Cumbria’s Working Youngsters: Making the Legislation Work

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Executive Summary

Research has shown that child employment legislation in Britain is largely ineffectual. Local authorities have the responsibility to monitor and regulate the work undertaken by children of school age. However, most school students who work do so without the knowledge or consent of the relevant authority. Although it may be that changes in the legislation may be required, and additional resources made available, the research reported here explores the possibility of improving the situation within the constraint of currently available resources.

The study was undertaken in four stages. The main aim was to evaluate the effectiveness of two intervention programmes implemented by Child Employment and Entertainment Officers and Environmental Health Officers in Cumbria.

Stage 1 (2004) involved surveying students in five Cumbrian schools, first when they were in Year 10 and again when they had progressed to Year 11. Questions covered issues such as type of part-time job undertaken, hours of work and whether a working student had obtained a work permit.

Stages 3 and 4 (late 2005 and early 2006) included the intervention programmes aimed at students in Year 10. The schools were divided into three categories. One school experienced Intervention Condition I, which included activities centred on the school, the home and local employers. Another school experienced Intervention Condition II, which included activities centred on the school and the home, but not local employers. The other three schools acted as a control. They are categorized as Condition III, where no intervention was undertaken.

Stage 4 (2006) replicated Stage 1 but the students surveyed were in the Year 10 classes which had been exposed to the intervention programmes. These students were surveyed late in session 2005-6 and early in session 2006-7.

The researchers also had access to the Cumbria County Council’s work permit database.

It was found that the percentage of students in Year 10 reporting that they were currently employed when the survey was undertaken fell between 2004 and 2006. The decline was not significant for the non-intervention schools in Condition III or for those in Intervention Condition I. However, the fall was significant for Intervention Condition II. When the students were in Year 11, the decline in reported current employment was significant in both of the Intervention Conditions.

For conditions I and III there was no substantial change for Year 10 students in the types of jobs undertaken between 2004 and 2006. However, for Intervention Condition II there was a significant decline in the proportion of students working in the hotel and catering sector. This significant drop was also found when Condition II students were in Year 11.
For Year 10 students, the average number of hours worked per week fell between 2004 and 2006. However, this decline was significant only for Intervention Condition II. This significant drop was also found when the Condition II students were in Year 11.

The number of Year 10 students reporting that they had work permits rose significantly between 2004 and 2006. This was significant for both Intervention Condition I and Intervention Condition II. When the students were in Year 11, the significant rise in students reporting they had permits held only for Intervention Condition II.

Inspection of the Cumbria County Council work permit database suggests that the Intervention Conditions I and II had a positive impact on permit levels in the schools concerned. Whereas across the county as a whole there was a decline in the number of permits issued between 2004 and 2006, in Year 10 of the schools concerned, the cohort targeted by the intervention, permit levels rose.

Comparisons of the data acquired in the surveys with that in the Cumbria County Council educational database were made.

The broad picture emerging from these comparisons was similar. However, it was found that some students, recorded as having work permits, stated that they did not. In other cases, the reverse occurred. It is suggested that this is an indication that the work permit system and its function is less well understood than it might be.

It was also noted that in many cases working students now had different jobs from those for which they had received a permit. This draws attention to the fact that there is no systematic follow-up of young workers after their initial work permits are issued.

It is concluded that the interventions undertaken were successful in their primary aim of increasing the number of working students who had work permits. There is also a possibility that the interventions produced some other incidental benefits, such as students devoting fewer hours per week to their employment.

Most young people who work, in Cumbria as elsewhere in the United Kingdom, do so without the permission or even the knowledge of the local authority which by law is responsible for regulating child employment. It is within that context that the outcome of the research must be interpreted.

Accordingly, we conclude that the following steps seem appropriate:
In the short run, local authorities should adopt a more proactive approach, consider cost implications of their policies in detail, and target resources.
In the long run, a national review of legislation on child employment should be undertaken, with particular stress laid on the practicalities of implementation.
Acknowledgements

We would like to thank all of the students who participated in the study as well as the Headteachers and staff in all of the schools for their co-operation during this research project.

This project was made possible by the support of the staff from Cumbria County Council which includes Child Employment and Entertainment Officers and Administrators, EMS Co-ordinators and Education Welfare Area Managers and all staff within Children's Services of Cumbria County Council. We would also like to extend our thanks to the Environmental Health Officers from the South Lakeland District for their involvement and support. This project was funded by Cumbria County Council, NSPCC and the Child Employment Research Group (CERG) based at the University of Paisley.

Background to the present report

This is the third report of a series of studies focusing on the issue of child employment. The studies are part of an initiative involving Cumbria County Council (CCC), the NSPCC and the Child Employment Research Group (CERG) based at the University of Paisley.

