comment which could throw some light on this matter:

“In Canada we are controlled in everything we do at every level, Canada is a modern version of old fashioned Communism, from crossing the street, to recycling, to litter control, to smoking, buying alcohol only from government stores, we are kept down all the time, you step out of line and a uniform turns up or your neighbour calls up and reports you, at school we know its heads down. Here we have all enjoyed it and everyone is so nice, but we have stuck rigidly by the rules just in case” AC3-3

At this point many of the others agreed. They were used to having to conform to rules and they just automatically did this during the programme. This supports the findings from De-Gusti et al., (2009) explained in Chapter One, Part One, which outlines the high-level police attention given to youth in Canada. However, this issue did not prevent the participants from being very positive in their comments about the programme. They had appreciated how it had been run, their personal experiences and the fact they had made good friends. In particular, they commented that had enjoyed and respected the support of
the beekeeper instructors and had developed personally and learned new skills during the week:

“All of us have become great friends because of these bees” AC1-2

“I will look at things differently now after this course, I can do anything and I am not stupid like I have been told all my life” AC3-5

“Bees? What can I learn from bees? That’s what I thought. Well was I wrong. These bees have taught me a lot about my fears, and about me. They have taught me that respect is a two way game, don’t give it, don’t get it. Simple.” AC1-3

The UK participants required much more support than the other two groups. They required assistance by the beekeeper instructors to help them get into their suits and prepare for the final beekeeping session. The arrival back at the hives was met excitedly by all the participants at all sites, however, importantly, upon approaching the hives, all of the young participants fell completely silent. Any questions were in a low voice and everyone did exactly as they were asked by the beekeeper instructors.

It had taken more time than with the other groups to get an insight into the Canadian group’s attitudes and motivations and to begin to understand the individual personalities. The reasons for this are unclear and demands further investigation.

Like the UK participants, the other two groups of young people also hoped to continue their beekeeping:

“Well I will be continuing with beekeeping and I think we all will.” AC1-1

“I would like to thank the beekeepers and the bees for all of this, as it has helped me, and I have had a great time. I want a job doing this all the time.” AZ2-5

At all locations, all of the participants helped dismantle their tents and pack-up all the equipment. This was done efficiently at all three sites, illustrating the team-working skills that the young participants had developed over the short time during the programme. It
was apparent that mealtimes in particular had provided an opportunity that was a new experience for many participants, not only providing the physical benefits of eating healthily at regular times, but also the social aspects that others take for granted, but often are lacking in these young peoples’ day-to-day lives:

“Now I eat breakfast every day, this is the first time I have done this.” AC2-5

The comments below illustrate the participants’ general opinions and reflections about their experiences during the programme and reflections on its completion. For these participants, the programme had provided a dramatic change from their day-to-day lives and a positive learning experience. Some were already planning changes to their lifestyles, behaviour and attitudes:

“In less than a week I have learned more than in my whole life for sure.” AZ3-5

“The reason I like beekeeping is that it has proven to me that working together like the bees do, gets things done” AZ3-2

“Bees are amazing, they let you enter their world but they have taught all of us something about ourselves” UK1-2

“I think I will have more respect for myself, I will be more open to other people and I already have more respect for other people, and I realised that people can actually like/love me.”

“Perhaps this has given us all opportunities to sort our sad lives out, at least the bees don’t think we are sad or useless, they just get on with life” UK1-5
“I will be more happy, and treat people at home better” AC3-3

“I have enjoyed the whole week and now I realise I have to go back, but I will be going back quite different” AZ3-4

“When I return to my life, I hope that I will be more confident, outgoing and pleasant around good people. I hope to become more involved with good friends and school and do my beekeeping to help keep me calm” AC3-3

“My worker told me this would change me as she has seen this work for other kids. She was right and I love her for sending me here.” AC3-1

“I believe I will be more open in school and try to continue expanding my love for bees” AC2-3

“This programme has made me realise I need to say sorry to so many people and I will think “ICARE”, every time I speak with my friends, family and officers and I know this will help me more than hitting out” AC3-1

“Meeting new people and doing new things was what this programme [has] done for me” UK2-3

Overall, as can be seen from the comments above, the feedback from the young participants at all locations, was overwhelmingly positive about their beekeeping experience. The final session at each location was followed by a final focus group (described in the following chapter) this was then followed by lunch and final goodbyes.

The final lunch at all three locations produced evidence of a mixture of emotions from all the young people. Understandably there was relief, founded on the understanding that the
programme had gone well at all locations and had been a great success for all involved. There was also a sense of excitement from all present because they felt that with their new skills, experience and self-confidence, there were great opportunities for everyone for the future. However there was also a sense of sadness that the programme was ending with the recognition of the challenges ahead when everyone returned home. The young people at each site responded to the end of the programme in the same manner.

However, there were inevitably some significant differences between the endings of the programmes in each of the locations. In the UK programme, the young people asked a representative to stand and thank the beekeeper instructors for all their help, for their support and for believing in them all. This was then applauded by all the young people who all started hugging each other and shaking hands in a very positive atmosphere which included promises about keeping in contact. As lunch ended one parent came to the site to pick-up their child, but all of the other participants prepared to take the arranged transport back home. On parting, I noticed that some of the young people were in tears. The beekeeper instructors' reflections on the overall programme were hopeful that despite the short time-frame for the programme, that they had provided enough of a contrast to the young peoples' daily lives to make a difference to their future learning:

“What a transformation in many of them. All great kids, and they did so well in such a short time. I really feel that many of them will continue with their beekeeping, however they have learned a lot more than beekeeping: swearing has dramatically reduced, they are better behaved and self disciplined and above all you can see that many of them look happy which was not the case when they got here. Time will tell.” BK-3

“I am so proud of many of these young people, what an amazing feeling when over a few days you see such advancement, they do it themselves, we just help” BK-1
“Four days is not much time, but it’s amazing how kids can learn when given the opportunity and in the manner which suits them. Experiential learning often benefits these types of kids, they are often really smart and quick but in a way that school doesn’t often tap into. In a way, they get into trouble due to the fact many of them are very smart but frustrated and take the wrong path. Give them a great challenge in “their” comfort zone and you get great results, beekeeping ticks these boxes for these kids but also there is something about bees. Bees are social creatures, they have an organized society and get things done. This is what is missing in many of these kids’ lives, when they are with the bees, they enter and become part of their organised community. It’s so easy, throw in the risk of getting stung, and it is the perfect recipe for these kids.”  

BK-2

“The youngsters from the UK came to us starved of direction, discipline, support and love, we have done as much as we can in a short time, now they are driving off back to their world, but armed with positive experiences and knowledge, let’s hope”  

BK-1

Instead of a thank you speech, the Azorean participants all sang a joint final song for the beekeeper instructors, with the accordion playing and it was a very upbeat event with smiles and tears simultaneously. It was evident that the Azorean participants had made great friends and they all had excellent relationships with the beekeeper instructors. On leaving, the Azoreans were surrounded by family members, workers, the police and the local priest, all of whom had attended to support the young people at the beginning and end the programme. It took some two hours (with the musical accompaniment) for the goodbyes and be completed within the group. The beekeeper instructors’ reflections on the Azorean programme sum-up the participants’ development over the four days:

“Some of the nicest and most friendly, helpful so called “bad kids” that I have ever met. They are all so wanting to be successful, but trapped in poverty and problems which are more linked to their parents than themselves. This programme has really helped them on many levels but above all they have some skills and friendships and I believe that they will continue to keep bees well into the future in one of the world’s most amazing and most beautiful places”  

BK-2
For at least two of the beekeeper instructors, the experience had also been educational for them in providing an insight into this somewhat different group of young people and their cultural context:

“We will really miss these youngsters, they have taught us so many things about friendship and happiness in the face of austerity” BK-1

“Community support and loving people will help these kids as they go forward, we have never seen so much community support available on any of our programmes, they all have enjoyed the experiential aspect of this programme and love the beekeeping so the future looks sweet” BK-3

In Prince Edward Island, Canada the young people were more animated and positive than I had seen them at any other time throughout the programme. There was a lot of positive feedback and enthusiasm about the future and a lot of talk about how they could all work together with their beekeeping in the future. The Canadian participants decided to speak in French during the final hours and they were very thankful towards the beekeeper instructors. One by one, they all personally thanked the instructors for everything they had done. Several professional workers and parents turned-up at the camp at the end of the session and the young people were very enthusiastic about telling them about their experiences. As the young people left there were exchanges of personal details and a lot of hugging, crying and waving - which was the most emotion seen by them during the entire programme. The beekeeper instructors commented on how exhausted they felt at the end of this programme. This was particularly down to the French language issues, as everyone had found the particular spoken dialect challenging but interesting.

“The Canadian youngsters were a joy but were incredibly difficult to breakdown the rigidness of the way they would just follow orders and processes without any argument or questioning, almost without exception they just followed rules. All of them said they loved the beekeeping, this is understandable as beekeeping requires concentration and observing some clear rules of conduct which seemed to suit the Canadian rural temperament well.” BK-3
“Very friendly, very respectful and eager to learn, the only real difficulties here in Canada is with the languages, it’s not actually the languages, it’s the historical baggage of discrimination and position in society that comes with the languages, you always feel that everything that is said is thought through for double meanings which then creates everyone to have this guarded, polite and considered approach to everything. This was palpable during the programme. The programme however was a great success and all of the youngsters have really benefitted socially, with reference to skills learned through the beekeeping and interpersonally. A great experience for us all”  BK-2

“Great kids, great support by parents and professional workers and Prince Edward Island is a very special place with an amazing mix of Irish, Scottish and French history which makes the people very unique”  BK-1

A summary of my specific observations about the overall programme are included in the Conclusion (Chapter Five) of this report. In this chapter, I have described in some considerable detail, the programme philosophy, approach and contents, and the comments from the participants and the beekeeper instructors at the specific points during the itinerary. I have also described my personal observations during the three programmes at each of the three international locations, at which I was present as a joint-participant.

After following the groups in the three countries and outlining the above observations and comments from the instructors and the young people, it is apparent that learning beekeeping is more than simply understanding biology, or the intricacies of our food system. The beekeeper instructors informed the young participants at each of the programme sites that bees respond to the emotional signals of a beekeeper and they stated that most beekeepers will tell you to never open up a hive if you are in a bad mood! Each time they said this everyone laughed. However the majority of the young participants reported back to me that they felt that working with bees helped them feel calm, even although there was a lot of movement/buzzing in the hives. I saw some of the most vocal and active young people calm down when they were with bees. My observations illustrate how beekeeping encourages feelings of patience, and relaxation; crucial benefits for these young people, many of whom, for the variety of reasons I explained in Chapter One, Part Two, suffer anxiety and anger management problems including communication difficulties.
Interestingly, the positive attributes of the young peoples’ behaviour changes seem to occur as a by-product of working with the bees rather than as core aims or objectives of the programme itself.

In Chapter Four that follows, I describe the outcomes from the quantitative and qualitative data. I explain the relevance of this data together with the above information (the three ‘vignettes’) and make connections to the research and the literature review about experiential educational programmes and policies from the three international locations that I outlined in Chapter One.
Chapter Four: Quantitative and Qualitative Data, findings and discussion
Introduction

In this chapter, I build on the findings from my observations as described in the vignettes of the previous chapter, and describe and analyze the results and outcomes from the quantitative and qualitative methods used, namely the questionnaires and the focus groups which I explained in Chapter Two (Methodology). Where appropriate, I provide graphic illustrations of the data collected, in the form of graphs. The findings and discussions have parallels with the main themes that I explained in Chapter One. These themes are: personal learning experiences and learning styles; personal developmental and employability outcomes from learning; and also aspects of technological learning versus the natural environment. A new theme emerged, that of the importance of the element of ‘risk’ or danger to the experiential learning programme, and I discuss this at the end of this chapter. To begin, I present the data which describes the individuals’ personal likes and dislikes, which link to the emotional aspects of their learning styles.

Personal learning experiences and learning styles

As described in Chapter One, Part Two, there are many different types of learning style questionnaires and these are commonly used in many educational and employment/training settings. However, in this study I was interested in establishing what the participants’ views were of their past learning experiences, so that these could be compared to their views of the Bee Inspired programme. A formal learning styles questionnaire could have been incorporated into this study, had time and resources allowed this. The results presented here are taken from participants’ responses to a multiple-choice questionnaire (described in Chapter Two and presented in the Appendix 5 of this report) about their personal details, their experiences and what they felt they had learned both at school and on the bee-keeping programme. In the first section of the research questionnaire used for this study, participants were asked twenty questions about their learning preferences, how they felt in and about learning situations and how they perceived their own abilities/strengths. For instance, Question One of this questionnaire section, asked whether they “liked studying formal subjects at school (mathematics, science etc)”. Each question had five options of response, ranging from “strongly disagree” to “neutral opinion” to “strongly agree”. Of course the fact that this question included the word ‘formal’ may bring with it perceived ideas of how and when these particular subjects are studied, memories of experiences and any difficulties involved. There are also cultural interpretations of this word, and of the different subject
areas, which may have complex and multiple meanings for participants. These issues are all open to interpretation. This is one of the reasons why it was so important to gauge participants’ responses from other sources, such as my observations and the focus groups. I’m aware that for some participants who had learning difficulties, the written nature of the questionnaires would have seemed intimidating or confusing, however my experience with the pilot study had already provided me with an opportunity to shorten and simplify the questionnaire. If conducting further research in this area, I would recommend providing quicker and alternative ways of completing these questionnaires – perhaps through an electronic touch-screen, via a mobile phone application or on coloured paper with enlarged font-size – depending on the preference of the individual. I would also recommend including a learning styles questionnaire, or obtaining this information from the young person’s educational records as this would be valuable data to include in the analysis of their learning outcomes.

Overall, perhaps not surprisingly, opinions from the young people of ‘formal’ school subjects (interpreted as maths, science etc.) were equally divided and strongly polarised: while a third (13) had a neutral opinion, the rest of the group were split; fifteen strongly disliked, fifteen strongly liked maths and science; one just liked (“agree”) and one other just disliked (“disagree”) such formal school subjects. This suggests that there was no overall pattern to the perceived attractiveness of any specific subject area. It is likely that the young peoples’ likes and dislikes were more strongly linked to their past experiences of teachers and environments and their perceived competence and achievements within that subject area.

Of the sixteen participants who either liked or strongly liked ‘formal’ school subjects, nearly two-thirds (10) were Repatriated Azoreans. The reasons for this are unclear, however it was evident from aspects of the programme (described in my observations in the previous chapter) that the Azorean young people were familiar with a formal structure to lessons and rules such as not using mobile phones in the classrooms (something unfamiliar to the UK participants). All but two of the Repatriated Azorean participants liked either formal or informal subjects at school, although most (two-thirds – 10/15) preferred maths to physical education. This was surprising in view of observations of this group illustrated their self-confidence of living in the outdoors, such as setting-up their tents and lighting a camp fire etc.
The only participant from the whole group to like both informal (drama, physical education) and formal subjects at school was a White Canadian participant with a stated disability. In fact, this fifteen-year-old (female) participant was the only one from Canada who liked either type of subject, as six out of fifteen felt neutral. The other eight all strongly disliked both formal and informal school subjects, disappointingly illustrating a dislike for learning generally. This corresponds with the research outlined in Chapter One which indicates that many young people at risk are disengaged with learning.

The four White British participants were equally divided between neutral opinion toward (2) and disliking (2) both types of subject. Of the six ethnic minority participants born in the UK (five male, one female), half (3) strongly liked maths, but strongly disliked physical education, while the other half (3), including the female, felt neutral toward both – again indicating an ambivalence towards school which as I described in Chapter One, Part Two, leads to many young people leaving school early and reducing their employment prospects. Ethnic minorities from (but born outside) the UK, were split between strongly liking maths but strongly disliking physical education (2) and strongly disliking both types of subject (2). Again, this illustrates that there was no strong pattern of preferences for any specific area amongst these young people or between the gender/ethnic groups.

There was no significant difference in the gender differences, for example, over half (7/12) of female participants overall disliked formal subjects; just under half (5/12) also disliked informal subjects at school. A quarter (3) felt neutral toward both. A third (4) strongly disliked both types of subject, while only one female participant liked both (the only participant in the group overall to like both). Nearly half (14/33) of male participants liked formal subjects at school, while just over a quarter (9) strongly disliked them and another third (10) felt neutral toward both types of school subject. The same males who liked formal subjects such as maths and science tended to dislike informal subjects like physical education and drama – all except for one. However, in contrast, those males who strongly disliked formal subjects also disliked informal subjects. In other words, for the male participants, liking maths meant not liking physical education, but not liking maths also meant not liking physical education. This may have meant that these individuals were less likely to become engaged in any type of learning. Only one male liked informal subjects at school, a Repatriated Azorean with no declared disability. This highlights the importance of not stereotyping young people at risk as being non-academic, as I explained in Chapter
One, the enjoyment of studying a specific subject often results in positive learning outcomes for the individual concerned.

Just over a third of participants with declared disabilities (7/18), felt neutral toward both types of subject. Another third (7) strongly disliked formal subjects – and all but one of these also disliked informal subjects. Only one-sixth (4) of participants with disabilities liked formal subjects, however, all but one of these disliked informal subjects. Again, as has been seen with other groups, liking maths meant not liking physical education, but then, so did not liking maths. A disability may have highlighted a perceived or genuine difficulty to be able to engage or attend physical activities at school. Overall, however, it seems that those participants with declared disabilities shared similar feelings of ambivalence towards school learning in general, compared to those who had not declared a disability. The positive outcomes from the Bee Inspired experiential programme provided a stark contrast to these young peoples’ previous learning experiences in mainstream educational settings, as I will explain.

As I have already explained, in contrast to mainstream education, experiential education programmes (set out in Chapter One, Part Two) do not work from a planned curriculum document, but instead are based on a tradition of pedagogical practice combined with extensive staff training and a team-working environment. It relies heavily on the emotional intelligence of the instructors and the engagement of the learners. The effectiveness of outdoor education programmes for youth in general is well-documented, for example research investigating cognitive and emotional outcomes of these types of programmes provides evidence of positive personal and social development of participants as a result of their participation (e.g. Holloway & Krensky, 2001; Holloway & LeCompte, 2001; Martin, 2001; Martin, Leberman, & Neil, 2002; Shields, 2001). With this in mind, in the focus groups there were comments from the participants that related to the unique nature of beekeeping and the new learning opportunity it potentially provided for them.

“I like the idea of nature, but I don't know much about it.” UK3-1

I preferred learning with the photographs and actually seeing the beekeeping for itself rather than learning in a class where you can't see what is happening. AC1-4
Arguably, this may have been because the young people felt that other interventions were not able to address their particular learning-styles which research has shown has a direct impact on their potential for disaffection at school (Curtis, 2009a&b; Riley & Rustique-Forrester, 2002). However, evidently the experiential education programme involving beekeeping, was able to tap into the particular learning needs of these young people at risk, in complex and multi-dimensional ways, as can be shown from these quotes from across all three locations:

“There is nothing worse than being in a classroom, so for me this was ideal” UK2-2

“I didn't want to be locked-up inside learning something useless like normal.” AC1-3

“How many beekeepers do you know? That's why this attracted me” UK1-4

“This bee programme is different from everything else” UK3-4

I now know I like hands-on programmes, as I liked being outdoors and just learning that way. UK1-1

The ‘hands-on’ approach defined by the participants, is evidence of what Gardner would define as the more diverse and kinaesthetic teaching strategy within the beekeeping programme which provided new insights for the young peoples’ learning experience. The dramatic change of environment also inevitably created a positive learning atmosphere (Green et al., 2000). However, there is something more complex happening here as there are other important elements that need to be teased out from this data, described in the following sections in this chapter.

**Personal developmental and employability outcomes from learning**

As I explained in Chapter One, the emotional aspects of learning are crucial if we are to understand how to engage young people at risk and prevent them from offending or re-offending. Emotions are founded on our interactions with each other and with this in mind, the young people were asked, through the questionnaire, about how they felt about
learning alone or as part of a group. Furthermore, they were asked to reflect on how they felt being around other people more generally. As I explained in Chapter One, many young people at risk suffer from learning difficulties and complex communication problems which prevent them from fully understanding or articulating their understanding to others (Cross, 2004). Arguably, these issues are compounded by technology which can hide these difficulties in a virtual world devoid of emotional engagement. The questionnaire asked a range of questions that aimed to highlight what these young people thought of these issues and their potential impact on their learning. 

Overall, a mere six out of forty-five participants liked studying alone – three strongly so, three just ‘sometimes’. This may explain why the team-working atmosphere that I described in the previous chapter, developed so well. However, it was evident from at least one of the young peoples’ comments, that beekeeping was seen as attractive to them because it was a role that could be done alone:

“This is something I could do by myself, once I know how, and that suits me” AZ1-1

Perhaps not surprisingly, twice as many preferred group study (12), although, a sizeable third of the whole group felt neutral toward studying alone (16/45) and studying as part of a group (15/45). The reasons for these results may be attributed to a lack of self-confidence in these young people, in that they feel more comfortable when being part of a group of learners engaged on a task. This element of self-confidence and self-esteem is (as I have already explained) critical to the personal development of individuals and something that I discuss in detail in the following sections.