The first report, *Cumbria’s working youngsters: A 2004 update* (McKechnie, Hobbs, Anderson and Simpson, 2005), focused on the nature and extent of part-time employment amongst school students. The study revisited a number of schools that CERG had originally studied in the early 1990s and considered the extent of any change that had occurred in the intervening period.

The second study, *Cumbria’s working youngsters: Exploring their experiences* (McKechnie, Anderson and Hobbs, 2006), sought to broaden our understanding of young workers experiences, with a specific focus on health and safety issues.

In this third report we turn our attention to the question of the current systems for monitoring and protecting young employees in the workplace.
INTRODUCTION

Interest in child employment in Britain was re-kindled by a series of studies which were carried out in the early 1990s. The work of Pond and Searle (1991) and Lavalette, McKechnie and Hobbs (1991) demonstrated that child employment was a common experience for young people in Britain and this conclusion has been supported by subsequent research findings.

Throughout the 1990s a key aspect of this research was that it was linked to an emerging debate about the legislation that existed to monitor and protect young people who were combining part-time employment with full-time education. A common thread running throughout all of the research findings was that the existing legislation was largely ignored and was ineffective.

The existing legislation in this area, the Children and Young Persons Act (1933), allows young people, before they reach the end of the period of compulsory education, to have a part-time job whilst still at school. However, it acknowledges that there is a need to protect this group of employees and places certain constraints on such employment. These include minimum age criteria, maximum hours of work, watersheds prohibiting employment at specific times early in the morning and late evening and proscribes certain types of employment.

Local authorities are charged with the day-to-day application of this policy. Local bye-laws supplement the central legislation in this area. In order that they can monitor such employment local authorities have adopted a work permit system. The application for this permit requires details on the nature of the job and the hours that can be worked. This, along with other information, is then used in the decision to award, or not award, the work permit. This legislation, while originally laid in the 1930s, has been updated at various times but the essential elements have remained largely unchanged.

The legislation requires local authorities to monitor the employment of children in their area. In practice this had been interpreted as requiring a work permit. This was made explicit in the model byelaws issued by the government in 2000.

A number of recent studies into local authority policy and practice on child employment have questioned the effectiveness of the legislation in this area (Hamilton, 2002; Murray, 2005; McKechnie, Hobbs, Anderson, Howieson and Semple, 2006). Researchers are not the only group who argue that the legislation is ineffective. In 1998 the government set up an interdepartmental review of the issue. The final report, which was never made public, has been obtained by the present writers under the Freedom of Information Act. It acknowledged the inefficacy of the present system and made a number of recommendations. One of these included the idea of abandoning the work permit system in favour of one that relied upon employers informing local authorities of any school-aged employees (Hobbs, Anderson and McKechnie, forthcoming).
In 2004 the Better Regulation Task Force’s (BRTF) review of the legislation in this area concludes that current legislation is largely ignored. This body recommended that the work permit system should be changed in favour of one where employers of school-aged children are licensed.

The government’s response to the recommendations from the 1998 review and the BRTF has been the same, namely that no action has been taken. However, there is some evidence of activity in this area.

At the local authority level a number of authorities have appointed Child Employment and Entertainment Officers (CEEO). Such posts mean that within these authorities there are individuals clearly identified as having responsibility for the child employment issues. This strategy has not been applied throughout the whole of Britain. For example, Scottish local authorities have not appointed CEEOs.

In some cases authorities have been involved in specific initiatives. For example in 2005 West Yorkshire Police and local authority workers in Leeds combined forces to patrol the city centre with the aim of highlighting the child employment regulations for employees and employers (West Yorkshire Police, 2005).

Other authorities have been proactive in the sense that they have been prosecuting employers who breach the child employment regulations. Surrey County Council is one such case where child employment officers have prosecuted a number of employers including large scale companies such as McDonald’s and Tesco (Spear, 2004).

However, the latter examples are exceptions to the rule, namely that the system is largely reactive rather than proactive and is under-resourced at the local level. It could be argued that local authorities are simply reflecting the attitude of central government who, while acknowledging the system is not working, do nothing to address the issue.

Two questions arise at this stage. First, why should we be concerned about this? Second, what can be done to move the discussion forward? We shall deal with each in turn. There are a number of reasons why this issue should concern us. As we have already indicated having a part-time job is a majority experience for young people however, at present this labour force remains largely invisible. By ignoring this group of employees what message are we sending to young workers about their first job, their rights as employees and their contribution to many businesses?

By failing to acknowledge this group of employees we also fail to address their health and safety needs. There is a growing body of research on accidental injuries suffered by young workers, both in the United States (for example, Castillo, Davies and Wegman, 1999) and in the United Kingdom (for example, O’Neill, 2006). As it is presently set out a primary aim of the legislation is to protect young people in the workplace and at present we are failing to meet this aim. In this case protection goes beyond concerns about accidental injury and needs to address ‘safety’ in a number of different contexts.
Finally it is sometimes argued that part-time employment can be a beneficial experience for young people. However, there is a need to ensure that the balance between potential costs and benefits is weighted in favour of the benefits. If we are not aware of the types of jobs and experiences of young employees then this task becomes more problematic.

Our second question relates to how we might move the discussion forward? Responding to the present situation, researchers have suggested a number of alternative ideas (Whitney, 1999; McKechnie and Hobbs, 2001). A common idea that emerges is that the current legislative structures are failing and that a root and branch review is needed. However, one question needs to be addressed before we consider such an approach. Is the present system failing to work because of a lack of attention and resources or because the mechanisms under-pinning the legislation are unworkable?

In this project we seek to address this question by examining the effectiveness of a proactive intervention strategy where the primary aim is to improve compliance with the existing legislation.

**Project Aims**

This study sets out to consider whether the effectiveness of the present system can be improved at the local authority level. A central pillar of the local authorities’ child employment monitoring strategy is that all young employees must attain a work permit. Research has shown that the majority of child employees work illegally because they did not have these permits (for example see, McKechnie, Hobbs, Anderson and Simpson, 2005). However, there has been no attempt to consider why this is the case. A number of explanations are possible. For example, there is widespread ignorance of the legislation and young people and employers may not be aware of the permit system. Alternatively it may be that local authorities have not invested the necessary resources in this area. A third alternative is that the system fails to work because it is outdated and unsuited for the modern world.

The aim of the present project is to evaluate whether the existing legislation can be made to work more effectively. If lack of awareness, or poor resource level, is the main reason for the failure of this legislation then tackling these issues should improve compliance levels. However, if, even within “optimum circumstances”, there is little impact on conformity to the legislation, this might indicate a more fundamental problem with the legislation or the resource model being used.
METHODOLOGY

The primary aim of the project is to evaluate the impact of an intervention strategy which has the specific aim of increasing conformity to the existing legislation. Such an increase in conformity should manifest itself in the form of an increase in the number of work permits issued by the authority. However, other indirect effects may emerge as a result of the intervention strategy such as a reduction in numbers working or a change in the hours worked.

To evaluate the intervention programme we adopted an approach comparing data on employment before and after the interventions. In 2004 a survey was carried out in five schools across Cumbria. This 2004 data provides the baseline data for this project. In June 2004 a survey of Year 10 school students was carried out to collect information on their part-time employment status, hours worked, type of job etc. The research team returned to each school in October 2004, when the same students had now progressed to Year 11, to repeat the survey. A full report and analysis of these findings can be found in Cumbria’s working youngsters: A 2004 Update (McKechnie, Hobbs, Anderson & Simpson, 2005).

The intervention programme was designed and carried out in 2005-06. The different elements within the intervention are detailed later. The intervention was undertaken with the cooperation of Child Employment and Entertainment Officers (CEEOs) and Environmental Health Officers (EHOs). The intervention programme involved two stages. The first occurred in November 2005 and the second stage in March/April 2006.

After completion of the interventions the 2004 survey was replicated in all five participating schools. These surveys were carried out in June 2006 for Year 10 and October 2006 when the students had progressed to Year 11. The time frames and procedures for the survey mirrored those for the 2004 survey.

Both surveys, 2004 and 2006, were carried out by the Child Employment Research Group while the interventions were delivered by CEEOs and EHOs in Cumbria.

The Schools

Five schools participated in this project. They were drawn from four of the six districts within Cumbria (see Table M1 page 10). All five schools participated in all phases of the project from 2004 through to its conclusion in 2006.

Each school was assigned to one of three Intervention Conditions. Conditions I and II involved two different intervention programmes which are detailed below. Condition III involved no specific intervention. It acted as a control condition which would help us distinguish the effects of the interventions from changes due to the passage of time or other circumstances.
Table M1: Schools Included in the Study

<table>
<thead>
<tr>
<th>School</th>
<th>Area</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>Carlisle City</td>
<td>III</td>
</tr>
<tr>
<td>School B</td>
<td>South Lakeland</td>
<td>I</td>
</tr>
<tr>
<td>School C</td>
<td>Barrow-in-Furness</td>
<td>III</td>
</tr>
<tr>
<td>School D</td>
<td>Copeland</td>
<td>III</td>
</tr>
<tr>
<td>School E</td>
<td>Carlisle City</td>
<td>II</td>
</tr>
</tbody>
</table>

The information on the number of participants within each school can be found in Tables M2 and M3 (page 10 & 11). The tables show the percentage of students that participated in the survey in 2004 and 2006 as a percentage of the overall Year group.