The perceived attractiveness of studying alone seemed to diminish with age. For example, over half of fourteen-year-olds (14/26) either disliked (5) or strongly disliked (9) studying alone. Exactly half of fifteen year olds (6/12) felt the same way, with one disliking and five strongly disliking studying by themselves. Two out of seven sixteen-year-olds strongly disliked both ways of studying, and three felt neutral toward both, but only one strongly liked group study (but hated solo study) and only one sixteen-year-old strongly liked solo study (but hated group study). Four out of thirty-three males (an eighth), and two out of

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13 I recognise that the mere presence of these questions and asking the young people to reflect on these issues may have had an impact on the outcomes. Whilst research suggests therapeutic effects of this kind of approach, there is no space here to discuss this.
twelve females (a sixth) liked studying alone, while sixteen males (half) and seven females (half) disliked studying alone. Twice as many male participants (8) and twice as many females (4) liked group study. However, still more, twelve males and five females, disliked group study. With males, those who disliked solo study actually liked group study – and the reverse was also true (those who disliked group study actually liked solo study) for over half (7/12). In contrast, with females, while liking group study meant disliking solo study, not liking group study also meant not liking solo study. In other words, the males mostly liked one or the other, but the females only tended only to like group study. Reasons for this are unclear, but may be due to cultural and gender differences that were outside the scope of this questionnaire.

In terms of cultural and ethnic differences in this area, there were no significant patterns to these answers. This may have been due to the small sample size. White British participants were equally split between neutral opinion to both solo and group study (2) and disliking them both (2). Half of White Canadians (6/12) also disliked both solo and group study, and only one White Canadian like both. UK-born ethnic minorities were either neutral toward both (3/5) or disliked solo study and strongly liked group study (2). The one Canada-born ethnic minority participant also disliked both forms of study. One out of the eight other ethnic minority participants liked solo but disliked group study; three disliked both types of study and three felt neutral toward both. Interestingly, and in contrast to the White British young people, over half the Repatriated Azorean participants (8) liked group study – none of which liked studying alone – while only one-fifth (3) liked solo study – none of whom liked studying in groups. This indicates at least partly, the reasons why the Azorean group worked well together as a team right from the beginning of the programme, on their duties at the camp site, whereas it took much longer for the UK participants to do this successfully. Merely a ninth (2) and a sixth (3) of participants with disabilities respectively liked solo and group study. Half of those with disabilities (9) disliked studying alone – seven strongly so – and only three of these liked the opposite, group study. Only one participant with a disability (a fourteen-year-old, white, female Canadian) liked studying alone and in groups.

Overall, the young people didn’t see themselves as ‘sociable’, only a fifth (7) said they strongly liked socialising, and only one said they liked socialising, while nearly half (20) said they didn’t like socialising – fourteen strongly so. Of this twenty, six were female – which is similar to the overall male-female ratio, suggesting that males and females were
equally unsocial. Only one-sixth of those with disabilities (3/18) liked socialising, while nearly half (7) didn’t. Of both the White British/Canadian (8/16) and ethnic minority (7/14) participants, exactly half said they didn’t like socialising. The Repatriated Azoreans were only slightly better off in that only a third didn’t like socialising (6/15), while another third (5/15) strongly liked it. This is an interesting finding, bearing in mind the outcomes from the programmes, where the Azorean group of young people were observed to be very sociable and I observed the other groups developing in their confidence in this aspect over the four days.

Being sociable can be linked to many emotions including an element of nervousness. Perhaps unsurprisingly therefore, nearly a quarter of the whole group (12/45) said they ‘felt nervous’ around young people generally, ten of whom also felt nervous around others in learning situations. Another quarter of the group said they didn’t feel nervous around other young people, either in learning situations or generally. Half (23/45) felt neutral. Of the participants with disabilities, nearly half (8/18) felt nervous around young people – both generally and in learning situations. All but one of these (7/18) said the same about adults. Only one participant with disabilities said they never felt nervous around adults or young people either generally or in learning situations. This confirms the issues I described in Chapter One; low self-esteem and lack of self-confidence appears to weigh down these young people and their ability to interact effectively with others around them. This therefore is likely to impact negatively on their experiences in job interviews etc, reducing their future employability. In contrast to this, and as this quote illustrates, the Bee Inspired programme encouraged self-confidence through reflection and self-knowing:

I learnt to trust in other people doing the beekeeping, but I also know what my strong and weak points are. **AZ1-3**

Over a quarter of males (7/33) said they felt nervous around both adults and young people both generally and in learning situations – six strongly so. Just under a quarter of males (6) said they never felt nervous of adults or young people. Over a half of males (17) felt said they felt neutral, but four of these strongly said no to feeling nervous around adults, either generally or in learning situations. So, although just as many felt nervous all the time as did none of the time, some males expressed a lack of nervousness around adults by choosing “(strongly) disagree”, while at the same time not expressing a lack of
nervousness around other young people by selecting “neutral opinion”. In terms of
gendered differences, the outcomes from this particular question could have been
influenced by what the male participants perceived as required from them, e.g. that their
‘male’ role should not admit to ‘nervousness’ because it may be perceived as a female trait
and therefore a potential weakness. There were some conflicting and complex outcomes
from this question which warrant further investigation.

If the younger participants felt similar or greater amounts of nervousness as the older
ones, they were less reluctant to admit it. In all situations involving adults and/or young
people, with fourteen-year-olds, half as many said they did feel nervous (3) as didn’t feel
nervous (7). However, in contrast, with fifteen and sixteen-year-old participants, twice as
many said they did feel nervous (respectively 4 and 2) as didn’t (2 and 1). One White
British participant admitted to feeling nervous around adults and young people both in
learning situations and generally; one strongly wasn’t; two were neutral. Five out of twelve
White Canadians (nearly half) were nervous around all ages in all situations, while only
one wasn’t – half (6) felt neutral.

Half of the Repatriated Azorean participants (7/15) reported poor relations with peers of
the same gender and a dislike of same sex learning environments – the other half (8) felt
neutral. In contrast, over two-thirds of Repatriated Azoreans (11/15) reported good
relationships with either their teachers (1) or adults generally (3) or both (7). Of the
fourteen participants from ethnic minorities, only three said they never felt nervous;
although another three said they never felt nervous around adults but felt neutral about
young people. Two felt nervous in learning situations and generally around adults and
young people.

In contrast to these results, during the Bee Inspired there was evidence from the
comments of the young people of how these emotions changed. For example, the
following comments illustrate a growth in participants’ self-esteem and self-confidence, as
discussed in Chapter One Part Two:

I couldn’t sleep worrying about doing the beekeeping, but I liked every minute, I have
realized I can do almost anything if I try and overcome my fears. **UK3-4**
The questionnaire also asked the participants about their existing relationships with others, including those they learn with. As I described in Chapter One, it is extremely beneficial for learners if there is a good rapport between teacher and student and also between students. This promotes positive learning outcomes through a sharing of experiences which encourages reflective and shared knowledge. Following-on from the young peoples’ description of their general ambivalence towards learning in school and their nervousness around others, it was perhaps inevitable that outcomes from this question confirmed that these young people felt their social relationships were also difficult. For example, it seemed that most of these young people preferred studying with individuals from the same gender. From the questionnaire outcomes, only two out of forty-five participants preferred unisex study groups; just under half (22/45) felt neutral; and just under half (21) either disliked (10) or strongly disliked (11) studying in groups of the same gender. Accordingly, only the same two felt they had good same sex relations; half (23/45) felt they did not have good same sex relations, twelve strongly so. Having said this, relationships between young people in the general population can also be problematic at this age, due to complex physical and emotional developmental changes.

As I explained in Chapter One, experiential education is a chance for young people to reflect on their own subjective understanding of their social interaction and for at least two participants, these emotions were articulated in the simple statements:

“Bees don't talk back” UK2-4

“Working with bees is better than being around people ” UK3-5

More encouraging, and in contrast to these difficulties in social interactions, many participants felt they had good relationships with teachers – nearly a third (14/45). However, a third of all participants (15/45) felt they didn’t have good teacher relationships. The same was true of participants’ relations with adults generally, just under a third (13/45) had good adult relations; a third (15/45) didn’t. White British participants largely felt neutral
about same sex study groups (3/4), but one strongly disliked them; although half (2/4) said they didn’t have good same sex relations, while two felt neutral. While one of the four White British participants felt he had good relationships with teachers, he didn’t feel he had good relations with adults generally.

Nearly half of White Canadians disliked unisex study groups (5/12) and only one liked them: the only white Canadian who also felt they had good relations with people of the same gender, with instructors/teachers and with adults generally. One other White Canadian felt she had good relations with teachers and adults generally, but felt she had poor relations with people of the same gender and strongly disliked single gender study groups. Just under half (5/12) of White Canadians felt neutral toward all the questions posed in this section, while more (6/12) disliked single sex study groups and felt they didn’t have good relations with others at all.

Repatriated Azoreans were roughly split between neutral opinion (8/15) and disliking (7/15) studying in groups of the same gender. This was echoed precisely by their assessment of their relations with others of the same gender, – eight felt neutral, seven saying they had poor same sex relations. More positively, three-fifths of Repatriated Azoreans (9/15) felt they had good relationships with teachers – seven strongly so – while a relatively mere fifth (3/15) felt they didn’t. Similar numbers of repatriated Azoreans felt the same way about their relations with adults generally, with nine reporting good, and only two reporting not good. Although the numbers were the same in each case (9/15), two of those who had good adult relations had poor teacher relations, and vice versa, two of those who had good teacher relations had poor adult relations. Seven out of the fourteen participants from ethnic minorities didn’t feel they had good relationships with people of the same gender, and didn’t like same sex classes. Six of these didn’t feel they had good relations with their teachers/instructors either.

Of the thirty-three male participants, just over a third (12) disliked unisex study groups, and the same twelve also felt they didn’t have good relationships with other males. Only one male liked single gender classes – and also had good relations with other males, with teachers and with adults generally. More positively, as with other groups, males had better relations with teachers and adults: a third (11/33) felt they had good teacher relations; and just under a third (9/33) felt they had good relationships with adults generally.
Three-quarters of female participants disliked unisex study groups (9/12), and all but one of these felt they had poor relations with other females. Only one female participant felt they had good relations with other females and with teachers and with others generally. Only a quarter of females (3/12) had good relations with teachers, while a third (4/12) had good relations with adults generally. Just under half (5/12) felt they had poor teacher relations, and a third (4/12) felt they had poor adult relations.

More than half of fourteen-year-olds (16/26) disliked unisex study groups and felt they didn’t have good relations with others of the same gender, while the rest felt neutral. However, more positively, just over a third felt they had good teacher relations (9/26) and just under a third had good adult relations (8/26). Despite this, however, a third of fourteen year olds (9/26) felt they had poor relations both with adults generally and with their teachers.

Only one of the twelve fifteen-year-olds liked unisex study groups and also felt they had good relations with others of the same gender and with their teachers and with adults generally. Only two of the other eleven other fifteen-year-olds had good relations with both adults generally and teachers specifically, but they felt neutral toward single gender classes and their relations with others of the same gender. A quarter of the fifteen-year-olds (3/12), reported poor relations with everyone, and to strongly disliking studying in groups of the same gender.

Only one of seven sixteen-year-olds liked unisex study groups and also reported good relations with everyone. Only one other sixteen-year-old reported having good relations with teachers and with adults generally, but he reported poor relations with other males and disliked male study groups. Three out of seven sixteen-year-olds (two male, one female) reported poor relations with others of the same gender, with teachers and with adults generally, and strongly disliked single gender classes. Two felt neutral towards all questions posed about their relations with others.

Only one participant with a disability preferred unisex study groups and also had good relations with others of the same gender, with teachers and with adults generally. Nearly a third of those with disabilities (5/18) disliked single gender classes, four strongly so. Four out of eighteen participants with disabilities said they had poor relations with those of the same gender, with adults generally and with teachers specifically. A third (6/18) said they
had good relations with teachers, and all but one of these said they also had good relations with adult generally. Worryingly, five participants with disabilities (nearly a third) said they had very poor relations both with adults generally and with teachers. The comments from the focus groups reflected the answers from the questionnaires presented above, as some of the young people recognised that they felt they were not sociable by nature and that they felt a nervousness towards learning and being in a group.

Participants were also asked about their instructors/teachers both at school and during the beekeeping programme. They were asked whether they found their instructors/teachers to be informative, helpful, friendly, and knowledgeable about the subject, interesting, caring, and approachable, ‘modern thinking’ and professional. Participants were also asked whether they thought their instructor was strict, whether they liked their instructor, and whether they trusted them.

Regarding the beekeeping programme, all participants said their instructor was helpful, friendly and knowledgeable. All but one said they thought their instructor was knowledgeable, interesting, caring, approachable, and that they liked and trusted the teacher: the one who didn’t agree, felt neutral. Only one felt neutral about most aspects of their instructor, but did feel the instructor was informative, helpful and friendly. One other felt their instructor was helpful, caring, approachable, but didn’t feel their instructor was strict enough and therefore ‘not professional’. This supports the general views of the beekeepers that the rapport between the young people and the instructors was good, confirming the research that this is an integral part of a successful experiential learning programme.

Participants were asked about the social aspect of their learning experiences at school and during the beekeeping programme. They were asked about whether they felt more independent, more confident, more disciplined, more socially able, more responsible, more tolerant and more able to cope. Participants were also asked whether they felt more anxious around people, or happier around others; they were asked if they felt more self-reliant, healthier and if they felt a better sense of well-being.

Confirming the comments from the beekeepers mentioned above, there was a clear divide in participants’ social experiences at school. Participants from Canada largely felt positive about all social aspects of their school experience (12/15); from the Azores, participants
largely felt neutral (12/15); from the UK participants mainly felt negative (11/15). The two social aspects of school in Canada that participants agreed upon most was it made them feel healthier and gave them a better sense of well-being. In the Azores the aspect that received the most negative opinion was happiness: school didn't make them feel happier. Of UK participants, only three positive responses were given overall: each made by a different participant about a different social aspect of their school experience. One fourteen-year-old ethnic minority male with no disability felt more confident at school; a White fourteen-year-old male with a disability felt more able to socialise with others at school; and one sixteen-year-old ethnic minority male with a disability also felt less anxious around others at school. This highlights the need for more comparable investigation into why the educational experiences of young people at risk in these countries is perceived so differently.

Participants were also asked about the learning environment and quality of learning experience both at school and during the bee-keeping programme. Participants were asked whether they felt the learning area was safe and secure, whether it was a ‘no smoking’ zone, ‘no alcohol’ zone, ‘no drugs’ zone, and a ‘no bad language’ zone. They were also asked whether they felt the atmosphere was supportive and positive. About the other learners, participants were asked whether they were friendly, interested and worked co-operatively.

Regarding the bee-keeping programme, none of the participants expressed a single negative or neutral opinion about the learning environment and quality. The beekeeping environment for them was safe, drug and alcohol-free, supportive, friendly and co-operative. In contrast, again there was a distinct divide between experiences had by those from UK, Canada and the Azores.

All participants from Canada felt positive about every aspect the learning environment and quality, except for one. This one participant (a fifteen-year-old White female participant with a disability) felt neutral when asked whether the atmosphere was great, positive and supportive.

Fifteen out of fifteen repatriated Azoreans agreed that their schools felt safe and secure, and were ‘no alcohol’ and ‘no smoking’ zones. Only two didn't agree that their schools were ‘no drugs’ and ‘no bad language’ zones, the rest did. However, most Repatriated
Azoreans gave neutral responses over whether they felt their schools were great (10/15), supportive (10/15) and positive (13/15). A lot of repatriated Azoreans also felt negative opinions about whether their school was friendly (7/15), interested (9/15) and co-operative (9/15).

About both school and the beekeeping programme, participants were asked how they felt on conclusion of the learning experience. Participants were asked whether their opinions were asked for; whether they were invited to give ideas and suggestions; whether they were asked for feedback; whether they wanted to give feedback; whether they wanted to continue with this learning opportunity; whether they enjoyed the type of learning; whether they enjoyed learning with others; whether they improved their skills and finally whether they thought this type of learning would be useful to their lives.

Again, in respect of the beekeeping programme, not a single participant had a negative or neutral opinion. All participants enjoyed the learning and found it useful to their lives, they all felt their opinions and feedback were respected, asked for and given and all wanted to continue. The development of a pro-social attitude from the young people was evident from this data and these opinions were re-emphasised through comments in the focus groups:

Everyone here is now good friends and we need each other so I have learned that being with people can be good. **AZ3-2**

The fact we were involved in everything and not treated like idiots was what I liked best, and like the bees, we all just work happily together like a good gang. **UK1-2**

Again, participants varied in their opinions about their school experiences, depending on where they went to school: participants felt positive about Canadians schools; Repatriated Azoreans felt mainly neutral but partly negative about Azorean schools; and UK participants mostly felt strongly negative about all aspects.

Participants from UK schools all felt that their opinions and suggestions, and weren’t asked whether they enjoyed or understood their learning experiences. Only five UK participants felt they wanted to give their views about the learning experience and their suggestions
about how the learning could be improved, even though they felt they weren’t asked for them.

Only three Repatriated Azoreans had anything positive to say on conclusion of their school experience; three fourteen-year-old males with no declared disabilities felt they were asked about their opinions, but felt either negative or neutral about everything else. The least negative aspect of Azorean schools was skills improvement: thirteen out of fifteen felt neutral, and only two “disagreed”. Least positively, nine out of fifteen Repatriated Azoreans didn’t even want to give their opinions and suggestions for improving the learning, and only two did. As I explained in Chapter One, Part Two, there is limited information available about young people at risk in the education system in the Azores. This research emphasizes the importance of further investigation in this area and sharing best practice internationally.

In contrast to the other groups, Canadians universally felt positive about all aspects of the conclusion of their school learning experience. However, it is worth pointing out that although the confidential nature of these questionnaires was confirmed to all the young people, it was possible that, in view of the perceived authoritarian approach of educationalists and social workers expressed by the Canadian young people, that I described in the previous chapter, they may have felt pressurised to answer these questions in this way, incase they were identified.

Regarding beekeeping, the only aspect on which participants generally gave any negative opinion was regarding the instructor’s being ‘modern thinking’: just over a third (16/45) felt their beekeeping instructor wasn’t modern thinking. Of this sixteen, almost all (14) were male, half (8) were aged fourteen, the other half equally aged fifteen (4) and sixteen (4), nearly half were from the UK, the other half from Canada, just over a third (6/16) were from ethnic minorities. Over half of participants who didn’t see their beekeeping instructor as ‘modern thinking’ had a declared disability (9/16).

Regarding their experiences of school teachers, participants were less positive. Participants from Canadian schools were generally positive about their teachers, although again some (a third – 5/15) felt their teachers weren’t modern thinking. Repatriated Azoreans had a lot more neutral opinions, and in each case at least one found that there teacher wasn’t knowledgeable, approachable, caring or trustworthy. Reflecting the
difficulties experienced by the Bee Inspired programme instructors, it was with participants from the UK that opinions were least positive about their school learning: almost all (13/15) felt their teacher was unprofessional, while the other two felt neutral. Only one participant from the UK felt their teacher was informative, and only three felt theirs were helpful, interesting and approachable. Over half of participants from the UK felt their teachers were knowledgeable (9/15), and interestingly all but two felt their teachers were modern thinking. Nonetheless, sadly, two thirds of UK participants (10/15) felt they did not trust their teacher.

In contrast to these results, the comment outcomes from the Bee Inspired programme focus groups related to the positive learning experience. For many participants, the primary aspect of the benefits to them of the Bee Inspired programme was related to the differences in the teaching and learning strategies used, compared to their previous experiences. For example, the atmosphere of mutual respect played a crucial part:

I have learned who I am, they have treated us tough but with respect. **AC1-5**

The programme has taught me that responsibility is a good but useful thing, to **me** and for **me**. **AZ2-3**

We have learned that attitude is for the streets not for beekeeping, the beekeepers and the bees aren’t at all interested in attitude. **UK1-5**

The beekeepers are strict but nice, but we ALL trust them, they made sure we knew what to do and were calm with us. **AZ2-1**

I learnt to work with the beekeeper who helped me understand everything and normally I don’t like listening to adults. **AC3-4**

Beekeeping is more than the bees, you need to manage everything and the bees need to be respected. **UK3-1**

Beekeepers are a different breed, they let you know the score without raising their voice or making negative comments. **UK2-2**
For some participants, it was the bees themselves, rather than the instructors, who were the centre of their new-found respect (this is discussed fully in the section that follows):

The bees really are in control and you are just a side-show dependent on them letting you participate.  \textit{AC1-2}

These quotes are examples that describe how the participants felt their social, communication and team-working skills improved as a result of the Bee Inspired programme. This is in-line with findings of similar effective experiential educational programme outcomes that I described in Chapter One. However there are specific differences that need to be identified and these will be discussed in the following section and in the final chapter.

The questionnaires also produced results which compared the perceived skills that the young people had gained at the Bee Inspired programme, compared to their previous experiences. Of the twenty participants that acquired a variety of skills at school, nearly three-quarters (14/20) acquired skills in all areas mentioned on the questionnaire; two had improved everything but their outdoor skills, and one felt they had improved everything but their social skills. This is particularly encouraging as social skills, as described in Chapter One, significantly contribute towards employability. This is particularly important for individuals with disabilities, who are often over-represented in unemployment statistics. As can be seen from Figure 5 (below), young people with stated disabilities reported they felt they had gained more skills than they would through learning at school:
**Figure 5: Column graph showing responses of participants' with disabilities to the question of whether they improved their skills at school and during the bee-keeping programme**

Continuing with the answers to the question posed to the participants about what they felt they had learned on the Bee Inspired programme, it was interesting to note that some were more self-reflective about their learning. As I explained in Chapter One, a level of emotional self-awareness is essential for developing effective relationships (Morrison, 2006). The personal nature of learning means that experiential educational programmes, which inherently incorporate encouragement of a reflective, emotional awareness, carry many personal and social benefits for the participants (Green et al., 2000).

I have learnt to trust myself. **AZ2-4**

I learnt how to forget my problems, when you keep bees you need to concentrate on them, not your own problems. **AZ2-2**

This programme has proved to me that I can be a success, which I wasn’t sure about before. **AZ3-5**

Overall, there were many more responses that illustrated the social benefits for the participants of the programme.