Table M2: Sample information Year 10\(^1\): 2004 and 2006

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Year 10</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School</td>
<td>No. of Year 10</td>
<td>No. sampled</td>
<td>Percentage of year sampled</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>91</td>
<td>60</td>
<td></td>
<td>65.9%</td>
</tr>
<tr>
<td>B</td>
<td>140</td>
<td>115</td>
<td></td>
<td>82.1%</td>
</tr>
<tr>
<td>C</td>
<td>93</td>
<td>59</td>
<td></td>
<td>63.4%</td>
</tr>
<tr>
<td>D</td>
<td>230</td>
<td>152</td>
<td></td>
<td>66.1%</td>
</tr>
<tr>
<td>E</td>
<td>232</td>
<td>158</td>
<td></td>
<td>68.1%</td>
</tr>
<tr>
<td>Total</td>
<td>786</td>
<td>544</td>
<td></td>
<td>69.1%</td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>149</td>
<td>122</td>
<td></td>
<td>81.8%</td>
</tr>
<tr>
<td>B</td>
<td>130</td>
<td>107</td>
<td></td>
<td>82.3%</td>
</tr>
<tr>
<td>C</td>
<td>88</td>
<td>44</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>D</td>
<td>237</td>
<td>182</td>
<td></td>
<td>76.7%</td>
</tr>
<tr>
<td>E</td>
<td>300</td>
<td>235</td>
<td></td>
<td>78.3%</td>
</tr>
<tr>
<td>Total</td>
<td>904</td>
<td>690</td>
<td></td>
<td>76.3%</td>
</tr>
</tbody>
</table>

\(^1\) Throughout the report the sample size stated in the tables may vary. This is due to missed responses; some students did not answer all of the survey questions.
Table M3: Sample information Year 11: 2004 and 2006

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Year 11</th>
<th></th>
<th></th>
<th>Percentage of year sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School</td>
<td>No. of Year 11</td>
<td>No. sampled</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>A</td>
<td>91</td>
<td>69</td>
<td>75.8%</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>139</td>
<td>98</td>
<td>70.5%</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>82</td>
<td>62</td>
<td>75.6%</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>230</td>
<td>176</td>
<td>76.5%</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>231</td>
<td>180</td>
<td>77.9%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>773</td>
<td>585</td>
<td>75.6%</td>
</tr>
<tr>
<td>2006</td>
<td>A</td>
<td>148</td>
<td>108</td>
<td>72.9%</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>131</td>
<td>85</td>
<td>64.8%</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>87</td>
<td>63</td>
<td>72.4%</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>238</td>
<td>185</td>
<td>77.7%</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>300</td>
<td>241</td>
<td>80.3%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>904</td>
<td>682</td>
<td>75.4%</td>
</tr>
</tbody>
</table>

The Intervention Programme

**Stage 1**

This involved surveying Year 10 and 11 students in 2004. The survey provides information on the nature and extent of part-time employment across all five schools.

**Stage 2:**

Condition I intervention activities (School, Family and Employer based)

- Posters placed in the school highlighting the issue
- CEEOs provide a short presentation (approximately 10 minutes) to Year 10 students in assembly on the legislation pertaining to child employment.
- All Year 10 students provided with a copy of an information flyer incorporating a permit request form
- Letters sent to all parents or guardians of Year 10 students outlining the issue and containing a copy of the flyer and permit request form.
- Local employers in a dominant employment sector, hotel and catering, were contacted. Employers in this sector (n = 300) have been identified through existing databases and were sent a letter outlining child employment legislation. The leaflet included a copy of the work permit request form.
Condition II intervention activities (School and Family based)

These were the same as for Condition I except that local employers were not contacted.

Condition III (Non-intervention).

No special measures were undertaken.

**Stage 3:**
Condition I intervention activities replicated some of the activities in Stage 2 and expanded upon others:

- Posters in school highlighting the issue
- CEEOs ran a workshop session for all Year 10 students on child employment, this was carried out in small groups within a class time period.
- All Year 10 students provided with a copy of an information flyer incorporating a permit request form
- Letters sent to all parents of Year 10 students outlining the issue and containing a copy of the flyer and permit request form.
- Hotel and catering employers were sent an additional round of new information on child employment, drawing attention to health and safety issues. Permit request forms were included with this information. In addition EHOs visited catering employers in the area surrounding the school. A total of 20 premises were visited, during which the EHOs completed a short questionnaire with the help of the employer. The questionnaire established whether any under 16s were employed, if so how many, if they had work permits, what activities they were undertaking and whether a risk assessment had been carried out. The EHOs left information about work permits and application forms with the employers. The premises visited were selected at random.

Condition II intervention activities again mirrored those in Condition I except that there were no activities targeted at employers.

Condition III again involved no special measures.

**Stage 4:**
The Child Employment Research Group (CERG) surveyed all Year 10 students across all three intervention conditions. The survey is a replication of the 2004 data gathering exercise. CERG returns to survey all Year 11 students in the early part of the new 2006-07 academic year.

A timeline for the stages can be found in Figure M1, at the end of the methodology section.
Cumbria County Council Permit Database Information

In addition to the above activity a separate strand of the research involved accessing Cumbria County Council’s database system. In this system each student has a record of any work permit request, the date of the application, when the permit was issued, who the employer is and the type of job.

From this database we were able to get information on the overall number of permits issued by CCC for the whole county over three academic years 2003-2004, 2004-2005 and 2005-2006. These time periods provide permit totals before the first survey and the period following the intervention programme. Information was supplied for National Curriculum Year Groups 8, 9, 10 and 11.

For each of the schools in the project we received details of the students who held permits in Year 10 and 11. This allowed us to match the Council’s work permit information with the survey databases collected by CERG. This would allow us to consider the degree of consistency between the two data sets.

Variables

As in previous research carried out by CERG, we have classified school students in three categories. We distinguished between Current Workers (reporting that they have a job at the time they were surveyed), Former Workers (not currently working but have worked at some time previously) and Never Worked.

In previous studies in this series we classified work into seven categories of Job Type. In the present study, since the numbers of students falling into some categories were quite small, we have collapsed some of these categories and classify jobs under four headings: Delivery, Retail, Hotel & Catering, and Other.
Figure M1: Timeline for the Intervention Study.

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Stage 1</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>2005</td>
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<td></td>
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<tr>
<td>Stage 2</td>
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<td>2006</td>
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<td>Stage 3</td>
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</tbody>
</table>
RESULTS

In this section of the report we will provide an overview of the main findings. We will consider the findings within three sections:

(i) Section A: This will focus on a comparison of the general employment data collected from the school students’ survey responses. The primary aim is to compare the findings from the pre-intervention 2004 survey with the post-intervention survey carried out in 2006.

(ii) Section B: Here attention is focused on the data provided by Cumbria County Council on the number of permits issued within their area. We present information covering four academic years 2003-04, 2004-05, 2005-06 and 2006-07.

(iii) Section C: In this we consider the findings from a matched database, where Cumbria Council’s permit information is matched to the school students’ survey responses.

Following each section we have provided a brief summary of the key findings from the analyses.

Section A: Pre- and Post-Intervention Surveys

We compare the findings from the pre-intervention survey data from 2004 with the 2006 post-intervention data. The following areas are considered for both Year 10 and Year 11 students:

- Work status
- Job type
- Hours worked
- Permit levels (self-reported)

Year 10

Work Status

As in previous studies carried out by the Child Employment Research Group we believe that a true understanding of the extent of part-time employment can only be gained by considering those who are currently working, those who have worked in the past (former workers) and those who have never had a part-time job.

Table A1 (page 16) compares the total number of current, former and never worked students across all five schools in the pre- and post-intervention surveys. It is evident that there is a significantly lower percentage of current workers in 2006 ($\chi^2 = 19.69$, df = 2, p< 0.001). However, it is worth noting that there is a similarity between the 2004 and 2006 data sets in that the majority of school students have experience of part-time employment, 63% and 51%, respectively.
Table A1: Work Status 2004 and 2006 (%)

<table>
<thead>
<tr>
<th>Year of Survey</th>
<th>Current Workers (%)</th>
<th>Former Workers (%)</th>
<th>Never Worked (%)</th>
<th>Total no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>44</td>
<td>19</td>
<td>38</td>
<td>536</td>
</tr>
<tr>
<td>2006</td>
<td>32</td>
<td>19</td>
<td>49</td>
<td>690</td>
</tr>
</tbody>
</table>

The above finding relates to all of the schools within the study. We need to consider whether or not variation in employment status is linked to the three intervention conditions. As we can see from Table A2 the reduction in the percentage in current workers is evident within all three intervention groups suggesting that there is some general decline in employment levels occurring between 2004 and 2006.

Table A2: Work Status and the Intervention Conditions (%)

<table>
<thead>
<tr>
<th>Intervention Group</th>
<th>Year</th>
<th>Current Workers (%)</th>
<th>Former Workers (%)</th>
<th>Never Worked (%)</th>
<th>Total no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition I</td>
<td>2004</td>
<td>78</td>
<td>12</td>
<td>11</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>65</td>
<td>14</td>
<td>22</td>
<td>107</td>
</tr>
<tr>
<td>Condition II</td>
<td>2004</td>
<td>42</td>
<td>23</td>
<td>36</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>29</td>
<td>22</td>
<td>49</td>
<td>235</td>
</tr>
<tr>
<td>Condition III</td>
<td>2004</td>
<td>31</td>
<td>19</td>
<td>50</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>24</td>
<td>19</td>
<td>57</td>
<td>348</td>
</tr>
</tbody>
</table>

However, we examined the extent to which the decline within each intervention condition was significant. Comparing the work status of students in Condition III (Non-intervention) in 2004 and 2006, shows that the decline in percentage of current workers was not significant ($\chi^2 = 3.50$, df = 2, p > 0.05). This finding was replicated in one of the intervention schools (Condition I), ($\chi^2 = 5.74$, df = 2, p = 0.057). However for the other intervention school (Condition II), we did find that the decline in the number of students currently working in 2006 was significant ($\chi^2 = 8.51$, df = 2, p< 0.02).