I learned about bees, biology, geography, science which I normally hate, but I understood it all, the bees work together and they have taught us that doing this gets things done. **UK2-3**

The bees work closely together and achieve a lot, we have learned to work closely together and we have learned a lot too. **UK2-4**

Cleaning, cooking and managing myself was not interesting to me, but now I see that great things can happen when everything is in order, the bees are very organised. **UK3-5**

The whole group worked together with the beekeeper, and I learned that I can do that which I didn’t think I could. **UK1-4**
I now realize it is okay to be scared, as we were all scared but working together we were a big success. **UK2-5**

I have learnt to work with other people and to listen and trust in people. **AC2-1**

**Aspects of technological learning versus the natural environment**

The concepts of experiential education that I outlined in Chapter One, Part Two, provide a framework within which to investigate the common characteristics of outdoor education. Experiential education’s focus on learners as the position of knowledge construction shifts our focus away from a planned curriculum, towards the investigation of the interrelationship between enacted and experienced pedagogy. The enacted pedagogy refers to how the pedagogy operates in action, in daily practice, in this case whilst learning about bee-keeping practices. This type of pedagogy encompasses not only the activities of the programme but also the role of the learner and the facilitator and the organisation’s philosophical views of learning (McCormick & Murphy, 2000).

The contrast to the perceived attractiveness of ‘formal’ vs ‘informal’ learning for these young people explained in the section above, is arguably interconnected with the emotional experiences that surround our individual learning styles (Carnwell and Baker, 2007). The emotional aspects associated with being outdoors, which value the subjective experiences of the young people, are linked to the relaxed, informal reflective atmosphere that is required for affective learning. However, because mainstream education encourages the use of technology that attempts to simulate the natural world (for example in keeping virtual pets), the opportunity for spending time experiencing the natural environment is severely limited, despite the well-documented benefits of doing so which I set out in Part Two of Chapter One. Young people who need a positive focus or influence in their lives can obtain many benefits from being given an experience of the natural world that challenges their established views (Naess, 2008, Vinning, Merrick, & Price, 2008). For instance, when asked in the focus groups, the question: ‘**Why did you choose to apply for a place on the Bee Inspired programme?**’ many of the participants’ responses included reference to these specific benefits:
"I love to be outside in the countryside in the Azores so beekeeping is perfect"  **AZ3-1**

"This was a different type of programme that I could do outside "  **AC3-2**

Indeed, importantly, for some participants, there seemed to be a rejection of the technological world which surrounded them, in favour of the natural environment that beekeeping provided:

" You don't need to use a computer to do beekeeping"  **UK1-2**

"This is better than sitting in an office or at a computer screen all day, every day for the rest of my life"  **AC3-5**

The young people on the UK programme had a steep learning-curve (as I described in Chapter Three, Vignette One) as they were outwardly very disturbed when the rules meant they were separated temporarily from their mobile phones. However, it is worth bearing in mind that the data presented in the Methodology chapter of this report, presents the average age of the individuals in this group as younger than others on the programme. This may have contributed to their immature behaviour towards this rule.

As I explained in Chapter One, in experiential learning in the natural world, stimuli can be harnessed to allow effective learning environments which affect and pave the way for growth, both intellectually and personally for the participants (Kellert and Farnham, 2002). Critics' views of affective learning strategies may be founded on the perspective that intrinsic emotions are fundamentally subjective, organic or intuitive and therefore should be judged as unsuitable to scientific analysis or measurement. However, I argue this is the very reason that makes it essential to research them further, especially within the context of experiential education. It is tempting to be sceptical about affective learning and claim that it is a term that is used simply for convenience or to idealise student-centred learning. However, as I explained in Chapter One, the emotional aspects of learning and the
formation of ‘emotional intelligence’ is long established as a fundamental part of learners’ motivations (Dewey, 1963; Gardner, 2005). For example, the emotional aspects of beekeeping provided the young people with a new perspective of learning, as can be seen in the following quotes when they were asked: Why did you choose to apply for a place on the Bee Inspired programme?

“"The bees help calm you down and they all work together in one big family"” **UK2-1**

“Listen buddy, bees are cool, I am cool and we go together” **AC2-5**

“Beekeeping stays the same, other jobs keep changing, and I don't like that.” **AC3-1**

“Why would anyone want to do any other type of course when you can do beekeeping” **UK3-3**

The value of the skills gained from the Bee Inspired programme was subject to interpretation by the young people and those around them. In the questionnaire, participants were asked about the skills they acquired while at school and during the beekeeping programme and the results compared. More specifically, they were asked whether they felt they had acquired new academic, practical, social, outdoor and technical skills. Participants were also asked whether they had acquired a variety of new skills and whether if they felt they had acquired no new skills. In relation to beekeeping, all but three participants felt they had improved skills in all areas. Of those three, the first felt neutral about outdoor skills gained, but positive about all other skills gained, the second felt neutral about academic skills gained, but positive about all other skills gained, and the third and last felt neutral about all skills gained, except that they improved their social skills. (All three participants were from the UK, all were younger participants (2 aged fourteen, 1 fifteen), one had a disability and one was female). Encouragingly, there were no participants who felt they hadn’t learned any new skills on the beekeeping programme. These results are illustrated in the graph below:
Figure 5: Column graph showing participants' affirmative responses to questions about skills acquisition at school and on the beekeeping programme

Although these results are based on the participants’ perception of their skills acquired (as opposed to a summative assessment of their existence) it is debatable as to how valuable these results are. However, reflecting on our perceptions of acquiring new skills requires a level of emotional self-awareness that is, in itself, essential for developing effective self-development (Hall, 2005). Just by being aware of our own unique strengths and weaknesses, we promote the potential for more effective learning.

When asked the same question about their school learning experiences, two-thirds (30/45) disagreed (4) or strongly disagreed (31) to having learned no new skills at school, while six out of forty-five participants claimed they felt they learned no new skills at school. Of these six, interestingly all were fourteen-years-old; one was Repatriated Azorean, the rest were from the UK (1 White British, 4 from ethnic minorities, 2 of whom born overseas). Again, in support of my observations described in the previous chapters’ Vignettes, this illustrates how the UK group felt they had negative experiences of learning at school compared to the other young people on this programme. These perceptions of the young people perhaps hold the key to understanding why other interventions aimed at young people at risk are not as effective as they could be. Furthermore, gendered differences were also apparent in these findings: these six who felt they gained no new skills whilst at school,
were mostly female (5). Two of these six had a declared disability\textsuperscript{14}. The details of these findings are illustrated below:

![Types of Skills Acquired](image)

**Figure 7: Column graph showing types of skills acquired by participants at school and on the bee-keeping programme**

Over a third of those who acquired a variety of skills at school (8/20) were Repatriated Azoreans, with the remaining twelve coming from Canada (10 White Canadians, 2 from ethnic minorities born overseas). Seven of the twenty had declared disabilities (all White Canadian). Three quarters of those who learned a variety of skills at school were male (15/20), and over half (12/20) were aged fourteen (the other half were equally fifteen (4) and sixteen (4) years old). In particular, I was interested in whether the young people felt that these social and other skills provided them with more independence. As you can see from the Figure 7 below, there was a stark contrast between the sense of independence gained from the Bee Inspired programme, compared to that from school-based learning. This was consistent across all three of the locations.

\textsuperscript{14} As I outlined in Chapter Two, the nature of these disabilities is unclear and I suggest further research is required to be conducted in this area.
With each social aspect of learning skills: being able to cope, feeling more responsible and feeling an increase in self-reliance, all but three participants felt they had improved during the beekeeping programme. One fourteen-year-old male Repatriated Azorean with no declared disability answered “neutral opinion” to all questions, as did one fifteen-year-old, UK-born, ethnic minority, male participant with a disability, who actually felt less able to cope. One UK-born ethnic minority male participant, but with no disability and aged sixteen, expressed that he felt less able to cope after the programme and also felt less responsible and tolerant of others. It was unclear why these individuals had answered this question in this way. All the adults involved in supporting the young people on the Bee Inspired programme took their responsibilities for supporting the young people very seriously and took considerable time to ensure that the young people were comfortable with the programme content and outcomes and that they felt they felt comfortable and secure and had benefited from participating in the programme. Whilst every reasonable care and precaution was taken, the questionnaires were confidential and no opportunity for a follow-up procedure was therefore available. Whilst every care can be taken in research projects such as these, it is possible that some elements are unpredictable, and whilst as far as we know, no harm was done to or by It was unclear whether this result was due to a mis-understanding of the question, a symptom of an incident that had happened just prior to him completing the questionnaire, or whether this was his perception of his
genuine feelings after the programme. Whatever the reasons for these responses, in hindsight, there should have been a follow-up procedure that allowed for any issues to be addressed and any necessary action to be taken. This is discussed more fully in the section describing recommendations for further research in the final chapter.

These three participants aside, however, all participants felt the bee-keeping programme helped them to develop their social skills. These results were confirmed by the comments from the focus groups, which include this example:

There has been a lot to learn, how to make beds, clean dishes, make food, do beekeeping, know parts of the bees body, and to listen, I never listen to anyone but beekeeping has helped me to do this. **UK2-1**

Bearing in mind the importance of the responses above about perceived independence from the individuals with stated disabilities, it is also appropriate to point out that, as I explained in Chapter One, Part Two, young people from minority ethnic groups are also often over-represented in unemployment statistics. As I have already explained, there are complexities surrounding self-identification as ‘disabled’ or as a ‘minority ethnic’, that adds an element of uncertainty to this data. However, as Figure 9 (below) illustrates, skills learned during Bee Inspired held a perceived value for those people from minority ethnic groups, compared to the value of the learning they received from school.
Figure 9: Column graph showing responses of participants from ethnic minorities to the questions of whether school and beekeeping learning experiences were useful to their lives.

It is important to note that these responses from the young people are entirely subjective, and maybe difficult to interpret due to classification issues. They do, however, represent important issues around perceived improved self-confidence for these individuals. Seeing a value to a specific kind of learning for any individual is *in itself* valuable and is particularly precious for these young people for the reasons I have already explained. The comments below illustrate the change in perception of what learning meant for these young people compared to the ambivalence expressed towards their school learning at the beginning of the programme in their questionnaires:

I have learned that learning can be fun and even difficult things can be learned by people like us. **AC2-2**

I have learned to clean up and cook, but the bit I liked most was when we all put the suits on and we met the bees, awesome, and there was no problems we all done EXACTLY as we were asked, wouldn’t you?. **AC3-3**

Finally, the questionnaire asked the participants about the usefulness of the learning on the Bee Inspired programme in terms of perceived increase in a sense of responsibility. In comparison with the experiences from school, again the responses were very positive as can be seen in the graph below:
With long-term objectives in mind for the young people at risk, it is important to address how the different skills that these young people felt they had gained on the Bee Inspired programme, may convert to their improved employability and in turn, prevent them from offending or re-offending. Increasingly, in the 21st Century, emphasis is on skilled labour and evidence suggests that many young people lack the appropriate skills - cognitive and personal - needed to participate in the modern workplace (Leitch, 2006). However, here we can see evidence that crucial personal, social and emotional skills are enhanced through this experiential educational programme. Hence I argue the broader issues around affective learning strategies and more specifically experiential educational programmes, should be more fully debated, analysed and further developed. This will enable learners to fully engage with and maintain lifelong learning journeys that help create successful career opportunities. Indeed, the strong and varied emotions (some of which can be seen in the quotes above), attached to affective learning in the outdoors, substantiate the case for using this approach to inform and underpin all experiential education programmes. Without applying this concept, there is a danger that an experiential education programme could lose focus and fail to stimulate these emotions and therefore fail to deliver the desired learning outcomes of the programme. So, the question of how and why affective learning takes place in the outdoors is a concept worth further investigation. We need to understand more about how this environment relates to young people today and what challenges we face in stimulating positive attitudes towards it through affective learning.

As I explained in Chapter One, unemployment amongst young people in many countries has been rising from the mid-2000s and progress on reducing poverty and increasing average incomes has also slowed from that time (Brewer, et al., 2009). Recession-induced declines in employment are exacerbating a worldwide problem and because of the correlations between these statistics; potentially serious implications for offending and re-offending rates. Interestingly, the young people in this programme had already anticipated the connection between the experiential learning they were engaged with, and their future...
career potential. This can be seen in the following quotes, when they were asked: **Why did you choose to apply for a place on the Bee Inspired programme?**

“There are great opportunities to have a company selling honey and other bee things” **AZ1-3**

“The idea of working with bees sounded great, and a job doing this would suit me” **AZ2-3**

“I need to do something in the future and this is my type of thing” **AZ2-5**

“Beekeeping will offer me a trade” **UK1-1**

“The bees sounded like a good job for me” **UK2-5**

“In the Azores you can beekeep the whole year round, this is an ideal place for this” **AZ3-2**

“There are not many beekeepers in the Azores and we can do business with the States from here and Europe, and Africa” **AZ2-1**

“Canada is a big country so I can sell my honey to so many people” **AC2-3**

“Beekeeping offers more than just honey you know” **AC3-5**
“Beekeeping offers some job for life”  UK3-2

“Selling honey to tourists here in the Azores could be big business”  AZ1-5

“You can even keep bees in London, so this job offers a lot of possibilities”  UK3-5

“There are great opportunities for beekeepers such as managing glasshouses, which means big bucks”  AC2-4

“Honey is big business and I want to be part of the action.”  AC1-5

“Farmers need bees, so there is a great chance of getting paid well if you are a beekeeper in Canada”  AC1-1

“Beekeeping is also about making candles, lip balm and lotions and honey, this is a great business to be in, that's why I chose beekeeping”  AZ3-4

**Dangerous Learning: Learning in an Atmosphere of Perceived Risk**

Beekeeping carries a small element of risk, in terms of being stung. As I described in the vignettes in Chapter Three, there was an aspect of ritual to the equipment and wearing of outfits required during the practice of beekeeping which was understood by the participants to reduce this risk. Our innate fear of arthropods (especially for children) has been the subject of much research and debate (e.g. see Gerdes et al., 2009). However,
the perceived risk of being stung by the bees appeared to be over-emphasized by the participants at times\textsuperscript{15}. Reasons for this are unclear. However, as I explained in Chapter One, feelings of excitement and the physical effects of adrenalin, form an important part of motivating young people (towards either positive or negative behaviour). It is possible therefore, that their anticipation and (exaggerated) perception of danger and the intrinsic elements of risk inherent in beekeeping, were strongly linked to the positive learning experiences that the young people later described. For example:

\begin{quote}
This is better than sitting at a computer, and the adrenaline pumps more doing beekeeping, one wrong move is reality.  \textit{AC3-5}
\end{quote}

\begin{quote}
A dangerous job, but great fun and not difficult even although I thought it would be really difficult.  \textit{AC1-3}
\end{quote}

\begin{quote}
If you like danger, this is for you.  \textit{AZ2-5}
\end{quote}

\begin{quote}
The majority of us were worried about going to the bees but we all loved it, even the quiet ones, which was surprising.  \textit{AZ1-2}
\end{quote}

\begin{quote}
Health and Safety is essential, you need to listen to what you are told which until now has always been a problem for me, but now I understand why you need to listen.  \textit{UK3-2}
\end{quote}

\begin{quote}
I have learnt that to be a beekeeper you can’t be a loser, the bees won’t tolerate that for sure.  \textit{AZ1-1}
\end{quote}

\begin{quote}
To be honest, visiting all those bees was scary but awesome, and the programme taught me to work with other people to achieve things.  \textit{AC2-3}
\end{quote}

\textsuperscript{15} Reasons for this are complex and beyond the scope of this report, however one reason maybe a phobia of insects frequently played-out in our media, for instance through fictional films which depict swarms of ‘deadly’ bees (e.g. The Swarm, 1978 and subsequent remakes).
Once you have faced 30,000 bees you can face anything, you just need to believe in yourself, that’s what I have learned. **AZ3-4**

Interestingly, there was an element of perceived calmness involved in the beekeeping, which ran parallel to the perceived danger, as expressed in these comments:

**Total Fear. Total Pleasure. Total Calmness. That’s my experience with the bees.** **UK1-3**

**The bees put you under a spell, which clears your mind for a while, and then you want more time with them.** **AZ3-3**

**I know I have learned things but I am not sure what at the moment, but I am not angry like normal which is good.** **AC2-4**

The value of this calmness, in reducing anxiety and improving anger-management strategies, should not be under-estimated. As I explained in Chapter One, Part Two, many young people at risk have a burden of anxiety caused by external social problems, which are often compounded by poor communication and literacy skills. These aspects hold significant advantages in terms of transferable skills for future educational success and employability, which as I have explained, significantly reduces risks of recidivism.

Although seemingly contradictory in nature, the element of perceived risk can be combined within a controlled, informal learning atmosphere (Pollard, 1996). The environment of the Bee Inspired experiential educational programme successfully provided such an setting, which induced an element of fear and/or stress whilst at the same time, being controlled by the programme leaders and delivered to the participants in a measured way. This was important, because any unnecessary risks could have had an adverse consequence to those on the programme. The fact that the young people chose to exaggerate these risks to themselves is important and deserves further examination. Structuring outdoor experiential education in this way, allows for: “comprehensive self-examination, self-exploration and self-reflection of the individual in a supporting and caring environment” (Martin et al., 2004:18). The benefit of these outcomes from experiential education is a building of confidence in a young person’s abilities in a caring environment where outdoor educators can help participants learn to be better equipped to face challenges in their own
lives. Along with the activities themselves, the unfamiliar environment in which these programmes are held contributes to creating this sense of dissonance through creating a sense of the unknown (Long, 2001; Martin, 2001; Martin et al., 2002). Several outdoor education theorists argue that the emotions involved in a novel environment allows participants to gain new perspectives on familiar environments from which they come, and the freedom to experiment with new roles (Kimball & Bacon, 1993; Nadler, 1993; Walk & Golins, 1976, as cited in Mckenzie, 2000). The effectiveness of the combined elements of perceived risk within an experiential educational programme was perhaps due to the unique nature of beekeeping summed-up with the following statements:

The sound of the bees and the dancing is hypnotic - it’s a thousand times better than drugs, they take you to another place, a chaotic but organized place. **AC3-1**

With beekeeping you need to stay alert or else, but you end up in a trance with the bees which is the most calming experience I have ever had, and I can’t explain it, but I want more. **AC2-5**

I think I could do beekeeping everyday and never get fed-up, you really do get a buzz out of it. **AZ1-4**

As I explained in Chapter One, Part Two, literacy problems is often a risk factor for young people associated with social problems like unemployment and criminal behaviour (Cross, 2004:70). Indeed, many individuals in our prison systems suffer poor literacy and numeracy skills that result in, or from, learning and communication difficulties (Home Office, 2009). Understandably, young people often feel anxiety because of their continued frustration at being unable to effectively communicate their level of understanding (Cooper et al., 1994; Cross, 2004). The invisible nature of this anxiety is compounded by a lack in recognition of these difficulties by others and is frequently (mis)interpreted as inappropriate or deviant behaviour. The intrinsic mental health problems that occur as a result of these complex difficulties adds further complications. Potentially, the cycle of re-offending continues unless there is recognition and help for these young people both within and beyond the youth offending and educational systems.
Early intervention strategies are therefore essential if learning and communication difficulties are to be diagnosed and addressed; hence the successes of programmes such as Surestart in the UK and Headstart in the US. Yet, despite the recognition of the importance of other kinds of communication and differentiation strategies that address different learning styles, reading and writing are embedded in formal curriculums and teaching policies.

The unique aspect of the Bee Inspired intervention programme is how the bees themselves provide an opportunity for young people at risk to interact with them and each other, without conventional forms of communication. Raising awareness of the existence of a new world without the difficulties, anxieties and confrontations of reading, writing and understanding, provides a profound, new, reflective and refreshing environment for these young people.

As I described in the section above, during the Bee Inspired programme, many of the young people commented on how they understood the need for them to be confident and calm when near to, and working with the bees. Furthermore, the young people seemed to re-inforce their own need for this calmness, when they over-emphasised to themselves, the perceived dangers if they did not act appropriately. It follows then, that they recognised how the bees may interpret their emotions and body language and adapted them accordingly. Their newly acquired confidence and (perceived) competence around the bees, delivered personal success through the completion of their beekeeping duties. Whether the bees’ actions were affected or not as a direct result of the young peoples’ changed behaviour, is arguably irrelevant. This is because, this specific interaction, with the perceived risk (of being stung) and its resulting short and longer term rewards (being praised by the instructors and harvesting honey etc), provided the young people with a new and positive learning and communication experience. When this experience was linked explicitly by the instructors (with whom they had developed rapport and respect) to transferable skills, the young people appeared to recognise the value of this experience for their future personal and professional development16.

16 This raises other issues, for example, were the changed behaviours of the young people a reflection of their ‘actual’ feelings of ‘calm’ and ‘self-confidence’, or were they more accurately described as their interpretation of a performance of what these (unfamiliar) emotions may look like to the bees?
Other aspects of the Bee Inspired programme also contributed to this positive experience for example, as I have described above, the intensive, kinaesthetic and eidetic nature of the learning experience and the materials which continuously engaged the young people with the course contents.

**Conclusion**

In this chapter I have integrated the findings from the quantitative and qualitative data and brought new meanings to it by using the quotations from the participants themselves, together with my observations described in the previous chapter. I divided the themes into the different topics that I described in Chapter One which included the different learning experiences and styles of the young people, the experiential learning programme and the learning outcomes. There was also a new and perhaps unanticipated finding; that of the importance of the element of risk to the young people involved in the experiential learning programme. I have linked all these themes to the importance of the overall objective of this research: that of preventing the offending or re-offending of young people, for example in discussing the transferable skills gained for their future improved employability.