This pattern of results might be taken to suggest that one possible impact of the intervention activities was to make students less likely to take up employment. We would suggest that this finding is treated with some caution. It may be noted that it was in the school with the more limited activities (school and family based only) that the decline was found to be significant. Furthermore, an alternative explanation for the apparent decline in employment is that as a result of the interventions students were less willing to report their work status accurately.
**Job Type**

Part of the intervention programme involved targeting the employers of one particular sector with information on the legal requirements that they had to meet when employing young people under 16 years of age. The sector in question was hotel and catering, a major employer of school students within Condition I school.

It is possible that, as a result of this aspect of the intervention programme, employment levels in this sector may have declined over the period of the study. This was not a primary goal of the project but we acknowledge that it may have been an indirect effect of the strategy adopted.

For this study we categorised the jobs that current workers were doing into four sectors: Delivery, Retail, Hotel & Catering and Other (see the Methods section for an explanation of these categories).

Table A3 shows the percentage of Year 10 current workers who were employed in each sector in 2004 and 2006. As we can see there is some variation in the percentage of students working within each job category pre- and post-intervention. However, closer inspection showed that these variations were not significant ($\chi^2 = 5.11$, df = 3, $p> 0.05$).

**Table A3: Year 10 Current Workers Employed by Job Category (%)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Delivery %</th>
<th>Retail %</th>
<th>Hotel &amp; Catering %</th>
<th>Other %</th>
<th>Total no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>24</td>
<td>13</td>
<td>36</td>
<td>28</td>
<td>228</td>
</tr>
<tr>
<td>2006</td>
<td>26</td>
<td>8</td>
<td>31</td>
<td>35</td>
<td>220</td>
</tr>
</tbody>
</table>

It could be argued that if the intervention was impacting on employment levels within a specific sector this would be most apparent at the individual school level and not the whole sample. To explore this we considered the numbers working in each job category for each of the intervention conditions, comparing the pre- and post- data.

Figure A1 (page 18) shows the percentage of students working in each job sector in 2004 and 2006 for Condition I. As we can see the majority of young people are employed in the hotel and catering sector in the pre- and post-intervention period. This school lies within the area where the employers in the hotel and catering sector were targeted with information on employing young workers. However a comparison of the pre- and post-intervention levels of employment within each category showed that there was no significant difference across the period of the intervention programme ($\chi^2 = 0.45$, df = 3, $p> 0.05$).
In the case of Condition II and III there was no targeting of the hotel and catering employers or the employers of any other sector. Figure A2 and A3 (page 19) shows the percentage of students employed in each job sector for both of these interventions.
The above Figure for Condition II shows that the number of students working in delivery was consistent over the time period of this study. However, the numbers working in Hotel and Catering declined significantly in 2006 while the number of students working in the ‘Other’ category significantly increased over this time period ($\chi^2 = 13.01$, df = 3, p < 0.005). The variation in this case cannot be ascribed to any specific aspect of the intervention programme and is more likely to reflect changes in the local economy, availability of jobs etc.

In the third intervention condition, Condition III (Figure A3, page 20) we find relatively consistent employment levels within Delivery and Other categories with some variation in the number of pupils employed in the Retail and Hotel & Catering sectors. These variations were not found to be significant ($\chi^2 = 4.56$, df = 3, p >0.05).
Reviewing the pattern of results shows us that there is some variation in the dominant job categories across the three intervention groups. Figures A1, A2 and A3 demonstrate this. Delivery work is more common in Condition II and III reflecting the fact that these schools are based in urban areas. In contrast the school participating in Condition I is in a rural area dominated by tourism and the dominant job sector is Hotel and Catering. The same significant pattern is found in 2004 ($\chi^2 = 55.99$, df = 6, $p < 0.001$) and 2006 ($\chi^2 = 47.46$, df = 6, $p < 0.001$). This supports the findings from previous studies in Cumbria which have argued that the dominant job categories within any area reflect the underlying economic and geographic conditions of the local area.

With respect to the strategy of targeting one employment sector in Condition I we can conclude that there is no evidence to suggest that this led to a reduction in the numbers employed within the hotel and catering sector.

**Hours Worked**

A key concern for many with an interest in child welfare is the number of hours that school students work. In the context of the present project we are interested in exploring whether the number of hours worked has varied over the time period of the study. A subsidiary question is, if any change is found is this linked to the intervention conditions? As with the previous indicators of part-time employment that we have considered the intervention programme was not designed to impact on the number of hours worked but it is possible that it had some indirect effect.
We will start by considering the number of hours worked by all students who were currently working at the time of the surveys. In 2004 the average hours worked per week was 7.95, this has dropped to 6.35 hours in 2006. This was a significant drop in the average hours worked by Year 10 \((t (400.6) = 3.17, p< 0.003)\). Table A4 shows the average hours worked by students within each of the intervention conditions for 2004 and 2006.

**Table A4: Mean Hours Worked: Year 10**

<table>
<thead>
<tr>
<th></th>
<th>Survey year</th>
<th>Means hours worked per week</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition I</td>
<td>2004</td>
<td>7.69</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>6.58</td>
<td>(t (144) = 1.84, p= 0.068)</td>
</tr>
<tr>
<td>Condition II</td>
<td>2004</td>
<td>7.96</td>
<td>(t (116.37) = 3.04, p&lt; 0.004)</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>5.79</td>
<td></td>
</tr>
<tr>
<td>Condition III</td>
<td>2004</td>
<td>7.14</td>
<td>(t (110.14) = 0.69, p&gt; 0.05)</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>6.62</td>
<td></td>
</tr>
</tbody>
</table>

It is apparent that in all three intervention conditions the average number of hours worked declines. However, this decline is not significant in Condition III, the non-intervention condition, but is significant in Condition II and approaches a significant level in Condition I. This pattern might lead us towards the view that the actions taken within both pro-active intervention conditions may have had some effect on the average number of hours worked.

We should be cautious about reaching this conclusion without further exploration of the data. As we noted in the previous section on job type there had been some variation in the pattern of jobs held by students. Previous research has shown that one predictor of the number of hours worked is job type.

To explore the potential interaction between variables an Analysis of Variance (ANOVA) was carried out with year of survey \((2)\) x intervention condition \((3)\) x job type \((4)\). The analysis indicated that there was a significant difference associated with the year of study \((F (1,389) = 5.13, p<0.03)\) and job type \((F (3,389) = 5.15, p<0.003)\). Post hoc tests showed that ‘Delivery’ workers worked a significantly lower number of hours than those employed in ‘Hotel and Catering’ and ‘Other’ job categories.

The results of this analysis found no significant difference in hours worked between the intervention conditions \((F (2,389) = 0.58, p >0.05)\) nor was there any evidence of any significant interaction effects between the three variables.
These findings suggest that the variation in hours that had been identified cannot be explained by the intervention strategies. One possibility is that the variation in the number of students working within each job category (see Figures A2, A3, and A4) may have affected the average number of hours worked. For example if we know that the Delivery sector involves working a lower number of hours per week, an increase in the proportion of workers in this sector would reduce the average hours of current workers.

The overall drop in the average number of hours working has had another notable effect. Previous research has shown a link between students working in excess of 10 hours per week and poorer academic outcomes (McKechnie, and Hobbs, 2001). As Table A5 shows, the percentage of students that fall into this category has significantly declined between the two survey periods ($\chi^2 = 7.93$, df = 2, p < 0.02).

Table A5: Hours Worked per Week: Year 10 (%)

<table>
<thead>
<tr>
<th>Year of survey</th>
<th>Less than 5 hours per week %</th>
<th>5.1 &lt; 10 hours per week %</th>
<th>More than 10 hours per week %</th>
<th>Total no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>35</td>
<td>46</td>
<td>19</td>
<td>214</td>
</tr>
<tr>
<td>2006</td>
<td>44</td>
<td>47</td>
<td>10</td>
<td>206</td>
</tr>
</tbody>
</table>

Permits

A primary aim of this study was to increase the number of permits held by young workers. In this section we consider the survey data and students self-reported permit information. We focus upon the current workers, excluding babysitters from the total number of workers since this type of employment is not covered in the legislation relating to work permits.

Across all of the schools in the present study in 2004 only 15% of current workers had a work permit, in 2006 this has risen to 52% (see Figure A4, page 23). This constitutes a significant rise in the number of current workers reporting permits ($\chi^2 = 55.99$, df = 1, p < 0.001). However, this is based upon data from all of the participating schools and may simply reflect an overall growth in permits across all of Cumbria.

Based upon the intervention programme we would hypothesise that the schools receiving the pro-active interventions should have a higher number of permits than the non-intervention condition.
Figure A5 (see page 24) shows the percentage of current workers who reported that they had work permits in 2004. As we can see the numbers reporting permits for Intervention Conditions I, II and III is low, 7%, 27% and 18% respectively. At the time of this study the school involved in Condition II had a higher than expected number of work permits ($\chi^2 = 9.87$, df = 2, $p < 0.01$) and at the time we suggested that this might be linked to one particular employment sector, delivery, which employed a number of students.

The picture for 2006 is markedly different (see Figure A8, page 26). In this case permit levels have increased across all of the intervention conditions, including the non-intervention condition (57%, 59% and 39%). A closer inspection of the data shows that the rise in permit levels for Condition I and Condition II is significantly greater ($\chi^2 = 6.24$, df = 2, $p < 0.05$).