I argue that the objectives of the Bee Inspired experiential educational programme were met. In fact, there are some aspects of the programme which were unexpected, for example in terms of the engagement of the participants in the programme and the longer-term outcomes (described in the following chapter).

The general positive outcomes of the programme can be summed-up with the following quote:

I have learnt more in four days than in four years at school and I haven't even had to try too much. **UK3-3**

In the final chapter which follows, I describe the significance of these findings in relation to the objectives of the research and my view on the overall outcomes of the Bee Inspired experiential education programme. I will also explain the re-offending rates of the young people and compare and discuss these to similar relevant statistics. Another issue relevant to these outcomes is the fact that many of the young people who participated in the Bee Inspired programme have continued with their beekeeping skills in each of the locations.
Finally, I will draw conclusions based on these outcomes and provide some recommendations for future research and practice in relation to experiential educational programmes such as these, for young people at risk.
Chapter Five: Conclusions
Introduction

In this chapter, I draw together the findings and discussion from the research into this experiential education programme involving beekeeping. I refer to the original objectives of the study, and link these to the outcomes from the qualitative and quantitative data that I described in the previous two chapters. After addressing each of the three specific aims of this research study, I describe what the potential implications are for policy and practice when helping young people at risk, and I will make some appropriate recommendations that further research should take, bearing in mind these outcomes. The three aims of the research are listed below:

1. To evaluate the effectiveness of an experiential learning programme in engaging young people at risk of offending and reducing that risk.

2. To compare the effectiveness of the programme in three different geographical locations with young people from different cultural contexts.

3. To assess the effectiveness of an experiential learning programme involving beekeeping in comparison to other interventions designed to reduce young people’s risk of offending.

Evaluating the effectiveness of the study

The challenges of conducting research into youth offending, centres on the inconsistencies in definitions of terms such as ‘youth’ and ‘crime’ (explained in Chapter One). Furthermore, the fact that crime data and data from relevant interventions are not collated in a consistent or systematic way, exacerbates these difficulties (Garside, 2010). Of particular relevance to the research reported here is that (for example) whilst many of the ISSPs or Community Orders imposed on young people in England and Wales are breached, the action taken by the different agencies is not consistent and therefore varies according to the particular practices of that locality (Waters, 2007). This presents immense difficulties in presenting research which claims to be perceived as ‘effective’. However, having said this, as I have explained, a broad range of evidence does indeed suggest that many of the current interventions that aim to prevent young people described as ‘at risk’
from offending or re-offending are not achieving their objectives (Wikström and Treiber, 2008). This may be because these arguably, mainly punitive, authoritarian strategies:

“...tend to entrench rather than resolve disadvantage, distress and trauma experienced by many young adults while doing little if anything to make society safer or crime less prevalent.” (Garside, 2010:4)

As I explained in Chapter One, there is an abundance of research which points to the range of social and economic disadvantages which young people ‘at risk’ experience. It is only through a better understanding of what these needs are, and how and why these factors may contribute to their risk of offending that the underlying causes of these individuals’ behaviour can be addressed (Garside, 2010). In order to provide some opportunities for new insights into these needs, this research adds to the relatively limited amount of research where the voices of these young people are heard (see for example Grimshaw et al, 2011). This is in stark contrast to the plethora of research in this area which relies wholly on a quantitative model of experimental design for instance in Randomised Control Trials (RCTs). Interventions which include a multi-systemic approach which includes an element of CBT have been argued to be particularly effective (e.g. Wikstrom and Treiber, 2008). As I explained in my introduction, this research study is significant because it provides an in-depth examination of a very specific and unique experiential education programme which involves such an approach.

The multi-systemic elements of this research include the ethnographic methodology, the setting in a natural environment and the practice of learning beekeeping together with cognitive behavioural management strategies. This research is the only known recorded international programme that has researched beekeeping as an intervention for young people aged 13-17 years old (of both genders) who have offended, or are at risk of re-offending. This study is important because, following the recommendations of Morrissey et al. (2005) and Larson and Hansen (2006), it focuses on the value of using a programme which has a preventative focus that helps young people prepare for adulthood through the development of life-skills, instead of a deficit model where ‘treatment’ is needed to address problem behaviour among at-risk youth. As I explained in Chapter 1 and illustrated in the examples in Appendix 3, these deficit-type approaches within interventions with young people have been less effective in reducing recidivism. The programme is not promoted as either a preventative or treatment programme to the young people who participate, which in itself helps to encourage enrolment and participation and not to stigmatise these young people. It provides an example of how a focus on environmental experiential programmes
using beekeeping can reveal important conditions that support youth in their development towards adulthood and potentially prevent them from offending or reoffending in the short and long term. This focus is essential if practitioners wish to move toward building a broad range of programmes that support positive development among young people ‘before’, or ‘after’ problem behaviours arise to prevent offending.

This study also adds to a small body of research that starts to ask and answer questions about how certain outcomes are obtained in various experiential education contexts. The mixed-methods methodology used in this research project is significant because examining various activities in context is important in understanding how they can create conditions for positive development for young people. In accordance with recommendations of Larson and Hansen (2006), this study gives in-depth descriptions of how the Bee Inspired programme operated at the three international locations in order to facilitate investigation into processes which helped in the engagement and development of the young participants. Uniquely and perhaps most importantly, this study also provides clear insight from the perspectives of the youth involved, not only into the outcomes of the programme, but also in terms of their personal and social development; factors that research shows helps prevent young people from offending or re-offending through improving their success in educational or employment settings.

From the perspective of theory, this research study adds to comparative, mixed-methods research that privileges rather than marginalizes the voices of youth. This perspective acknowledges youth as a valuable source of information in evaluating developmental aspects of experiential education programmes, as is recommended by Larson (2000) and Warner (1990). Interpretations of these voices presented here reveal critical insights which can be illuminated when youth are consulted and viewed as experts of their own experiences. These are important elements to better understand how rates of youth recidivism amongst some individuals can be reduced.

In Chapter One, I explained the difficulties and challenges presented to young people at risk within the three international locations discussed here. Although each location has its own unique complexities, many of these issues I have described are experienced by young people globally. The challenges they face on a personal level are often exacerbated by poor educational outcomes and in turn, reduced employment prospects and the situation for many is not improving. One of the main objectives then, for experiential
educational programmes for young people at risk, is to reduce rates of recidivism for these individuals. In achieving this, research has highlighted the importance of helping young people to acquire specific skills which assist their learning for their future personal and professional lives. These factors are intrinsically linked to each other and any separation can only be superficial in its attempt to address the overall objective. I argue that experiential learning allows an holistic, genuine and practical solution to young people’s complex needs. More specifically, there are some core elements of the Bee Inspired programme which are unique in the way they appear to address some specific needs of some young people at risk. I explain below the main areas of this success in facilitating the development of life-skills, with examples of how this evidence shows the programme was successful in meeting its objectives:

**Cognitive skills:**
The programme encouraged the young people with training on general thinking and decision-making skills such as to ‘stop and think’ before acting, helped them generate alternative solutions, evaluate consequences, and make decisions about appropriate behaviour. This was evidenced by the effective team working skills I discussed in the previous chapter.

> “The bees don’t need to react, their presence is enough. I now realise I don’t always need to react either and I don’t care if you like me or not.” **UK1-4**

**Interpersonal problem solving:**
The atmosphere of the programme, with its integral discipline and ‘moral code’ (‘ICARE’) provided training in problem-solving skills for dealing with interpersonal conflict and peer pressure. This is an intrinsic part of team working, especially within the short time-frame of this intensive learning programme.

> “The beekeepers told us so many times. Take your time, think three times then act or speak. It gives you time to think if you are doing or saying the wrong thing. Most of us never normally think once, and man that’s been our biggest problem”  
**AC-3-2**

**Practical skills:**
The programme encouraged practical skills like lighting a fire, pitching a tent and preparing and cooking food. These practical skills are closely linked to the social skills that were
developed, for instance in eating a meal together and sharing domestic tasks. Equipped with the skills and confidence to do basic everyday tasks like preparing a meal provided the young people with an improved self-esteem and important skills that would allow them to live and work independently.

**Pro-Social Skills:**
The programme also provided a space and the time to enhance pro-social behaviours. Interpreting social cues, taking other peoples’ feelings into account and other similar skills were integral to the successful team working and learning environment during the programme:

“We all learned something important from the bees, ‘work together and respect’ and the job gets done. We all learned from the beekeeper instructors ‘work together and respect’ and the job gets done and everyone is much happier. I will go home and remember that if nothing else.” **UK3-4**

“Upset the bees and get stung. Upset the brothers and get worse. Its best not to upset anyone” **AZ23**

As I explained in Chapter One, problems commonly affecting young offenders are family breakdown, educational underachievement, substance abuse and mental illness:

“They are also more likely to have difficulty controlling their behaviour and understanding its impact on others. The youth justice system works on the basis that addressing such risk factors during the course of a sentence is the best way to reduce a young person’s risk of re-offending”. (NAO, 2010:4)

I argue that the Bee Inspired programme is an intervention that can help young people address these risk factors, through the positive experience of learning in a novel environment. However, more than this, the Bee Inspired programme produced some unique and particular benefits, for example in the skills that are explained below:

**Anger management:**
Training in techniques for identifying triggers and cues that arouse anger and maintaining self-control are crucial in developing social skills. The team-working environment at the Bee Inspired programme provided ways for the young people to develop this skill.
“As soon as anyone, even a hint of bad behavior, and WOOSH!! The instructors will say that word “ICARE” and you’re beaten. No one argues with it, as we all agreed to it. No “ICARE’ and you’re out of here, buddy.” **UK2-2**

However, in ways which I explain below, there was an aspect of the development of a anger management strategy for these young people that was integral to the perceived behaviour of the bees themselves.

**Moral reasoning:**
The programme’s activities designed to improve the ability to reason about right and wrong behaviour and raise the level of moral development. This included basic life skills like not using bad language which some of the young people were apparently unaware they were using:

“The beekeepers make you think about what you are doing, we do the thinking, they don’t just tell us, we should know if something is right or wrong, most of us were just lazy before and then always make the wrong decisions.” **UK1-5**

**Behaviour modification:**
The programme’s instructors used behavioural strategies like contracts and/or strategic reward and penalty schemes designed to reinforce appropriate behaviour. These are well-established within teaching and learning strategies with a range of learners, as I described in Chapter 1. However, the Bee Inspired programme was particularly effective in this area because of the novel environment in which it was situated:

“In America they have three strikes and you’re out, we have' ICARE' and don’t follow it and seriously you could have one strike and you’re out. All of us like the fact we know where we stand with this ICARE stuff otherwise its every man for himself which we know doesn’t work.” **AZ3-3**

Importantly, the element of perceived risk is likely to have also played a significant part in the effectiveness of the behaviour management teaching strategies employed by the beekeeper instructors. This is because the law of nature transcends any adult rules as we
are unable to confront or change them. The young peoples’ acceptance of the perceived ‘power’ of the bees seemed beyond their control or understanding, yet they managed to adapt their behaviour to the perceived needs of the bees. As I discussed in the previous chapter, this element of perceived communication between the young people and the bees raises vital issues and requires further investigation.

Re-offending rates

In helping these young people at risk to acquire skills (such as those I have identified above), we can be sure that we are promoting their chances of securing employment and therefore participation in society. But judging the effectiveness of the Bee Inspired programme was not aimed specifically at measuring these outcomes (although this, in itself, as I have explained throughout this report, is intrinsically linked to its objectives), but about preventing these young people from re-offending. In this aspect I can confirm that the Bee Inspired programme has been very effective. April 2011 marked one calendar year following the completion of the Bee Inspired programme by the 45 participants in each of the three international locations. At this time, I contacted the co-ordinator for the programme who was tracking the progress of each of the participants for up to eighteen months after completion. Below I set out the results:

(One year on)

- Prince Edward Island, Canada – no re-offending by any of the 15 participants on the programme.

- Azores Islands – no re-offending by any of the 15 participants on the programme.

- United Kingdom – 1 participant reoffended and was charged with an offence. (UK1-3 - a Male aged 14 years old when started the programme).

In October 2011, eighteen months following completion of the programme by the young participants, the co-ordinator reported the following updated re-offending rates:

- Prince Edward Island, Canada –1 participant re-offended. (AC3-1 a female aged 15 years old when started on the programme).

- Azores Islands – no re-offending by any of the 15 participants on the programme.
• United Kingdom – one additional participant reoffended\textsuperscript{17}. 
(UK1-1 a male aged 14 years old when started on the programme)

Overall, only three of the total 45 participants re-offended during the period that their progress was tracked after the Bee Inspired programme. This compares extremely favourably to the national average of re-offending rates explained in Chapter One. For example, the re-offending rates in Canada are approximately 43%, Azores estimated at 33%, whilst in England and Wales the rates are 56% for those young people who receive court sentences and about 37% for those with less serious offences (NAO, 2010). Of course, the limitations of this relatively small-scale study that I set out in Chapter Two, mean that the groups of young people who participated on this programme do not represent statistical significance. However, the Bee Inspired programme provided potential success stories for many of the participants observed here, and many others\textsuperscript{18}. Even if the figures cannot meaningfully be converted into percentages, it is clear that as only three of the 45 participants (6%) went on to re-offend within eighteen months of the programme, there is strong case for further examination of the Bee Inspired and similar programmes.

When considering the effectiveness of the programme I should also point out that many of the young people continue with their beekeeping practice and it seems that this somehow prevents them from re-offending. The reasons for this are unclear and warrant further investigation. For example, after eighteen months the co-ordinator confirmed that in the Azores 12 of the 15 young people were still beekeeping. In the UK, 9 of the 15 young people were still beekeeping, but I have been informed that both those males who re-offended were not beekeeping at, or just prior to their re-offending. In Canada, 11 of the 15 young people have continued with their beekeeping, but likewise, I have been informed that the female who re-offended was not beekeeping at, or just prior to her re-offending. The significance of the low recidivism reported above, and the additional information which links these low rates specifically to the young peoples’ beekeeping practice, provides the grounds for further research and indeed demands the sharing of these findings with other relevant authorities for the wider benefit of young people at risk.

\textsuperscript{17} Interestingly, the two males who re-offended were in the same sub-group of five on the UK programme. However further investigation into what may have occurred during this sub-group’s experiences that may have had an impact on these participants is outside the scope of this report.

\textsuperscript{18} Data from previous participants from the Bee Inspired programmes that have taken place annually over the past four years is not available.
Comparing the outcomes of the three locations

The structure and delivery of the Bee Inspired programme at the three international locations was the same. Similarities and differences in the nature of participants’ important experiential experiences give insight into different ways in which youth can be challenged and supported in achieving success, and can be encouraged to explore their identity and build confidence and emotional competence both individually and in a group setting. This emphasises the importance of providing a broad range of interventions for young people at risk, where each individual’s needs are unique.

My observations and descriptions presented in this report highlight some significant differences between the experiences of the participants and the beekeeper instructors in three locations where the programmes took place. In concluding my findings, it is appropriate here to summarise which of these differences I recognize as most relevant to the overall objectives of the research and the Bee Inspired programme as a whole. I hope that this will contribute to sharing aspects of success for the programme and those that could be changed, as well as promoting a better understanding among professionals and carers who work with young people at risk.

As I described in the vignettes in Chapter Three, the cultural differences were especially evident in the contrast between the social celebratory atmosphere at the beginning and end of the programme that was held in the Azores, compared to the sombre mood at the programme in England. This, in itself would perhaps have not been as significant to me as an observer, if the adults supporting these young people had been equally as visible at these locations. It is unclear why any of the parents/guardians or other adult support workers were absent from the start or end of programme in England, especially when they had specifically been invited to attend. This is even more puzzling because, as I explained in Chapter Four, Part One, the average age of these particular young people was younger than the other two locations so logically would have meant that they would have required more support and encouragement from those adults around them, not less. Limited social capital remains a crucial factor in these young peoples’ lives (Morrissey & Werner-Wilson, 2005).

There were particular times during the programme itinerary in England, which illustrated what I interpreted to be a vulnerability or lack resilience in this group of young people. For
example, many became very emotional and disturbed when it was made clear to them that they would be unable to use their mobile phones during the programme. Perhaps this was an example of a previous lack of discipline at mainstream school? Or perhaps it was evidence of poor parenting skills in that these young people relied so heavily upon their technology for any interaction; they felt they would struggle to cope with real social interaction when they were without their phones. This latter perspective could hold true when we consider that at one point during the Bee Inspired programme in England, the beekeeper instructor had to explain to one of the participants about the reasons for shaking hands when greeting someone. It is more likely that a combination of these factors and others contributed to the young peoples’ behaviours. As I explained in Chapter One, many young people today have a lifestyle which does not include working in, or experiencing the natural or social environment. Their lack of fundamental social skills does not just prevent them from entering employment, but also impacts their physical and mental health and well-being. Their need to venture into the outdoors is often replaced by more sedentary activities using modern technology such as computers, mobile phones and other devices that often do not have the capacity to offer them physical or emotional challenges. This report provides some stark reminders in the form of comments and behaviour from young people of what our social world may look like, if these attitudes remain unchallenged.

The parenting skills which are an integral part of the UK’s Surestart and the US Headstart programmes has helped thousands of families to learn together about diverse subject matters; from literacy and numeracy skills to bathing a baby. It was evident to me during my observations of the programme in England, that the Surestart programme is needed now more than ever if we are to assist these young people in learning basic skills and common routines like preparing and cooking a nutritious meal and enjoying this together with friends and family. It is ironic that despite being isolated from the outside world, basic domestic skills that are essential to our everyday lives have also been neglected from many of these young peoples’ learning experiences. How tragic then, that 124 Surestart centres throughout the UK have already closed down due to government funding cuts, with further centres closing within the next few months (Watt, 2011).

I also observed that for the Canadian programme, there were specific language difficulties and cultural differences that had to be understood; promoting these young peoples’ sense of identity was key to encouraging them to work as a team. Perhaps ways of encouraging
freedom of expression from young people at risk in Canada would be a beneficial strategy for future intervention programmes such as these? Overall however, the participants within the Bee Inspired programme at all three international locations expressed that they felt relaxed, comfortable and perhaps most importantly safe in the natural environment working together undertaking the beekeeping experience. This is crucial to their learning experiences and the evidence presented here illustrates that this was one of the key issues why the programme was so successful in its longer-term objectives in preventing these young people from re-offending.

Research into experiential education opportunities in the natural environment including the outcomes reported here from the Bee Inspired programme, may help play a major role in contributing to the social debate on environmental issues. It may also engage and assist young people at risk of offending to refocus on the macro issues and to take part in an environmental activity, particularly beekeeping as a hobby or potential occupational opportunity. There is a connection between engaging with our natural environment and learning more about ourselves, as Suzuki and Taylor (2009) point out:

“In nature, everything is connected. And while people tend to think that human society is somehow excluded from nature like some sort of observer, we are in fact deeply embedded in the natural world. Because of this, our actions can have profound, unforeseen, and mysterious repercussions”.

Suzuki and Taylor (2009:49)

As I explained in Chapter One, Part One, the foundation of the concept of experiential education is based on Humanistic psychology with principles that support the ideology of individualism and Maslow’s theory of the ‘hierarchy of needs’ (Finger & Asun, 2001). What has evolved from this research is the understanding that experiential education allows young people to ‘go back to basics’ by starting with fundamentals like food and shelter that many of us take for granted. Together with the safe and secure environment of the campsite, and the effective teaching strategies of the instructors, it provided the young people with a solid foundation upon which to develop a new perspective on the world. With the above quotation in mind, this is arguably how the Bee Inspired programme encourages young participants to discover their own abilities, creativity, sense of purpose and self-esteem – all aspects that contribute to better educational and employment outcomes and therefore a reduction in risk of re-offending.
Assessing the perceived ‘effectiveness’: successful practice

As I explained in Chapter One, important data is unavailable regarding the specific details of offending and re-offending rates in some areas (e.g. The Azores); statistics on the effectiveness of intervention strategies is also extremely difficult, if not impossible to obtain. Unfortunately, likewise, data regarding previous participants on other Bee Inspired programmes are not recorded. Policies and funding that promotes follow-up procedures of the participants involved in this programme is also absent from the records. This is not unusual, because, as I explained in Chapter One, Part Two, many experiential education programmes such as Bee Inspired, are small-scale. However, despite their perceived ‘effectiveness’, often results are not published and joined-up strategies between charities, youth justice systems and other authorities worldwide who support young people, do not exist (Pitts, 2001; Waters, 2007). Data regarding the employment and/or work experience of these young people would also have benefited the analysis and discussion, however this was also unavailable. Assessing the benefits of these programmes is therefore restricted when the potential wider value of longitudinal data is not considered by some authorities. This is understandable when we reflect that often educationalists involved in these programmes are volunteers, forced to concentrate on the ‘here and now’, when in contrast, academic professionals and government bodies may have different requirements and perspectives.

With this in mind, the outcomes reported here are important because, as I mentioned above, the Bee Inspired programme provided evidence of good practice that should be shared more widely with others involved with the care of young people at risk. This can be achieved in many ways, either by adopting some or all of the policies that were integral to the success of the Bee Inspired programme (listed below), and/or building further on the insights that resulted from the programme. From my observations and the outcomes from the quantitative and qualitative data reported here, I summarise these themes below and these provide some examples of how these themes may play-out in practice.

- forming collaborative partnerships with key stakeholders
- involving families, professional workers and communities
- utilizing well-trained, experienced and specialist staff
- offering ongoing staff development
• planning programmes well with reference to structure and content
• making programmes affordable and accessible
• promoting positive relationships with caring adults
• provide positive role models
• recognizing and encouraging good behaviour
• embedding social/cognitive skills, such as those life skills listed above
• Make learning fun and ‘hands on’
• Providing an element of perceived risk or danger
• Provide clear conduct rules for both participants and staff such as ‘ICARE’
• Evaluate programme delivery
• Be flexible about content and structure to continually inform design through feedback by users.

Within the field of experiential education programmes in the natural environment, this research provides insight into the connection between theories and practice. By investigating and reviewing the perspectives of young people who have offended and/or are at risk of re-offending, this study provides a deeper understanding of the issues facing this group and provides insight into how they can be empowered to overcome the risk factors and challenges in their lives. This study gives evidence of the value of community experiential education programmes in the natural environment involving beekeeping, and the positive development, which can occur for this group of young people.

**Implications for Professional Practice: Recommendations**

Bearing in mind the above themes, I summarise below some specific aspects of the Bee Inspired programme which I consider to be particularly relevant to the effective development of the young peoples’ skills I described above. These points should be shared and discussed amongst professionals involved with young people in order to provide a format for best practice in experiential educational programmes.

**Individual attention for participants**

It could be argued that the main reason for the success of the Bee Inspired programme, is the individual attention provided to the young people. For example, in the differentiation
needed for individuals with the complex needs I described in Chapter One. Research suggests that these young people often do not obtain positive learning experiences at school and this has a serious potential impact for future employability and therefore their risk of re-offending. It is well-established that educational research recognizes that any individualised, differentiated one-to-one counseling and support element that supplements group sessions is likely to substantially improve the effectiveness of learning outcomes. The outcomes from the Bee Inspired programme support the view that for some young people, the individual attention supplied by the facilitators fulfills a specific need. I recognize that this would not be applicable for all young people, who may react negatively to this situation; however this has implications for educationalists and policy-makers involved in the care and support of young people at risk.

Increase participation among young people who have offended and are at-risk of re-offending

This can be achieved by making programmes such as Bee Inspired affordable (e.g. by subsidising them or waiving fees where necessary) making them accessible (e.g. offering transportation to young people who need it to get to the programme location), involving parents, professional workers and local community representatives, and asking community-based organizations for assistance with recruitment and attendance. Whilst not attractive to all young people at risk, Bee Inspired or those programmes similar in approach, should be available amongst a broad range of other interventions. As I explained in Chapter One, there are already many small-scale projects that aim to support young people at risk. These could be coordinated nationally through the appropriate authorities in order to increase communication and accessibility of these opportunities and reduce costs.

Safe space for participation

During every aspect of the Bee Inspired programme, formal and informal strategies are used to develop a sense of positive group identity. Bee Inspired programme beekeeper instructors foster a trusting atmosphere and create sense of anticipation and positive aspirations among participants. This is in stark contrast to some of the interventions which deliver a more disciplinarian approach (as discussed in Chapter 1) which arguably deliver and re-enforce a negative identity to the young people, alienating them by labeling them inappropriately. This has implications for the types of behavioural management and
teaching and learning strategies used by those involved in supporting young people at risk.

**Giving and receiving of support**

Beekeeping sessions, meal times, social gatherings and time with beekeeper instructors, provide ample opportunity for participants to experience the giving and receiving of support with their peers and adult staff. This is a *lived experience* and as such is experienced by *all* who participate in the programme, this encourages trust and self-reflection throughout the four days rather than restricting it to within a classroom environment.

> “The beekeepers were great, they are the types of parents most of us would love to have”  UK1-2

Again, the social aspects of this intervention may point to a more holistic approach in those living with (even on a temporary basis) young people at risk. It also has implications for parenting skills which aim to foster opportunities to (for instance) share meals together.

**Creative self-expression and healthy risks**

Because of the lived experience and the emergence within the programme sessions and social gatherings, Bee Inspired provides judgement-free opportunities to foster young people’s voices and opportunities to take healthy risks. As I discussed in Chapter 1, it is within this atmosphere of risk that valuable learning can develop. The perceived risk that came from the bees played a major part in motivating the young people to engage and remain interested in learning about the bees and how to care for them. The perceived risks were reduced through the use of specific teaching strategies and equipment, however as my observations illustrated, the young people seemed attracted to this inherent sense of danger. Opportunities for professionals to introduce ‘healthy risks’ into other interventions could therefore be beneficial in maintaining engagement and encouraging personal development and reflection.

**Authentic and Challenge-oriented communication:**

Bee Inspired programme design characteristics (i.e., length of time, safe space, facilitator skill, nature of sessions) are intentionally selected to foster honest, powerful communication among participants. Throughout the Bee Inspired programme beekeeper
instructors use carefully chosen words and actions in a manner that combined affirmation and challenge to encourage participants to take responsibility for the quality of their contribution in all aspects of the programme activities. This had mixed results for different groups and participants in the Bee Inspired programme (as I described in the UK Vignettes) and further professional dialogue and comparative research is therefore required into developing possible reasons why this type of pedagogical approach produced these reactions.

Developing motivation and strategies for applying lessons learned in the participants’ lives

Formal and informal strategies are used for thinking through positive ways to bring their entire Bee Inspired experiences home and into context beyond the programme itself. This encouraged positive lifestyles and behaviour and to help give participants’ positive interests and skills and prevented them from re-offending. As I described in Chapter 1, a follow-up strategy with the young person at risk in the days and weeks after the intervention has been shown to often have a positive impact in preventing the young person from re-offending. However, for complex reasons, including funding restrictions, often this follow-up is not possible. Importantly, the Bee Inspired programme motivated the young person to provide their own ‘follow-up’ strategy; that of maintaining their interest in and caring for the bees. This has significant implications for practice in that this is virtually cost-free, especially if (as occurred in this research project) the young people invest their own personal time and money into their bee keeping interests. As has been shown in Chicago and other similar programmes (discussed in Chapter 1), if pursued, this interest can also develop into employment for the young person, a factor that (as I have already highlighted) has a profoundly positive impact on an individual’s social, physical and emotional well-being.

Relapse prevention:

There is extensive research about the positive impact for some individuals if training is provided to them on personal tactics such as cognitive behaviour strategies. The Bee Inspired programme illustrated the effectiveness of these strategies that aim to recognize and cope with high-risk situations and halt the relapse cycle before the inappropriate behaviour occurs and causes consequences. Other interventions could therefore also use a combination of Experiential Education with these more ‘conventional’ cognitive strategies to provide a broader range of possible learning opportunities for the young people.
The positive feedback given by participants from the programmes at all three international locations, together with the low re-offending rates, indicates the importance of increasing educational settings for young people at risk of offending, beyond those that are school-based or limited to institutional surroundings. This should be widely acknowledged through increasing acceptance and financial support for such programmes. Learning is a continuous process and this was undoubtedly evidenced in the articulated understanding from the young people participating in this experiential education programme. Considerable barriers to outdoor experiential education presently exist with regard to accessibility and facilities due to short-falls in public education and wider government funding. However, if the concept of lifelong learning is to be readily accepted and played-out, then learning settings must also become holistic in the sense that cognitive energies are allowed free exchange within the learning domains of the personal and social within distinctive physical surroundings. Curricula for programmes for young people who have offended, or are at risk of offending must not only offer a diversity of subject matter; it must also tap into the experiential possibilities inherent to individuals’ multiple intelligences, local environments and the socio-cultural milieu. It is also important for experiential education interventions such as beekeeping to be regarded as serious contenders for helping young people to engage and develop, and therefore preventing them from offending in the first place. For those who have already offended, this research projects suggests that these strategies are effective in preventing them from re-offending. Only with a raised awareness of the opportunities on offer for these young people, will real change happen in the youth justice systems.

Young People at Risk: The Sociological Context

The voluntary sector has seen at least £200 million in cuts since the coalition government has come to power. Understandably, many educationalists are angry that government cuts in funding may contribute to other societal problems, such as the youth riots in the UK in the Summer of 2011. Voicing their perspective, leading youth figures have spoken out about the importance of youth services and those within the voluntary sector who provide interventions for young people. For example, Partnership for London said;

“disproportionate cuts to youth services in the past 18 months have resulted in the closure of youth clubs, trimming back of summer programmes and the loss of many youth councils across the country” (Children and Youth, 2011)
For professionals working with young people providing interventions such as experiential education for young people at risk, funding is now a priority. Tim Montgomerie summed-up the urgency of the situation: “Cameron needs to seize the moment and get on with a task that cannot be delayed” (Allen, 2011).

According to Scotland Yard, by 17th August 2011, 1,005 alleged riotous individuals were charged with various crimes connected to the riots in Britain (Gawker, 2011). This puts added strain on what is already an over-populated prison service because of the number of inmates who are recidivists. MoJ figures showed the total number of prisoners in England and Wales hit 86,654 in August 2011; 723 more than the previous week’s record high of 85,931 and less than 1,500 short of the usable operational capacity of 88,093 (Guardian, 2011). A tough approach by the courts in 2011 saw two-thirds of those charged remanded in custody, compared with just one in 10 of those charged with serious offences the previous year. With the recidivism rates that I described in mind, and our prisons at saturation point, it is timely that the government considers alternative approaches to dealing effectively with offenders. There is an opportunity to provide a strategic, long-term plan for interventions, including those involving experiential education for young people. A good investment is required, not just for the young people participating, but also for our communities and wider society.

**Recommendations for Future Research**

The key objective of this research was to evaluate whether or not this programme had a positive or negative effect on re-offending rates for those young people participating. The outcomes from this programme have provided unequivocal proof that, for this particular group of participants, the Bee Inspired programme provided a positive impact on their re-offending rates (as I described above). Furthermore, it provides evidence that the intervention was something that the participants volunteered to do and also contributed towards these young people developing transferable skills (such as team-working and anger-management described above). All these aspects provided considerable benefits to them in participating in learning and consequently securing employment; therefore further reducing their risk of re-offending in the future. Deepening our understanding of how recidivism rates for young people at risk can be reduced, can be facilitated in various contexts. As I explained in Chapter One, often programmes that aim to help and support young people at risk are not viewed as official ‘interventions’ but instead form part of many locally-funded, small-scale, ‘informal’ projects which may not be fully exploited and/or
evaluated in terms of their perceived ‘effectiveness’. Further qualitative mixed-method research such as that which I have reported here, would be extremely beneficial in exploring these projects’ perceived effectiveness, in particular, including the perspectives of youth participating in these experiential education programmes could provide some valuable data. It is crucial that future research in this area builds upon these findings, and those of other related experiential education interventions to uncover deeper meanings into both the successful and unsuccessful elements of these programmes and their facilitation.

Questions that emerge from this study worth pursuing in further research include:

1. How does a supportive environment appear across various programming contexts?
2. What are the factors affecting how challenges presented to youth are translated into feelings of success, accomplishment and reduction in offending behaviour?
3. How can practitioners support youth in successfully taking on roles of responsibility across contexts?
4. What is the nature of the disabilities suffered by young people at risk, how are they assessed/diagnosed/treated and how do these disabilities impact on the effectiveness of intervention strategies?
5. How can different agencies work together to widen the benefits of successful experiential education programmes for young people at risk?
6. Is the length and consistency of the programme important in itself, or is it the catalyst in the formation of relationships that support youth in their growth and helps them in reducing offending behaviour?
7. Perceived risk (i.e. of getting stung) forms a strong motivator for the young people in engaging with this programme. What are the reasons for this fear and is it unique to beekeeping? Are there other (perceived) risky environments that would be equally/more effective?

It would also be valuable to compare experiential education interventions with children and young people with similar adult programmes. For example, I have personally visited the only programme that I could discover of this type, which is based in one of the most disadvantaged cities in the USA; Chicago (www.beeline.com). The programme specifically uses beekeeping with adult prolific ex-offenders in a social-enterprise scheme to help the adults into employment. The programme, called aptly ‘Sweet Beginnings’, also shows
exemplary rates of recidivism for its participants (Singletary, 2011). This adds to the value and credibility of the findings I present from this research and provides firm justification for sharing best practice and further research.

In further research and case-studies, the perspectives of parents, staff and youth justice professionals in relation to these questions could also be explored, in order to further triangulate and ‘crystallize’ data and increase our understanding of these issues. It would be interesting to explore how multiple perspectives vary in terms of important factors influencing young peoples’ development. In particular, the research reported here did not specifically focus on the disabilities declared by the young people and more information about these disabilities may have had a substantial impact on the analysis of the outcomes. Furthermore, as I explained in Chapter Four, aspects of the questionnaire did not allow for follow-up procedures when answers from the young people were of concern. Future research in this area should learn from these areas of weakness to produce objectives that build further upon the results provided in this report.

**Final thoughts**

In this final chapter, I have explained how and why the Bee Inspired programme from the three different locations achieved its three objectives. I have evaluated the effectiveness of the programme in relation to the objectives of re-offending rates. For example, compared to the re-offending rates from other intervention strategies or projects that I described in Chapter One, Part Two, the Bee Inspired programme recidivism rates are very low, with only 3 participants out of 45 re-offending after eighteen months. As I described in Chapter One, there are difficulties in obtaining accurate data about recidivism rates with other experiential learning programmes, and this is one of the reasons why this research is so important. I have also highlighted the crucial part that beekeeping played in this effectiveness and described some possible reasons for this. I have compared the effectiveness between the three locations in relation to my observations and data described in Chapters Three and Four. I have also summarized my recommendations within relevant sociological contexts, in light of these findings. Bearing in mind the limitations to this research set out in Chapter Two, I have also recommended areas of further research that would greatly benefit a better understanding of, and guide the future direction of, experiential educational programmes for young people at risk.
As I explained in Chapter Two, whether an intervention is 'effective' or not is extremely difficult to measure, bearing in mind inherent complexities already described in the variations of what constitutes a 'crime', in what context and within what time-frame. As I have described, there are a broad range of interventions that are associated with attempts to prevent young people from committing crime. The nature and value of these different programmes should be more widely published and discussed and their successes celebrated. With this in mind, this research builds on aspects of multi-systemic interventions which celebrate diversity and where the voices of the participants themselves are heard and interpreted. For these young offenders, elements of the Bee Inspired programme encouraged them to change their own behaviours which in turn led to preventing most of them from re-offending. In other words, the specific combination of the participants' biographies and self-identities, together with the complex ingredients that made-up the Bee Inspired programme (e.g. the facilitators, the physical environment, the perception of ‘danger’ involved in working with the bees, and so forth) was an alternative way of exploring the needs of young people ‘at risk’.

In conclusion, there is no easy answer. Despite the apparent attractiveness of the homogenisation of young people ‘at risk’ there is no ‘magic bullet’ which would provide a specific direction for policy makers who hope to deliver more attractive-looking recidivism statistics. Pedagogical approaches in schools have evolved towards trying to meet the diverse needs of the individual through ‘differentiation’ and the emotional well-being of the child (DCSF, 2011). Although policies such as the UK National Curriculum arguably limits the flexibility of the teaching and learning styles, often there is a high degree of flexibility in the classroom allowing for a range of measures which support learning and development for all. Likewise policies and rhetoric surrounding interventions which attempt to help young people at risk of offending or re-offending need to avoid abstract dichotomies such as ‘effective’ versus ‘ineffective’. Instead, they should explore the value of innovative and diverse approaches such as the Bee Inspired programme which are often ‘under the radar’ and/or driven by the professionals themselves rather than government initiatives.

Finally, I would like to end on a relevant quotation from one of the participants on the Bee Inspired programme, which sums-up the reasons why we need to focus on more effective interventions like the Bee Inspired programme for young people at risk:
Once you have faced 30,000 bees you can face anything, you just need to believe in yourself, that’s what I have learned.

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Appendix 1: Canadian Youth Justice System: an Overview

The numerous programmes, identified in various jurisdictions across Canada, are organised by a typology of three models. These are described below:

(1) The Monitoring/Enforcement Model: Most of these early initiatives were based on the Serious Habitual Offender Comprehensive Action Programme (SHOCAP), a model adopted from the United States. SHOCAP is a police-centred, inter-agency strategy designed to provide a coordinated approach and enhanced communication between agencies working with young persons who are habitual offenders. The primary focus is increased monitoring and enforcement. However, depending upon where the programme has been implemented, police may also work closely with social services and probation on case-planning and re-integration into the community for the SHOCAP targets, while ensuring that there is strict compliance of their court-ordered conditions. Targeted offenders are usually chosen for the programme through the use of a formal screening instrument or are referred by an inter-agency review committee (DeGusti et al, 2009).

Another example of a monitoring/enforcement programme in Ontario is the Youth Intervention Monitoring Programme which was implemented by the Peel Regional Police in 2005. This programme targets youth under the age of 18, who are on some form of judicial release or court-ordered supervision and have gang associations. Neighbourhood police officers are assigned 3 to 5 youth targets and are responsible for monitoring the youths’ enforceable conditions (DeGusti et al, 2009).

In smaller communities, such as those found in the Atlantic Provinces which have populations of mixed English / Acadian French speaking communities, the provincial governments of Nova Scotia / New Brunswick / Prince Edward Island and Newfoundland and Labrador use various models, and there does not appear to be as great a demand for formalised programmes for chronic and persistent offenders, given their small numbers. Atlantic provinces’ communities are often served by bilingual English / French RCMP and police detachments, where a small number of community members communicate with each other on a regular basis about youth and adult offenders who are chronically offending. Through this communication, police members are made aware of youth who should receive extra attention and monitoring in their communities (DeGusti et al, 2009) (Bala et al, 2009).
The Multi-Agency/Intervention Model programmes have developed more recently and are becoming quite common in Canadian jurisdictions, particularly in Manitoba and British Columbia. Their primary focus is on prevention and intervention to reduce re-offending. While multi-agency intervention programmes also increase monitoring of the at-risk of offending youth, emphasis is placed upon engagement as opposed to monitoring alone. These multi-agency programmes involve the police in partnership with numerous other community-based services. Thus, instead of a police-centred approach, a team approach is used, relying on referrals from the police for intervention services. The primary activities include sharing of information regarding youth at risk for re-offending and coordination of youth services provided by the partnership agencies. In many programmes, youth can be referred by any participating agency as long as they meet specific criteria. Some programmes also use an assessment tool for identifying youth who are at significant risk to re-offend. (Bala et al, 2009)

The review of community-based and police programmes for youth offenders shows that this multi-agency approach to managing chronic and persistent youth offenders is most commonly used in Manitoba. For example, the city of Brandon operates a not-for-profit organisation called the Multi-Agency Preventative Programme (MAPP), which includes a network of agencies consisting of: the Brandon School Division, Addictions Foundation of Manitoba, Child and Adolescent Treatment Centre, Child and Family Services of Western Manitoba, Dakota Ojibway Child and Family Services, Métis Child, Family and Community Services, Community and Youth Correctional Services, Manitoba Justice Crown Attorney’s Office, Brandon University Psychology Department, the Brandon Fire Department, and the Brandon Police Service. The organisation does not replace agency involvement, but rather endeavours to provide support to the agencies involved in the form of: reports of youth activity in the community, school and home environments; information regarding police, courts and or probation; administrative support upon request; a measuring tool to assess areas of improvement and decline over time; a means of exchanging ideas between individuals and agencies; comprehensive files that can be used in case conferences or multi-agency meetings; and a means of networking with others in the community who share the same goals and ideas in helping young people at risk (Bala et al, 2009).

Quebec Therapeutic Model. Historically, the province of Quebec has had a unique approach to youth justice. Arguably, Quebec has promoted a more child welfare/child protection approach to young people at risk of offending, compared to other Canadian provinces. The policy documents and statements from the authorities within Quebec have
consistently espoused a social development philosophy where rehabilitation and reintegration are primary goals. Their experience with diversion and alternative sentences dates back to the late 1970s, when Quebec’s Youth Protection Act was introduced. (Cournoyer and Dionne, 2007; Le Blanc, 2007).

In Quebec, “Centres Jeunesse,” or “Youth Centres” which are located in communities across the province are responsible for both youth in need of protection as well as those in conflict with the law under the mandate of the Provincial Director (young persons). These are para-governmental agencies almost entirely funded by the Ministry of Health and Social Services (MSSS). They provide a range of services to children, youth, and their families, including young people up to 18 years of age who are subject to the YCJA and/or the Youth Protection Act in Quebec. In fact, the philosophical perspective informing youth services is based on the notion that there is little difference between the services provided to children and youth who are in need of protection and those who are youth offenders. Quebec’s philosophy on youth offenders views them as children and youth who are in a stage of development requiring special support. They are seen as susceptible to making errors, having special needs, and requiring structure and counselling to develop and mature. Service is usually provided in French although many centres, especially those in Montreal, will have some staff who can provide services in English (Bala et al, 2009; Cournoyer 2007; Le Blanc, 2007).
Appendix 2: English Youth Justice System: an Overview

When a young person first comes into contact with the justice system (perhaps by behaving in an anti-social way or committing a minor offence), the police and local authority can use a number of tools including Police Reprimand, Acceptable Behaviour Contracts, and Anti-Social Behaviour Orders, all of which aim to support the child or young person and prevent them from re-offending. If they commit a first or second offence, the police will give them a Reprimand or Final Warning which are orders intended to prevent the young person from entering the youth justice system too early and would give the local YOT the opportunity to offer support and help, for instance at school or with their family. If a child or young person is charged by the police after committing further offences or charged with committing a more serious offence, the YOT’s role is to ensure that the underlying causes for the offending behaviour are addressed (Blythe and Solomon, 2009). Of course, this can be challenging as often the causes of offending behaviour are complex, multi-faceted and difficult to resolve, especially in the short-term.

If charged, the young person would appear in a Youth Court and the Court would decide whether to hear the case immediately or if it needs to bail or remand the young person into custody. If this happens, the court may choose to remand the young person in a number of ways: on conditional bail, unconditional bail, to local authority accommodation or to custody (secure remand). Local YOT involvement would then be to ensure that the correct option is employed with respect to: the young person’s circumstances: the seriousness of the offence; risk to the public and the availability and appropriateness of proposed accommodation. If a young person pleads ‘not guilty’, a date is set for the trial at which the magistrates will hear all the evidence and decide if the young person is guilty. If the offence is very serious, the Youth Court will send the case to the Crown Court for trial and/or sentence. If the magistrates were to decide the young person is guilty, they will then decide upon an appropriate sentence (Woods, 2010).

If a young person pleads guilty or is convicted of the charge, they are then sentenced. Sentences can be to the community or to custody. If to the community, the local YOT would normally be involved in supervising the work which the young person has been ordered to do and if to custody, they would be involved in a ‘post custody licence supervision’. This means the court judge makes an order about what conditions will apply to the young person and his/her supervision. The types of requirements will usually be that the young person has to:
• keep the peace and be of ‘good behaviour’ (meaning that they must stay out of legal trouble)
• report to the police, or the person responsible for supervising them, (for example, a Youth Offending Team (YOT) worker)
• inform the person responsible for supervising them if they are arrested or questioned by police;
• tell the person responsible for supervising them where they are living, and tell them immediately of any change in their address, school or work;
• report any change in their family or financial situation;
• report any other change that might make it harder for them to comply with the conditions of their sentence.

Also, the person responsible for supervising the young person may put other conditions on them that will support their needs and rehabilitation such as attend programmes etc. Once the sentence has been completed, the local YOT would be involved in helping the young person resume their education and are committed to helping that young person avoid reoffending (Woods, 2010).

If a young person is to be sentenced, the English courts have the fifteen different orders at their disposal. These are explained in full in the Appendix.

The English justice system provides a large range of sentencing powers for young people. However, although the youth courts use guidance with reference to sentencing, there has been ongoing criticism from those working with young people that the sentences are often inconsistent in their approach and dependent on many variables such as location, age, or race of the individual. Although arguably this is an example of how responsive a court decision can be to different circumstances, there is a risk of the perception of injustice and/or discrimination. This was highlighted in a memo about a report from the Parliamentary Select Committee Review of court orders on young people over a six year period (NAPO, 2005). However, the perceived inconsistencies of the English justice system is outside the scope of this report, in which my objective here is to highlight the evidence that delivers a need for a different and potentially more egalitarianism approach.
Appendix 3: Examples of UK Experiential Learning Programmes

Example one:
In Kent, two non-profit organisations, EnvironmentPlus International CIC (which manages the International Federation for Experiential Education programme in Europe and North America) and The BumbleBee Alliance CIC, have benefited from a total of £7,500 from the Youth Opportunity Fund to provide experiential learning programmes in gardening and beekeeping for young people attending a special educational referral unit in Thanet, Kent. This referral unit administers up to 60 'at risk' young people. As part of the application process for the funding the young people in question helped develop the programme content and complete the application forms for the funding which embedded their experience into that of the project at a core level. This program went on to successfully deliver practical sessions in the natural environment and the programme lasted for six months. The programme’s main objective was to build confidence and social skills in a fun and interesting way.

EnvironmentPlus International CIC also based in Kent has also received funding of £13,000 from the Youth Capital Fund for the purchase of a Mazda double cab pick-up truck to assist in the delivery of experiential education programmes offering beekeeping, arts and crafts for 'at risk' young disabled people in the East Kent area.

The BumbleBee Alliance CIC and EnvironmentPlus International CIC work very closely with Kent County Council Youth Service, and referral units in the county offering experiential education and outdoor environmental programmes for at risk young people offering opportunities for over 1,800 young people in the 2008/2009 period.

David Moniz, Chief Executive of The BumbleBee Alliance CIC commented in early 2009: "We have received about £21,000 revenue and capital combined from the Youth Opportunity Fund and Youth Capital Fund. This is money well spent by the government. We will serve around 500 of East Kent's most disadvantaged young people this year using this funding, providing experiential education programmes in wildlife and environmental programmes and use our new pick up truck to meet their needs. The same kids who are breaking windows, damaging cars and causing a
nuisance to residents, when they are with us are happily constructing bird boxes, planting flowers and mentoring younger children. We can do a lot of work with small amounts of money and the help of our volunteers. No one is anti-social or breaking windows around here, quite the opposite, if these youngsters are 'active' 'respected' and 'cared for' they 'are happy'." (Santos 2009:2).

Example two:
In Bradford, Yorkshire in the North of England, a programme called Dance United has benefited from a variety of funding from the previous Labour administration's funding initiatives, and works in partnership with a variety of organisations to bring individuals and communities together to seek creative solutions to artistic challenges, triggering a process that develops social interaction and personal growth in participants.

The company believes that dance has a unique quality that can, when delivered through a tried-and-tested methodology, create profound and life-changing experiences. Dance United's work currently focuses on the criminal justice sector, and includes working with women in prison and young offenders in the community. 'The Academy' dance team is made up of a cadre of skilled and experienced professional dance artists and teachers working alongside the dedicated team of trained support workers seconded from Bradford YOT and other contributing agencies. A dance-based alternative education programme called ‘The Academy’ is developed from methods used to educate and train professional contemporary dance artists by Dance United. ‘The Academy’ process is a physically, mentally, and artistically challenging experience for young people who have failed to achieve in more conventional educational settings and who may be offenders or at serious risk of offending.

‘The Academy’ is not simply about helping young people to avoid re-offending; it is about helping them to discover their real potential and their innate capacity to succeed. As with any client group - adults, young people, offenders or professional artists - Dance United's approach focuses on dance of the highest artistic standard. With dance itself firmly at the core, ‘The Academy’ approach can facilitate profound changes in participants' personal and social well-being, simply by raising their self-esteem through aspirations and high expectations in what they are capable of achieving. The concept of allowing contemporary dance training to provide the dominant narrative for the programme permeates every aspect of the work. Young people are treated as young professional dancers. The current
action research work is delivered in a dedicated dance studio space in the centre of Bradford and this professional environment supports the narrative in every way.

Dance United commitment to equality of access in evident in the fact it never auditions participants and is dedicated to working with all of those referred to its programmes. The referrals to The Academy are made by a range of agencies, the main one being our principal and highly valued partners, Bradford YOT and Nacro who refer young people on ISSP or other community orders. Other contributing agencies include Leeds Youth Offending Service, Calderdale YOT and a number of pupil referral and school inclusion units. The Academy is rapidly becoming a viable ‘hub’ for West Yorkshire and Dance United is in discussions with a number of new partners, including Bradford College and HMYOI Wetherby. There is scope for The Academy template to be rolled-out elsewhere in the country (Dance-United, 2011).

Example three:
Six young offenders from Merthyr Tydfil in Wales, have joined forces with Arriva Trains Wales to help in a station makeover at Quaker’s Yard. The aim of the project was to offer young people a chance to give something positive back to the community and repair the harm caused by their offence. During two days at the station, the youngsters worked with supervisors and staff to help paint perimeter railings covering the entire length of the platform. They also assisted with the application of anti-climb paint to the station waiting shelter, which has previously been the scene of anti-social behaviour.

Matthew Jameson, Reparation Officer for Merthyr Tydfil County Borough Council, commented on the Arriva web review:

“Our role involves organising and supervising reparation with young people aged 11 to 18 who have been made subjects of community orders”.

He continued:

“The Quakers Yard project is a great example of young people from the surrounding area becoming involved in a positive exercise that can benefit the wider community. The boys who took part in the project got a great sense of satisfaction from a job well done and it meant more to them because of the locality to their own homes. These types of projects also give the young people an opportunity of experiencing what it is like to repair the damage caused by young people who have committed
physical damage to the community and so hopefully deterring them from committing more or similar offences”.

Martyn Tudor, property maintenance supervisor for Arriva Trains Wales, commented:

“Some of the youngsters may not have previously had the opportunity to work on projects such as this. In working with the team, we have been able to help them learn a new skill and understand the importance of teamwork and personal responsibility”. He continued: “We are pleased with the final result, which has helped further improve the appearance of the station for the benefit of our passengers”. http://www.arrivatrainswales.co.uk/ (retrieved 26/09/2009)
Appendix 4: Azorean Community Diaspora

Since the 17th century, many Azoreans have emigrated, mainly to areas such Brazil, the United States of America and to Canada. In particular, Rhode Island, South-eastern Massachusetts, the towns of New Bedford, Fall River, River Point and West Warwick are still prime destinations for Azoreans where there are large numbers of Azoreans living in established Azorean communities. These are also evident in Toronto, Hamilton and Montreal (King et al., 1999). From 1961 to 1977, about 150,000 Azoreans emigrated to the United States, thereafter there was an annual average total of 13,000 emigrants bound for the United States and Canada, with a small number choosing Bermuda and Venezuela. In 1919 the population of the Azores was 300,000 people which is higher than the current resident population, however at that time there were also 100,000 Azoreans resident in the United States and an additional 46,000 Azoreans who had taken residence in the areas around Florianopolis and Porto Alegre areas of Brazil (Santos et al., 2003).

The Azores Government is very pro-active in recognising the contribution of the Azorean Diaspora and the contribution that the previous generations of emigrants have made to the Azores. Many of the Diaspora have consistently assisted their families back in the Azores thus helping the Azorean economy. This is evident at ports in the Azores, when pick-up trucks can often be seen full of goods enroute to families in need.
Appendix 5 – Parents, Guardians and Young People – Information Sheet

[Printed on EnvironmentPlus International CIC letterhead]

[Logo, name and address of EnvironmentPlus International CIC ]

Title of project: The Big Buzz

Participant information sheet for: Parents, Guardians and Young People

Researcher’s name: Patrick Tierney

I am a Professional Doctorate in Youth Justice student at the University of Bedfordshire in the United Kingdom. I have had over 15 years experience in working with young people in experiential learning programmes related to the natural environment. I am currently the Chief Executive Officer for EnvironmentPlus International CIC which is a government registered, non profit Community Interest Company based in the United Kingdom. You can contact me by telephone on 01303 211599 or by e-mail patrick@environmentplus.org.uk

Project supervisors’ names: Professor John Pitts and supervisor Tim Bateman both of whom are based at the University of Bedfordshire.

Overview

The overall objectives and aims of my research project and strategy will be to provide a robust research evidence base to inform the development, implementation and review of environmental experiential learning programmes involving Beekeeping for young people.

The project will explore the leadership and programme content in relation to success factors and participation. This will be supported by the provision of research and analyses that monitors the effectiveness of programmes operated through voluntary organisations in the United Kingdom, Azores Islands (Autonomous region of Portugal situated in the mid Atlantic ridge) and in Atlantic Canada with young people from different cultural and linguistic backgrounds (English / French / Portuguese).

To enable me to undertake this investigation I will be asking voluntary youth groups offering environmental experiential learning programmes involving Beekeeping in each of the three geographical locations to be participants in the project.

It will be important for me to have the support and participation of the voluntary organisations, the Beekeeper Instructors and the young people involved in the programme.

It will be essential for the parents or guardians of youth participants to give their permission in writing for the young person to be involved.

I will respect the routines and policies of the voluntary organisations, staff and centres I will be working with, and will allow everyone to continue in their respective roles without inconvenience.
Special care will be taken not to interrupt the learning interactions and relationships between the Beekeeping Instructors and young people during the research process.

There will be no pressure for either Beekeeper Instructors or young people to participate in the observation sessions, interviews, questionnaires or surveys and anyone who does participate can ask to withdraw from any part, or all of the activities at any time up until the final report is completed.

No changes to the learning environment will occur for the purposes of observations or data gathering for this research.

All voluntary groups, Beekeeper Instructors and young people participating will do so anonymously, with the understanding that their identities will be kept confidential and that all information received by me will be kept confidential through a best practice “coding” of information.

I will be assisted in my research by a youth worker representative from The BumbleBee Alliance CIC who will liaise and communicate with voluntary groups in all three geographical locations interested in participating in the project. The representative will speak in advance with Beekeeper Instructors, Youth Leaders and Youth participants explaining fully my role in the research and will explain to the young people the process, and explain that it is acceptable to speak to me.

Research Activities:

Gathering of data about the experiential co-operative learning sessions involving Beekeeping offered, how the programmes are structured, the background and experience of the Beekeeping Instructors and their methods and techniques of delivery, collation of information about the language and cultural issues in relation to provision.

Interactive participation, and observation of participants, by the researcher of experiential co-operative learning sessions involving Beekeeping at each of the geographical locations.

Interviews to be undertaken between the researcher and the Beekeeper Instructors and Youth Leaders.

Questionnaires to be completed by each of the Youth participants.

Survey (mapping exercise) to be undertaken with each group.

The above activities will be undertaken by way of three separate comparative Case Studies (1) United Kingdom (three groups of 5 participants, three instructors) (2) Azores Islands (three groups of 5 participants, three instructors) (3) Atlantic Canada (three groups of 5 participants, three instructors)

If a young person participates in the research s/he will be involved in the following way: as a participant in the gathering data about young persons interests, observations, experience and participation and (e.g., Beekeeping Learning Programme, documentation).
If a young person participates in the research they will participate in an environmental experiential learning session involving Beekeeping which will be attended and observed by the researcher as a comparative study of the experiences of young people in each of the three locations where the research is being undertaken.

If a young person participates in the research they will also be given the opportunity to complete a short questionnaire with set questions which will be used by the researcher as a comparative study of the experiences of young people in each of the three locations where the research is being undertaken.

If you are a parent / guardian of a young person who will be participating in the research I would appreciate you talking to your child about my project, explaining that I will be spending some time with their voluntary group and that it is all right for him/her to talk to me.

All data gathered will be kept in a locked filing cabinet at my office. You will have the opportunity to read and check any written transcripts of the interviews before analysis of the data. All the data will be used to answer the project's questions and write a report.

The data and findings may also be part of a future conference presentation or journal article or used for teaching purposes. You will be consulted about the findings during the writing of the report and be provided with a summary of the project’s findings if you wish to receive one.

The interviews undertaken will be transcribed by someone not associated with the research (The BumbleBee Alliance CIC representative) who will also sign a confidentiality clause. Transcripts of the interviews will be confidential to my supervisors and me. Unless you choose to have your name used, pseudonyms that you choose yourself will be used in the research report, young people may wish to discuss this with their parents.

To summarise:

You are under no obligation to accept this invitation for your child to participate in my project. If you decide to accept for your child to participate, they have the right to:

- Decline to answer any particular question;
- Withdraw from the study at any time until all the data has been gathered;
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that their name will not be used unless you give permission to the researcher;
- Be given access to a summary of the project findings when it is concluded.
- Ask for the audiotape (if one is used) to be turned off at any time during the interview.

This project has been reviewed and approved by the University of Bedfordshire Ethics Committee. If you have any concerns about the conduct of this research, please contact: Professor John Pitts, Health and Social Services Research, University of Bedfordshire, Luton Campus, Park Square, Luton, Bedfordshire, United Kingdom, LU1 3JU

email john.pitts@beds.ac.uk

Thank you for taking time to consider participation for your child in this project. Feel free to approach my supervisors or me if you have any questions.
Appendix 5 – Youth Participant Questionnaire

EnvironmentPlus International CIC, Shepway Business Centre, Shearway Road, Folkestone, Kent, United Kingdom, CT19 4RH

Title of project: The Big Buzz:

Name of participant: xxxxxx  xxxxxxx  Code: xxx  xxxxxx

Age: 14  Male:  Female:  X

Group location: United Kingdom  Azores Islands  Atlantic Canada  x

This is page 1 of the questionnaire form. This sheet will be separated from the questionnaire when you have completed it. I will then issue your questionnaire a code number which will be placed on the questionnaire, your front sheet will be filed separately and securely at my office, and therefore no one will know what your answers to the questionnaire were apart from me and my university supervisor.

There are no right or wrong answers to any of the questions. You need to look at the heading for each section and then answer the questions in relation to that section. Each of your answers should be the one which most reflects your true feelings about each question. Your very first feeling and answer to the question should be the answer you use, therefore, you should not spend very much time on any particular question.

The questions for each section are exactly the same – this is to help me evaluate differences in your experience or opinion on the different types of learning experience you have had. All participants answer exactly the same questions. You may ask clarification on meanings of words or any part of the questionnaire at any time with the Youth Worker or myself, however we cannot advise you on what answer you should give to any question. You will have been provided with a YELLOW marker pen if you are in the United Kingdom, a BLUE marker pen if you are in the Azores Islands and a RED marker pen if you are in Atlantic Canada. For each question please shade the answer that you want to choose.

Example of a question: I enjoy football
If you really enjoy football you would probably choose - Strongly agree
If you enjoy football sometimes then you would probably choose – Agree
If you have no opinion about enjoying football you would probably choose – Neutral
If you do not enjoy football  you would probably choose - Disagree
If you really do not enjoy football you would probably choose – Strongly disagree

Data Input Information:

Code: xxx xxxx
Age: 14 15 16

Gender: Male Female

Location: United Kingdom Azores Islands Atlantic Canada

Ethnic Group:

British (white) British (ethnic minority born in UK) British (ethnic minority born overseas)

Azorian (white) Azorian (ethnic minority born overseas) Azorian (repatriated)

Canadian (white) Canadian (ethnic minority born in Canada) Canadian (ethnic minority born overseas)

Disability: Yes No

Introduction – About You

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>like studying formal subjects at school (maths, science etc..)</td>
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<td>like informal learning at school (physical education, drama etc..)</td>
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<td>like to study alone</td>
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<tr>
<td>like to study as part of a group</td>
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<td>like to socialise with other people</td>
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<td>I am nervous around other young people generally</td>
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<tr>
<td>I am nervous around other young people in learning situations</td>
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<tr>
<td>I am nervous around adults generally</td>
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<tr>
<td>I am nervous around adults in learning situations</td>
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<td>prefer to study with students of the same gender</td>
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<tr>
<td>have good relations with students of the same gender</td>
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</table>
I have good relations with my instructors / teachers

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<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I have good relations with adults

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I like to solve problems

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I like sports and physical activities

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I like creative thinking

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I am a reliable person

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I have difficulties learning

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I have a learning disability

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I have a physical disability

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

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**Section 1 – Your experience of learning – School based**

**Please type the name of your favourite subject:**

**Preparation prior to learning**

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I was informed of the content and duration of the learning programme before it began

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I knew who the instructor or teacher would be for the programme

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I knew what other students would be participating in the learning programme

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I was informed of any health and safety issues which would affect me in relation to the learning

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
</table>

I was provided with adequate equipment, clothing and materials to participate in the learning

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<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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</thead>
</table>

I was introduced to others participating before the learning commenced

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<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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</table>

I was informed of the rules, regulations or conduct issues prior to commencing the learning

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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</table>

I was involved in developing an aspect of the learning activity

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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</thead>
</table>

**Skills acquired through learning**

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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</thead>
</table>

I acquired new academic skills

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<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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</table>

I acquired new practical skills

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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</table>

I acquired new social skills

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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I acquired new outdoor skills

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<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
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<th>strongly disagree</th>
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I acquired new technical skills

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<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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</table>

I acquired new technical skills

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>neutral opinion</th>
<th>disagree</th>
<th>strongly disagree</th>
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</thead>
</table>
I acquired no new skills

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
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I acquired a variety of new skills

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
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**Instructor / Teacher**

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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I found the Instructor / Teacher to be informative

I found the Instructor / Teacher to be helpful

I found the Instructor / Teacher to be friendly

I found the Instructor / Teacher to be knowledgeable about the subject

I found the Instructor / Teacher to be interesting

I found the Instructor / Teacher to be caring

I found the Instructor / Teacher to be approachable

I found the Instructor / Teacher to be modern thinking

I found the Instructor / Teacher to be strict

I found the Instructor / Teacher to be professional

I liked the Instructor / Teacher

I trusted the Instructor / Teacher

**Social aspect of learning experience**

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
</table>

I feel more interdependent

I feel more confident

I feel more disciplined

I feel more able to socialise with people

I feel more responsible

I feel more tolerant of people

I feel more able to cope

I feel more anxious around people

I feel more happy around people

I feel more self reliant

I feel a better sense of well being

I feel more healthy

**Learning Environment and quality of learning experience**

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<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
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</table>

The learning area was safe and secure

The learning area was a 'No smoking' zone for learners

The learning area was a 'No alcohol' zone for learners

The learning area was a 'No drugs' zone for learners

The learning area was a 'No bad language' zone for learners
<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
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<tbody>
<tr>
<td>Learning atmosphere was great</td>
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<td>Learning atmosphere was supportive</td>
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<td>Learning atmosphere was positive</td>
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<td>Other learners were friendly</td>
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<td>Other learners were interested</td>
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<td>Other learners worked co-operatively</td>
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<td>On conclusion of the learning experience</td>
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<td>I was asked for my opinion about the learning experience</td>
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<td>I was invited to give ideas and suggestions about how to improve the experience</td>
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<td>I was asked if I enjoyed the learning experience</td>
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<td>I was asked if I understood the learning experience</td>
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<td>I wanted to give my views about the learning experience</td>
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<td>I wanted to give ideas and suggestions about how the learning could be improved</td>
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<td>I want to continue with this learning opportunity</td>
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<td>I enjoyed this type of learning</td>
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<td>I enjoyed learning with other people</td>
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<tr>
<td>I improved my skills with this type of learning</td>
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<tr>
<td>I found this type of learning to be useful to my life</td>
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**Section 2 – Your experience of learning – activity based Bee Keeping programme (group participation)**

**Preparation prior to learning**

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was informed of the content and duration of the learning programme before it began</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>I knew who the instructor or teacher would be for the programme</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I knew what other students would be participating in the learning programme</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was informed of any health and safety issues which would affect me in relation to the learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was provided with adequate equipment, clothing and materials to participate in the learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was introduced to others participating before the learning commenced</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
was informed of the rules, regulations or conduct issues prior to commencing the learning | Strongly Agree | Agree |
---|---|---|
was involved in developing an aspect of the learning activity | Strongly Agree | Agree |

Skills acquired through learning

| I acquired new academic skills | Strongly Agree | Agree |
| I acquired new practical skills | Strongly Agree | Agree |
| I acquired new social skills | Strongly Agree | Agree |
| I acquired new outdoor skills | Strongly Agree | Agree |
| I acquired new technical skills | Strongly Agree | Agree |
| I acquired no new skills | Strongly Agree | Agree |
| I acquired a variety of new skills | Strongly Agree | Agree |

Instructor / Teacher

| I found the Instructor / Teacher to be informative | Strongly Agree | Agree |
| I found the Instructor / Teacher to be helpful | Strongly Agree | Agree |
| I found the Instructor / Teacher to be friendly | Strongly Agree | Agree |
| I found the Instructor / Teacher to be knowledgeable about the subject | Strongly Agree | Agree |
| I found the Instructor / Teacher to be interesting | Strongly Agree | Agree |
| I found the Instructor / Teacher to be caring | Strongly Agree | Agree |
| I found the Instructor / Teacher to be approachable | Strongly Agree | Agree |
| I found the Instructor / Teacher to be modern thinking | Strongly Agree | Agree |
| I found the Instructor / Teacher to be strict | Strongly Agree | Agree |
| I found the Instructor / Teacher to be professional | Strongly Agree | Agree |
| I liked the Instructor / Teacher | Strongly Agree | Agree |
| I trusted the Instructor / Teacher | Strongly Agree | Agree |

Social aspect of learning experience

<p>| feel more interdependent | Strongly Agree | Agree |
| feel more confident | Strongly Agree | Agree |
| feel more disciplined | Strongly Agree | Agree |
| feel more able to socialise with people | Strongly Agree | Agree |
| feel more responsible | Strongly Agree | Agree |
| feel more tolerant of people | Strongly Agree | Agree |
| feel more able to cope | Strongly Agree | Agree |
| feel more anxious around people | Strongly Agree | Agree |</p>
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel more happy around people</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I feel more self reliant</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I feel a better sense of well being</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I feel more healthy</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

**Learning Environment and quality of learning experience**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learning area was safe and secure</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>The learning area was a 'No smoking' zone for learners</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>The learning area was a 'No alcohol' zone for learners</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>The learning area was a 'No drugs' zone for learners</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>The learning area was a 'No bad language' zone for learners</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Learning atmosphere was great</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Learning atmosphere was supportive</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Learning atmosphere was positive</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Other learners were friendly</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Other learners were interested</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Other learners worked co-operatively</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

**On conclusion of the learning experience**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral Opinion</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was asked for my opinion about the learning experience</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I was invited to give ideas and suggestions about how to improve the experience</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I was asked if I enjoyed the learning experience</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I was asked if I understood the learning experience</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I wanted to give my views about the learning experience</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I wanted to give ideas and suggestions about how the learning could be improved</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I want to continue with this learning opportunity</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I enjoyed this type of learning</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I enjoyed learning with other people</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I improved my skills with this type of learning</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>I found this type of learning to be useful to my life</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral Opinion</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>
Appendix 5: BeeKeeper Instructor / Youth Leader participant - Information sheet

[Printed on EnvironmentPlus International CIC letterhead]

[Logo, name and address of EnvironmentPlus International CIC ]

Dear BeeKeeper Instructor / Youth Leader of (names of centre location)

Thank you for your interest in my research topic. I now formally invite you to consider participating in a research project for my Professional Doctorate in Youth Justice degree at the University of Bedfordshire in the United Kingdom. This project will investigate how BeeKeeping can be used as an experiential co-operative learning programme for young people participating in community youth programmes.

I expect that the information will be of interest to the professional and research communities of youth justice, youth and community practitioners, the BeeKeeping fraternity as well as educationalists.

Please read the enclosed information sheet carefully. If you consent to participation, please keep this letter and the information sheet and return the signed consent sheet to me.

If you have any questions or wish to know more before deciding whether or not to participate, please do not hesitate to telephone me on 01303 211599, or contact me by email at patrick@environmentplus.org.uk

Thank you for taking time to consider this project.

Yours sincerely

Patrick Tierney
Overview

The overall objectives and aims of my research project and strategy will be to provide a robust research evidence base to inform the development, implementation and review of experiential co-operative learning programmes involving BeeKeeping for young people.

The project will explore the leadership and programme content in relation to success factors and participation. This will be supported by the provision of research and analyses that monitors the effectiveness of programmes operated through voluntary organisations in the United Kingdom, Azores Islands (Autonomous region of Portugal situated in the mid Atlantic ridge) and in Atlantic Canada with young people from different cultural and linguistic backgrounds (English / French / Portuguese).

To enable me to undertake this investigation I will be asking voluntary youth groups offering experiential co-operative learning programmes involving BeeKeeping in each of the three geographical locations to be participants in the project.

It will be important for me to have the support and participation of the voluntary organisations, the BeeKeeper Instructors and the young people involved in the programme.

It will be essential for the parents or guardians of youth participants to give their permission in writing for the young person to be involved.

I will respect the routines and policies of the voluntary organisations, staff and centres I will be working with, and will allow everyone to continue in their respective roles without inconvenience.

Special care will be taken not to interrupt the learning interactions and relationships between the BeeKeeping Instructors and young people during the research process.
There will be no pressure for either BeeKeeper Instructors or young people to participate in the observation sessions, interviews, questionnaires or surveys and anyone who does participate can ask to withdraw from any part, or all of the activities at any time up until the final report is completed.

No changes to the learning environment will occur for the purposes of observations or data gathering for this research.

All voluntary groups, BeeKeeper Instructors and young people participating will do so anonymously, with the understanding that their identities will be kept confidential and that all information received by me will be kept confidential through a best practice “coding” of information.

I will be assisted in my research by a youth worker representative from The BumbleBee Alliance CIC who will liaise and communicate with voluntary groups in all three geographical locations interested in participating in the project. The representative will speak in advance with BeeKeeper Instructors, Youth Leaders and Youth participants explaining fully my role in the research and will explain to the young people the process, and explain that it is acceptable to speak to me.

Research Activities:

Gathering of data about the experiential co-operative learning sessions involving BeeKeeping offered, how the programmes are structured, the background and experience of the BeeKeeping Instructors and their methods and techniques of delivery, collation of information about the language and cultural issues in relation to provision.

Interactive participation, and observation of participants, by the researcher of experiential co-operative learning sessions involving BeeKeeping at each of the geographical locations.

Interviews to be undertaken between the researcher and the BeeKeeper Instructors and Youth Leaders.

Questionnaires to be completed by each of the Youth participants.

Survey (mapping exercise) to be undertaken with each group.

The above activities will be undertaken by way of three separate comparative Case Studies (1) United Kingdom (three groups of 5 participants, three instructors) (2) Azores Islands (three groups of 5 participants, three instructors) (3) Atlantic Canada (three groups of 5 participants, three instructors)

Because the project research that you will be involved with will be undertaken during the next calendar year, I would continue to be sensitive to your time involvement and commitment to the project and negotiate issues related to the demands of the research with you at my earliest convenience.

All data gathered will be kept in a locked filing cabinet at my office. You will have the opportunity to read and check any written transcripts of the interviews before analysis of the data. All the data will be used to answer the project's questions and write a report.
The data and findings may also be part of a future conference presentation or journal article or used for teaching purposes. You will be consulted about the findings during the writing of the report and be provided with a summary of the project's findings if you wish to receive one.

To protect confidentiality, each BeeKeeping Instructor, Youth Leader will be asked to sign a confidentiality clause as part of the consent process. The interviews will be transcribed by someone not associated with the research (The BumbleBee Alliance CIC representative) who will also sign a confidentiality clause. Transcripts of the interviews will be confidential to my supervisors and me. Unless you choose to have your name used, pseudonyms that you choose yourself will be used in the research report.

To summarise:

You are under no obligation to accept this invitation to participate in my project. If you decide to participate, you have the right to:

- Decline to answer any particular question;
- Withdraw from the study at any time until all the data has been gathered;
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name will not be used unless you give permission to the researcher;
- Be given access to a summary of the project findings when it is concluded.
- Ask for the audiotape (if one is used) to be turned off at any time during the interview.

This project has been reviewed and approved by the University of Bedfordshire Ethics Committee. If you have any concerns about the conduct of this research, please contact:

Professor John Pitts, Health and Social Services Research, University of Bedfordshire, Luton Campus, Park Square, Luton, Bedfordshire, United Kingdom, LU1 3JU

email john.pitts@beds.ac.uk

Thank you for taking time to consider participation in this project. Feel free to approach my supervisors or me if you have any questions.
Appendices

Appendix 5: BeeKeeper Instructors, Youth Leader - Consent Form

[Printed on EnvironmentPlus International CIC letterhead]
[Logo, name and address of EnvironmentPlus International CIC]

Project title: **The Big Buzz**

BeeKeeper Instructors, Youth Leader – Participant Consent Form

This consent form will be held for a period of two (2) years

I have read the Information Sheet and have had the details of the research study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/do not agree to the interviews being audio taped.

I agree that the edited interview transcripts and extracts from transcripts may be used in reports and publications arising from the research or for teaching purposes.

I agree that edited extracts may be used in reports and publications arising from the research or for teaching purposes. I understand that I will have the opportunity to view extracts if I request, prior to public viewing.

I agree to not disclose anything discussed in the shared interview or discussion and inquiry group.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:

Full Name – printed

Date:
Appendix 5 - Lista de informação participante para, pais, guardiões, e jovens.

Pesquisador.: Patrick Tierney
Estou estudando para o meu Doutorado em justiça juvenil na Universidade de Bedfordshire no Reino Unido; tenho quinze anos de experiência trabalhando com jovens experimentando programas de ensino associados com o meio ambiente natural.

No momento sou C.E.O. para “EnvironmentPlus International cic” o qual é eficazmente registado não lucro; (Community Interest Company) baseado no Reino Unido.

Podem contatar-me pelo; telefone.: 01303 211 599
ou por e-mail, patrick@environmentplus.org.uk
Inspector do projecto é, Professor John Pitts o qual está baseado na Universidade de Bedfordshire.

Os objectivos principais da minha pesquisa e estrategia serão para fornecer uma evidência de pesquisa forte.
Prova (data base) para suporte do desenvolvimento, implemento e revista de ensino dos programas relacionados a apicultura, os quais estão destinados aos jovens. Estes programas são também destinados para serem experimentados e cooperativos.

O projecto examinará o guia e a capacidade do programa com relação aos seus pactos de sucesso e participação. Isto será suportado com o suplemento da data que examina eficácia dos programas operados pela organização voluntária no Reino Unido, Ilhas dos Açores e Canada Atlantico (Prince Edward Island) com jovens de culturas e linguísticas diferentes (Inglês, Frances, Protugues).

As bases da minha investigação serão a data coleccionada de voluntário grupos usando estes programas de experiência de apicultura em cada um dos lugares geográficos.

Quuestionários para serem completados por cada um dos jovem participantes.
Vista geral (carta geográfica) para ser completa por cada um dos grupos.
Cada actividade acima mencionada será facilitada por três casos comparativos.
1.) Reino Unido (4 grupos de 5 participantes, 4 instrutores).
2.) Ilhas dos Açores (2 grupos de 5 participantes, 2 instrutores).
3.) Canada Atlantico (P.E.I.) (dois grupos de 5 participantes, dois instrutores.

Quando uma pessoa participa no projecto, ele/ela envolverem coleccionar informação sobre outras pessoas, interesses, observações e experiências. (ex. fotografias, programas de apicultura)

Quando uma jovem pessoa participa na pesquisa, envolver-se-á em experiência de cooperação em sessões de ensino relacionadas com apicultura. Estas lições serão atendidas e observadas pelo pesquisador como comparativo estudo das experiências dos jovens em três locações.

Espera-se que os pais ou guardiães dos jovens participantes explicarão o projecto aos jovens e também dar-lhes licença para falarem comigo quando eu visitar os grupos. Toda a data coleccionada, será guardada num arquivo fechado à chave no meu escritório. Haverão oportunidades de ler e verificar entre vistas escritas antes de analizar a data. Toda a informação coleccionada será usada para o projecto e escrever o relatório.

A descoberta talvez pode ser parte duma conferência futura de apresentação ou um artigo no jornal ou usando para ensino material. A descoberta será disponível para consultas durante a escrita do relatório. Um sumário das descobertas do projecto serão também feitas.

Seria importante para mim ter suporte e participação da organização voluntária dos instrutores da apicultura e também dos jovens envolvidos no projecto.

E necessário que os pais or guardiães dos jovens darem permissão escrita em ordem dos jovens ficarem envolvidos.

Atividade de pesquisa.
Colecionando a data das sessões aprendidas; encontrar estruturas mais favoráveis; fundos e experiência dos instrutores de apicultura.
Os seus métodos e technicos de apresentação; colecção de informação sobre problemas da língua e cultura em relação do projecto transmitido.
É necessário para o pesquisador visitar cada uma das locações geográficas em ordem para observar os participantes, entretanto com os participantes e assim finalizar o melhor método de ensino.

O pesquisador entrevistará os guardiões dos jovens e também os instrutores da apicultura.
Appendix 6: Quantitative Data Outcomes: Spreadsheet Information
Appendix 7: A summary of Bee Inspired course and visual learning materials

At each site in England, the Azores Island and Prince Edward Island, Canada, each group of 15 young people gathered together in three groups of five young participants in a semi-circle. With everyone seated on foldable chairs, the beekeeper instructor sat at the front of the group. Each of the beekeeper instructors followed the same pattern of delivery. The instructors began by asking all present whether they had any knowledge of beekeeping. At all three sites none of the young people admitted to having had any prior knowledge or understanding of beekeeping. The instructors then started the session by describing honeybees.

The young participants learned that honeybees and silk-worms are the only two insect species directly exploited by man. Of the two species, the honeybee has by far the more elaborately organised life. Moreover, this organisation has been surprisingly little altered by the “domestication” of the bees over the past several thousands of years. Ancient Egyptians and Romans undertook beekeeping. Honeybees are classified as 'animals ferae naturae' - 'animals of a wild nature'. The scientific classification of living creatures was also presented. All of the young people at this point received a copy of the classification table to help visually understand where honeybees were placed within the classification. The table is included below:

**Table of Classification of Insects**

<table>
<thead>
<tr>
<th>KINGDOMS</th>
<th>Animal</th>
<th>Plant</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYLA</td>
<td>Arthropoda</td>
<td>Mollusca</td>
<td>Chordata</td>
<td>-</td>
</tr>
<tr>
<td>CLASSES</td>
<td>Insecta</td>
<td>Crustacea</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ORDERS</td>
<td>Hymenoptera</td>
<td>Diptera</td>
<td>Coleoptera</td>
<td>-</td>
</tr>
<tr>
<td>SUPERFAMILIES</td>
<td>Bees (Apoidea)</td>
<td>Ants</td>
<td>Wasps</td>
<td>-</td>
</tr>
<tr>
<td>FAMILIES</td>
<td>True bees(Apidae)</td>
<td>Leafcutters (Megachilidae)</td>
<td>Miners (4 families)</td>
<td>Plasterers (Colletidae)</td>
</tr>
<tr>
<td>GENERA</td>
<td>Honeybees</td>
<td>Bumblebees</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SPECIES</td>
<td>Western honeybee Apis mellifera</td>
<td>Eastern honeybee Apis cerana</td>
<td>Giant honeybee Apis dorsata</td>
<td>Little honeybee Apis florea</td>
</tr>
</tbody>
</table>
The instructor then handed all young people a colour A4 size glossy print leaflet showing the anatomy of the honeybee (below).

**Figure 1: Diagram of the Anatomy of a Honeybee**

(Source: The BumbleBee Alliance CIC)

*What is Needed to be a Good Beekeeper?*

The next part of the session consisted of the beekeeper instructors discussing some of the requirements, skills and qualities needed to become a successful beekeeper:

**The physique of the beekeeper.**

Beekeeping requires individuals to be able to lift, carry and handle awkward, heavy boxes weighing up to 30kg (60 lb) as well as other equipment and tools to assist in the maintenance of hives. Every beekeeper must have the strength for this or be able to work with another person/s to achieve the objective.

**Access to a suitable site.**

Traditional requirements for an apiary site are: open sunny location but with some shade; ready access to clean fresh water for the bees (within 200 metres or 200 yards); the presence of ample amounts (many hectares/ acres) of suitable foraging plants within 2 km (1 mile). It is unfortunate that in some areas, protection from vandalism is often necessary.
and screening (by hedges or distance) is also required at some sites as neighbours may be frightened of bees and complain if they are stung when bees are ‘out of temper’.

**Time requirements.**

For someone keeping even a few (3 or 4) stocks of bees, demands roughly one afternoon a week during the 'main' active season from April to August (this is the main season in England). Bees given less attention than this will yield less well and may become a liability. In addition, a fair amount of time will be required in August-September to process the honey crop. Bees satisfactorily bedded down for winter need very little attention from September to March - mainly an occasional visit to ensure that hives have not been disturbed by the weather or by vandals (human or animal). Keeping bees on a larger scale requires proportionately more effort and resource time.

**Propensity and enthusiasm.**

It was made clear to the participants that there is no point in someone keeping bees unless they are interested in their welfare. Many beekeepers enjoy working with bees on a part-time basis, and getting enough honey for family and friends. However, others like the more difficult challenge of trying to make a small supplementary income by keeping a couple of dozen stocks to produce enough honey, and selling honey either direct retail, at farmers’ markets, to shops (which must be allowed a generous mark-up and so will not pay so well) or on the internet (which will incur postage costs). Beekeeping therefore permits people the opportunity of undertaking it for leisure or hobby purposes, or in certain circumstances on a more larger-scale, commercial basis. This commercial aspect of the beekeeping had an impact on the participants, which was articulated later at the focus group meetings. This is fully explained in Chapter Five.

The final part of the introduction discussed the circulatory system of the honeybee. The instructor then handed all young people a colour A4 size glossy print leaflet showing the circulatory system (see below).

*Figure 2: The Circulatory System of the Honeybee*

(Source: BumbleBee Alliance, 2009)
The young participants learned that the circulatory system of the honeybee is typical of the insect family but is very different from a vertebrate's, ours in particular. In the bee, the heart is reduced to a pulsing tube lying between the dorsal diaphragm and the upper part of the abdomen. Blood is not confined to the closed circuit of arteries, veins and capillaries found in vertebrates, but fills the body cavity. In fact, it is not real blood, but a colourless plasma as it contains no red corpuscles and only has a very limited respiratory function called hemolymph, the main function of which is to carry food to where it is needed and move waste out of the body through the malphigian tubule. The heart draws-up this liquid through a system of one-way valves and pumps it forward to the thorax and head through an aorta.

The hemolymph circulates through the posterior section of the heart tubule which is wider and fitted with five pairs of one-way valves, called ostia, which draws up the blood. When the heart contracts, it forces blood forward and the next section of the heart tubule in turn contracts, moving the blood progressively forward towards the head where it is discharged from the open anterior end of the aorta. This second contraction causes the first posterior section to dilate and the ostia to re-open, bringing in a fresh supply of blood from the anterior cavity. In this way, the blood is kept circulating in a constant flow throughout the insect. The ventral pulsation drives the blood from the thorax into the abdomen, and on towards the rear. The dorsal pulsation works in the opposite direction, taking in fresh blood and forcing it forward towards the head. In other words, the blood in the abdomen circulates forwards in the dorsal part and back towards the rear in the ventral part.
The blood which is pumped into the head cavity forces the blood already there into the thorax which, in turn, pushes the blood from there into the abdominal cavity where the ostia once more draws it up into the heart, thus completing the cycle. A few special organs carry blood to the antennae, legs and veins in the wings, thereby making sure the whole body is irrigated. In the intestine, the blood makes sure nutrients extracted from food are carried to all the body’s cells. The faeces consist mainly of indigestible pollen husks.

*Figure Three (a): The Respiratory System of the Honeybee*
The first session on day two of the programme introduced the young participants to the subject of the Respiratory System of the honeybee. The session started with each participant receiving a distinctive colour photoprint Figure 3a and Figure 3b. The instructor explained that all living creatures need oxygen to exist, but not all acquire it in the same way. Insects have no centralised respiratory organs like ours. Air enters and leaves the body through spiracles, (breathing holes) in the thorax and abdomen, which are interconnected by tubes or tracheae. The tracheae expand into several air bags or tracheal sacs, which like bellows fill with air under the muscular pulsations of the abdomen. This reduces the density of the insect, thus allowing maximum volume for a minimal weight. From the tracheal sacs, the tracheae ramify into a network of smaller branches, which take oxygen all over the body and remove carbon dioxide at the same time. This process of exchange takes place by diffusion, but in active species, like the bee, rhythmic pulsations of the abdomen make respiration more efficient. However, the process of diffusion, used by both the circulatory and respiratory systems, is only suitable for small organisms. This is why the size of insects has always remained within certain limits.
The afternoon session on the second day related to bees and their requirements. The young participants learned about the importance of selecting a site to put their bees (called an 'apiary'), the importance of having a fresh water supply and to ensure the water could not be contaminated. The apiary should also be placed in an area where it would be easy for a beekeeper to reach and to work. It is essential for apiaries to be located in places near food sources for bees, who need flowering plants for nectar (honey), bee glue, and pollen (protein). Suggestions were given that it would be good to place an apiary on the top of a hill or high ground so water and air will drain away from hives. It would not be appropriate on wet, swampy, lowland or in deep, humid woods, as honey will not cure properly and bees could be subject to fungal diseases. The ideal location would be facing south to catch early warmth of sun; entrances should be pointed away from winds. It would be useful to provide a wind-break to keep hives from being blown over in high winds and provide shade during hot periods. Apiaries should be well away from floods and open fires. Hives should be placed on a stand, (not directly on the ground) to keep out ants and other pests. It is also useful to have the apiary nearby the beekeeper's home to discourage people from interfering with, or approaching the hives. It is also important to keep away from areas sprayed with insecticides, pesticides or herbicides, and from areas where there could be interference by animals.

One of the key questions from the young participants at all three international locations was ‘where do you get bees from for a hive?’ The beekeeper instructors explained that: There were several ways a beekeeper could obtain bees for a hive. One way of obtaining bees, they were informed, is to buy bees from another beekeeper as a way to get started. Beekeepers can sell you a full hive and all its equipment, or a nucleus hive with a small population of bees, and a laying queen, or a swarm (and only provide the equipment) or just a laying queen. It was explained that there was the possibility for beekeepers to buy packages of bees from abroad as another way to obtain bees, but it was highlighted that these bees are very expensive both to buy and to maintain and, while the returns might be higher, they will not perform well unless properly cared for. Finally it was discussed that it was also possible to source bees from swarms, or from colonies in trees or buildings. In all
cases there were advantages such as obtaining the bees with a knowledge and history of the bees or disadvantages such as diseased or aggressive bees when obtaining them from ambiguous sources. The young people then walked around camp and nearby countryside at each of the locations with the beekeeper instructors and looked at various sites which either would, or would not be suitable for an apiary.

**Hive construction**
As part of the experiential ethos of the programme, the young people were asked by the beekeeper instructors to help build a hive from scratch. They used a kit which comprised of the pieces for the hive (mostly made of wood), a kit assembly sheet explaining how to put all the pieces together, and a set of five small tools to help with the task. The group would work together to help build the hive. There are several types of bee-hive used by beekeepers, however for the Bee Inspired programme the 'Langstroth' hive was the type of hive chosen. This type of hive is one of the most common known beehives, mainly because it provides easy visibility to work with the bees, and the standard size allows easy expansion, exchange or sale of equipment with other beekeepers, if required.

Bees naturally build wax cells (comb) to fit their body size, when the space between frames, frames and walls, frames and tops or bottoms is smaller than the space, bees will fill it with bee glue or propolis, when the space is larger than the bee space, the bees will fill it with wax. The beekeeper instructors then went on to explain the need for, the types of, and the use of, other equipment in relation to beekeeping:

**The Smoker**
Smoke, used in moderate amounts, will cause the bees to eat honey because they instinctively fear that their hive is at risk. After they consume it, it is more difficult for them to sting on a full stomach. Some sort of smoking pot should be used, not a blazing torch of straw or bark; hot ash will burn bees, making them angry and the ash will dirty the honey. A can with a metal blow tube on the top or bottom, or a can with a small bellows attached make good smokers. Use cotton or jute rags, rotten wood, wood shavings, dung or dry leaves, place a small bit of green grass on top to 'cool' the smoke and catch any ashes.

**Veil and Hat or Bee Suit**
Among the most significant parts of garments a beekeeper should use is the veil or (preferably) when first starting to keep bees, a full bee-suit, as it gives more protection. Bee stings on the face in particular can be very painful for several days afterwards, and
there is the chance of injury to the eyes and ears. The participants were advised that if, by chance, a bee gets in the veil or bee-suit, walk away from the hives and remove the bees. If you are close to the hives do not take off the veil or remove the bee-suit. Beekeepers are always aware that bees who attack will normally, as part of their natural instinct attack the eyes. Using bee-suits also helps to protect garments and helps to prevent getting hive products on your regular clothing, and also helps to shield delicate portions of your body. Avoid dark or coarse textured clothing when undertaking beekeeping. Bees are more able to hold on to a rough surface fabric than smooth material. Dress in white or light coloured coveralls. If you are not wearing boots, do not put on dark socks. Boots that close over the coveralls or in the coveralls should be worn. A windbreaker jacket would help you to prevent being stung if you are wearing only a veil. Trousers, veil, and sleeves should be closed firmly to prevent bees from getting into clothes.

If a bee does get into clothing, squash it within the outfit or walk faraway from the hives and open up the clothing to let the bee escape and get away. Prior to managing bees, do not utilise any sweet smelling fragrance, hair spray or any other similar products. The odour can irritate the bees or interest them. Bees instinctively aim for eyes when angry, so some sort of veil should always protect your face and neck. The simplest veil can be a piece of mosquito netting sewn into a wide-brimmed hat. The netting should have some strings attached to the bottom to allow the loose ends to be tightened and tied. A veil is generally not needed on weak or small hives, but it gives confidence to beginning beekeepers and keeps them from becoming distracted. It is now very common for beekeepers to use full body ‘bee suits’. For the Bee Inspired programme all the young people would be using this type of suit which is regarded as being safer, quicker and easier to wear and use, as there are fewer pieces.

**Hives Tool:**
This is a metal scraper that can be purchased or made. A sharp edge is maintained to help scrape away wax and bee glue or propolis from inside the hive.

**Gloves:**
Gloves must be utilised. Gloves are advantageous particularly when the weather is bad or when moving colonies, however gloves may perhaps delay the manipulating of the colonies. Without the intervention of gloves, it is easier to undertake the beekeeping activities and the bees respond better to a lighter touch but it must be understood that the
beekeeper stands a much higher chance of being stung, and this could be multiple times on any one occasion. Gloves are therefore normally always worn by beginners for confidence. Canvas or leather gloves are used and have long sleeves of cotton sewn on to the glove top to protect arms too. Some beekeepers also use rubber gloves of the type which are often used for kitchen duties.

**Miscellaneous Equipment**

This included an explanation of what the following equipment was used for: queen cages, solar wax melter, honey extracting equipment, clothing (bee suit), observation hive, uncapping knife (to cut honey), bee-brush. The young participants in all three international locations were informed that they would be visiting the apiary at each site and would be able to see first-hand the hives and the bees at work. This enabled the beekeeper instructors to demonstrate and inform the young participants who were to become beginner beekeepers, how to handle bees and what to look for in a hive when examining bees.

**Handling Bees: how to minimise stings from the bees:**

Always try to work on days when bees are flying well since half of the foraging bees will normally be out; do not work when it is too windy, rainy or cold since all the bees are more likely to be in the hive. It is advisable to wear light-coloured protective clothing and a veil (although as mentioned above, the participants were informed they would be wearing full body bee-suits). Make sure that ankles and wrists of clothing are tightly closed in case bees start to crawl up openings in clothing. Beginning beekeepers will want to wear gloves for confidence but gloves should not be used all the time. The best time to wear them is when transferring bees from a wild hive to a framed hive. Bee stings leave a scent on the gloves, so be sure to wash gloves periodically. Use smoke lightly; this makes bees eat honey and they will be eating honey instead of stinging you. When working bees, use gentle, slow movements so the bees will not be alarmed. Crushed bees cause alarm in the hive so move frames slowly. Remain calm and work slowly, if you are nervous, or have an odour that alarms bees (hair spray, horse smells) the bees will be more likely to sting you. If stung, scrape away sting barb; do not pull it out as this will inject you with more venom. Smoke the sting area as explained above, the venom leaves an odour "tag" which will excite other bees to sting.
Figure Four (a): Digestive System of the Bee (View 1)
(Source The BumbleBee Alliance CIC, 2009)
The young participants again followed the experiential session by using the distinctive photo material of the digestive system as the bee instructor described how it consists of an alimentary canal, divided into various different sections with specialized functions, which runs from mouth to anus. The oesophagus leads from the mouth cavity into the honey stomach or crop, from there it leads into the functional stomach before becoming the small intestine and finally the rectum and anus. The honey stomach is an expansible bag containing the honey ingested by the forager before leaving the hive, as well as the nectar or water collected during its flight. When full, the crop usually holds a load of approximately 4 mg and occupies most of the foresection of the abdomen. The contents of the crop can be regurgitated once the bee arrives back at the hive (harvest of nectar or water) by contraction of the surrounding muscle fibers. At the rear end of the crop there is a cross-shaped valve, called the proventriculus which prevents the nectar or water from running into the functional stomach (ventriculus). This valve only opens when the bee needs to consume food for energy. Consumed food is stored as fat in the workers' body, a layer of cells lining the roof and floor of the abdomen.

On day three, the day began with a lesson about the nervous system of the bee, as identified in the diagrams below:
This is a summary of what the participants learned in the afternoon session: in insects, the nervous system is less centralized than in vertebrates, which is why a beheaded insect's thorax is still able to walk. The brain, which is located in the head, is the main component of a series of interconnected ganglia running along the ventral nerve cord (situated above the alimentary canal). Insects usually have a double nerve cord which expands into a pair of large ganglia in each body segment. Nerves fibres radiate from the brain to the simple and compound eyes, the antennae and the mouthparts. Similarly, numerous nerves fan out from the pairs of ganglia in the thorax and abdomen to stimulate movement in the legs, wings, genital parts, heart. There are countless lenses fed by nerve cells in a compound eye (4,000 to 8,000) or the sense hairs on an antenna (3,000 to 30,000). These examples give a hint of the complexity of the nervous system of insects and, more especially, of the honeybee. Unlike vertebrates, which have a dorsal nervous system and ventral heart, insects and invertebrates in general have a ventral nerve cord and a dorsal heart.
Larva is Latin for “ghost” and the young participants learned that this was the active immature form before it became what we recognise as a living bee.

The sting of the worker bee is an ovipositor or ‘egg-laying organ’ which over time has evolved to become a system of defence. Unlike most other insects, the bee loses its sting after use and its death follows within hours. The advantage gained by this ripping out of the sting mechanism lies in the fact that the victim receives a much higher dose of poison as the muscles keep pumping in venom several minutes after the sting. Presumably, the colony, with its thousands of workers, can allow for the death of a few bees in defence of the brood nest as the extra venom injected means losses are kept to a minimum.
Through the diagram (Figure Seven above) the participants were able to learn that the sting is composed of two barbed lancets, several pairs of plates, which attach the sting within the sting chamber, and powerful muscles. The muscles are connected to the venom gland as well as to a special gland containing an alerting substance or pheromone. Bee venom is composed of proteins and peptides but the main element is a protein called "melittine". Venom also contains numerous other constituents. The reason for this wide variety of constituents is easily understood if we consider the diversity of the bee's potential predators, from insects to man.

It was important that all beekeepers have an understanding of the different sting reactions observed in humans. There are three types of reactions:

1. **Local**: The initial localized swelling is generally followed by a more generalized swelling. The affected spot can remain red, hot and sensitive for some days.

2. **Systemic**: A systemic reaction usually takes place within minutes of the sting and can give rise to a number of symptoms including respiratory problems, abdominal pains, nausea, vomiting.

3. **Anaphylactic**: The symptoms of an anaphylactic shock appear immediately following the sting. Breathing becomes laboured, vomiting can follow and there is often a sudden drop in blood pressure leading to unconsciousness and sometimes even to death from respiratory and circulatory collapse (a pathological state characterized by a sudden feeling of faintness (with or without loss of consciousness), a drop in blood pressure, increased pulse rate, cold sweats. As a rule, beekeepers develop a certain resistance to bee stings but there have been cases of systemic and even anaphylactic reactions in people long accustomed to the effects of the venom.

**Visiting the beehives and the basics of beekeeping**

In the afternoon of the third day after lunch, the young participants at each of the international locations all met-up with their beekeeper instructors. This was the anticipated event that the young participants on the programme had spent several days working towards: meeting the bees.
The participants stood with the beekeeper instructors about 50 feet away from the location of the hives at the main apiary (downwind) and the instructors explained why the hives were located at the particular location referring back to information they had already received during one of the previous sessions. The participants were informed at this point that they would be given a session on beekeeping based on best practice and "international standards". Therefore this information could be slightly different to their local beekeeping practices. For example, the terminology could be a little different but the practices would be almost the same everywhere, however they would be learning very positive information, which most beekeepers would find most helpful. The instructors then provided each of the participants with a bee-suit, a pair of gloves and each participant was checked to make sure they had either boots or protective shoes. The instructors then assisted each of the participants to make sure their suit was properly worn and secured before commencing with the session.

The instructor then went over the reasons again of the importance of wearing protective clothing when beekeeping (explained at the beginning of this Chapter).

A beekeeper should keep the bees in control each time the hive is open. A standard hive can lodge tens of thousands of workers all capable of stinging. There are measures a beekeeper should always take if the hive is close to nearby houses or neighbours, to try to ensure the bees are not aggressive before opening up the hive. One of the most important things to do is to try and evaluate if the bees are aggressive or upset as this would normally be an indication that they could cause issues with neighbouring homes or that there could be a risk of the bees swarming thus causing a nuisance or inconvenience to those in the neighbourhood. Obviously, in rural or isolated areas this would be less of an issue.

The beekeeper instructors advised the young participants that before starting to be a beekeeper that they may perhaps want to make contact with beekeepers in their area. In many areas, there are associations and organisations that specialise in beekeeping (e.g. The British Beekeepers Association in the United Kingdom). However they were also informed that initially they should approach the organisations with a trusted adult or worker until they actually started, to ensure they new who they were dealing with, and also sometimes adults preferred introductions by other adults. As a rule, the beekeeping organisations will be more than glad to reveal their expertise and provide new insights.
Most beekeepers like keeping bees and to them it is a “hobby” although for some it is a “job”. The young participants were advised they should take lots of notes or remember what was being said by beekeepers they meet in the future, as there was a good probability that they would apply some of their ideas or experiences in the long run.

Another important point was made to the young people. They were advised to think about the safety of love ones, friends, and neighbours. For example, you wouldn’t want somebody to get stung who maybe allergic to bee-stings. It is better to ask friends and neighbours beforehand, if they know they are allergic to bees. It would also be important to know ahead of time if there was someone who would not want bee-hives within a close proximity. Checking with the council area/municipality is also important, to ensure that there are no restrictions on keeping bees in a built-up area. It is crucial to understand and keep within any rules and regulations from the outset and also to think about whether you have a place that will be advantageous to keeping bees. Consideration would have to be given about where the bees would have to fly to retrieve nectar and pollen. Maintaining plant life that bees like close to the hives is also not a bad idea as well. Since bees require water day after day there needs to be a source of water nearby too. So additional issues that have to be given some consideration by a beekeeper are: How many months of the year would pollen and nectar would be easily accessible to the bees? Will you need to feed them in order for them to survive and how much of the year? Is there a water reserve existing throughout the year intended for the bees?

Another issue that would need to be keep in mind by a beekeeper is what would be beneath the bees as they fly to get the nectar and pollen they need. The bees will defecate as they are airborne and their faeces will leave spots on the ground underneath them. So for instance, if a car is parked near to the apiary on a regular basis, it is possible that the faeces may perhaps even spoil the exterior of a car. There are ways to utilise to make the bees to fly at a higher height, like placing a plant or bush in what would be their most normally used flight path.

Planning should occur in the Autumn, because Spring is the ideal time to actually begin to keep bees. Beekeeping can be fun and is a learning process that can lead to much bigger things. The best months are late March and early April and May when fruit trees and early flowering plants are in bloom. The longer days, warmer weather, and nectar and pollen from spring blossoms will help bees get off to a good start. If you start with packaged bees
or a nucleus colony, bees will build combs and increase their populations on the early nectar flow. Do not expect to harvest much, if any, surplus honey during the first year. Bees will normally need all the honey they can store in the first season to overwinter in good condition and to produce well during the second year.

It is best to start with two colonies. Having two gives the advantage of being able to exchange brood, bees, and combs in case one of the colonies needs some help. However, it is important not to make exchanges between the colonies if there is danger of disease. In addition, it is important for the new beekeeper not to try to keep more than two hives until it is felt that they can competently manage more. Too many colonies may keep the beekeeper busy just supplying them with supers (the boxes above the deeper hives), but they may not be able to enjoy learning the details of the actual beekeeping, which is very important.

**Starting a New Bee Hive**

The session then continued with the instructors explaining that there are several ways to obtain bees as a new beekeeper. In more detail, they explained there are generally four ways to get honey bees to start beekeeping:

1. Buy a mated queen and a 3-pound (1.5kg) package of bees (the weight differs from location to location).

2. Buy a full-strength colony or nucleus colony (a small colony with three to five frames of brood, bees, and queen).

3. Capture a swarm.

4. Relocate a colony from a tree or building to a hive. This is considered to be an advanced procedure and is not recommended for a new beekeeper.

**Packaged Bees.**

It was explained to the young participants that this was often the best and easiest way for people to start beekeeping, i.e. to buy a mated queen and a 3-pound (1.5kg) package of
bees for each colony you plan to start. Local beekeepers will normally be able to inform a new beekeeper where bees can be purchased. It is important to place the order early and indicate when you want the bees shipped. Hives, feeders, hive location, and all other equipment MUST be ready and waiting when the bees arrive. Packaged bees are normally shipped in a screened box or cage. This box or cage will contain the worker bees, a feeder can of sugar syrup, and the queen bee in a smaller queen cage. The queen cage is suspended beside the syrup can at the top of the package or just below the can. The queen usually has a few attendant worker bees and a special candy in the box or cage with her.

When they arrive, it is important to place the package of bees in a cool, dark, well-ventilated room until you can install the bees in the hive. The bees can be kept in the package for a day or two if there is plenty of sugar syrup in the feeder can. If the feeder can is empty, brush or sprinkle sugar syrup on the screen twice a day. Use only as much syrup as the bees will clean up readily. A 3 pound (1.5kg) package of bees will consume about a pint of syrup in an hour. The bees will be much more gentle and easy to handle when placed in the hive if they are well-fed. Participants were told to remember that Beekeeping is a process so not to be overwhelmed by the different materials and processes involved. As with any new venture, time to acclimate yourself to the beekeeping and the language used by beekeepers is important and nothing to be scared or concerned about.

Late afternoon is the best time to install bees in the hive so they will settle down quickly without flying too much. It is very important to continually feed packaged bees with sugar syrup until plenty of nectar is available and the colony is strong enough to forage for itself. The bees will no longer take the syrup when the colony is strong enough and nectar is available.

At this point the beekeeper instructors informed the young participants that they would now actually help with the task of setting up a new hive with packaged bees. The participants were told to follow the procedures to be outlined by the beekeeper instructor (provided below) and to work as requested on each of the tasks.

Firstly, place the box/cage on its side and sprinkle or brush the sugar syrup on the screened box/cage sides about one hour before it is time to put the bees into the hive.
When everything is ready to install the bees, put on the veil or bee-suit and get the hive tool and smoker. Remove five frames from the hive body and push the other five frames to one side of the chamber. You probably will not need it, but light the smoker and have it ready. It is best to reduce the hive entrance with an entrance cleat or stuff the entrance lightly with green grass (this is typically a method used in Canada and America). Sprinkle the bees through the screen with enough lukewarm water to thoroughly wet them and loosen the cover of the package, but do not remove the cover. Give the package a sharp bounce on the ground to knock the bees to the bottom. Remove the syrup can and queen cage and temporarily replace the cover over the hole.

Next, check the queen cage to make sure the queen is alive (this is essential – the hive needs the Queen). Then remove the cork or whatever covering from the end of the queen cage where candy is located so worker bees can eat the candy and release the queen. The cage may be either plastic or wood. Punch a small hole through the candy with a small nail, and wedge the queen cage, candy-end up, between two frames in the centre of the hive so that the screened face of the cage is exposed to the bees. Shake enough bees over the queen cage to form a small cluster. Shake the remaining bees from the package into the hive. It may be difficult to shake the last few bees from the package. The bees flying and crawling outside the hive will find the hive if the weather is not too cold. Gently replace the other frames in the hive and put the feeder on top of the frames with the holes downward. Then place a super without frames over the feeder and put on the hive cover.

The beekeeper will need to go the next day to check to see if the bees are going in and out of the hive; otherwise, do not disturb the hive for about 3 to 4 days. Then check the feeder; if it is empty, refill it. Be very careful to disturb the bees as little as possible. After the bees have been in the hive for about 5 days, check the colony to see if the queen has been released and is laying. Wax comb should have started on the foundation, and there will be a few eggs and some syrup stored in the cells if the colony is developing normally. Use as little smoke as possible and handle the bees and equipment gently. Remove the empty queen cage, remove any burr comb that the bees may have built around the queen cage, refill the feeder with syrup, and close the hive quietly. The purpose of the first inspection of a packaged colony is to see if the queen is alive and laying. If eggs are seen in cells, do not look for the queen. It means she is present and laying. If the queen is not present or laying after 7 to 8 days, you must do one of the following: (1) Immediately introduce another queen. (2) Give the colony a comb with eggs and larvae. (3) Unite the
bees with another colony. There are no other alternatives. Providing the new colony with a new queen is the best option.

Since queens in colonies started from packaged bees may die or be superseded during the first 6 weeks, you should check your colonies about once a week to make certain all is well. A clue that things are not going well will be the presence of developing queen cells. It usually takes about 12 weeks for a colony started from packaged bees to reach a large population. Remember to continue feeding the bees until all the frames have wax combs or until the bees no longer take the syrup. Bees should be fed any time there is a shortage of nectar during the first year.

By checking the bees regularly, a beekeeper will know when to add another hive body or super. Regular checks will also help the beekeeper to gain experience in working with the bees, so the new beekeeper, experience and the colony grow at the same rate. The beekeeper instructors then informed the young participants that this experience and what they have learned may save them bees, honey, money, time, and disappointment later. The young participants at this point had gone through all of the practical aspects as outlined in this description. They were then invited to attend some of the other well-established hives (there were at least six – ten at each of the international locations) at which time the beekeepers showed them these hives and explained the different aspects of the hives and the activities of the bees.