This pattern of results suggests that the two pro-active interventions had a significant impact on the number of self-reported permits. We are left with two questions to address, first, how to account for the increase in permit levels between 2004 and 2006 for the non-intervention group and, second, was there any variation between Condition I and II.
Condition III, the non-intervention condition, consists of three schools where the only activity was to collect survey data from the school students. There are two possible explanations to account for the increase in permit levels from 2004 to 2006 for this group of schools. As we indicated earlier in this report during the time that the project was
being carried out the Cumbrian Child Employment Officers were carrying out their normal duties across the region. The increase in permits in this case may reflect that general level of background activity within the study. If this is the case then the Conditions I and II manage to increase permit levels beyond this general background level.

An alternative explanation for the increase in Condition III permit levels lies in the fact that this group comprises three schools (see Methods section for explanation). Further analysis shows that the increase in permits from 2004 to 2006 is in fact due to the change in one school over this time period. The school in question is geographically close to the school in Condition II and we may be witnessing a spill over effect from the pro-active intervention school to one of the non-intervention schools. This explanation is supported by the fact that the remaining two schools in Condition III show no increase in permits over the 2004 to 2006 period.

The second question that we have to address relates to the extent to which there is any differential effect associated with Condition I and II. In both cases there is a significant increase in permit levels, however, Condition I had an additional component in the package of interventions. In this case, hotel and catering businesses in the area were targeted by letter and a sub-sample were visited by EHOs. Part of the visit highlighted the child employment legislation.

We might anticipate that if this strategy had any specific impact it would be reflected in the number of employees in this sector who held work permits. Figures A8 and A9 (pages 26 & 27) show the pattern of permits held by job type for 2004 and 2006 for all current workers in the study. The figures show the increase in the number of permits held across all job sectors. Within each year there was no evidence of any significant variation in permit levels associated with job type (2004: $\chi^2 = 6.89$, df = 3, $p > 0.05$); 2006 ($\chi^2 = 3.39$, df = 3, $p > 0.05$).
Figure A7: Self Report Permit Levels by Job Type in 2004 (%)

Figure A8: Self Report Permit Levels by Job Type in 2006 (%)
To explore this issue in more detail we set out to consider the relationship between job type and the likelihood of holding a permit for Condition I and Condition II. However, we were unable to carry out a full analysis of this material due to constraints on the sample size. This problem manifested itself in two ways, first the small numbers working in some job sectors (e.g. delivery workers are very rare in Condition I) and second, in some cases no students had permits within a job sector. However an exploration of the existing data suggests that Condition I may have had some impact on the permit levels in the Hotel & Catering sector.

Figures A9 and A10 (page 28) show the percentage, for Condition I and II respectively, of students who worked in each job category who report having, or not a having, a permit in 2004 and 2006.

**Figure A9: Condition I: Permits and Job Type 2004 (%)**
Inspection of these two figures shows that the increase in permit levels is linked to three job categories. It was not possible to reliably test the significance of this pattern in 2006. However, the trend within the data suggests that there has been a notable increase in permits in the hotel and catering sector. While this is in line with our hypothesis we must also draw attention to the same pattern for retail employees.

Adopting the same approach for Condition II produces a different pattern. Figures A11 and A12 (page 29) show the percentage of students in each job category who reported having, or not having, a permit for 2004 and 2006.

Inspection of these figures shows that the increase in permits from the pre- to the post-intervention period is associated with increases in delivery and retail categories. There is little variation in the percentage of employees reporting permits in hotel and catering. In this intervention none of the employment categories were targeted and the pattern of results between Condition I and II suggests that the targeting strategy may have improved permit levels within a specific sector. As we have already stated we need to be cautious when interpreting these findings.
Figure A11: Condition II: Permits and Job Type 2004 (%)

Figure A12: Condition II: Permits and Job Type 2006 (%)
Year 11

As we indicated in the Methods section school students were surveyed on two occasions, as they approached the end of Year 10 and in the early part of Year 11. We will now turn our attention to a review of the Year 11 findings. We will follow the same structure as in the previous section.

We should keep in mind that the Year 11 data was collected five months after the completion of the intervention programme. The rationale for considering this data in some detail relates to the need to evaluate the longer term impact of the intervention programme. Such intervention programmes may have a limited effect in that they may only have a short-term influence. Alternatively studies in other areas of psychology which have relied upon some form of intervention have identified a “sleeper effect” where the impact of an intervention does not emerge until some time after the actual intervention. By reviewing the Year 11 data we will be able to address these issues.

Work Status

Table A5 compares the percentage of school students, across all schools, within each work status category based on the 2004 and 2006 data sets, i.e. pre- and post-intervention. The total number of current workers has declined over this period, 42% vs. 32%. In contrast the percentage of former and never worked students has increased. This pattern of change was found to be significant ($\chi^2 = 15.67, df = 2, p < 0.001$). In 2004 the majority of students were either current or former workers and as such had experience of paid employment, in 2006 this figure now stands at 50%.

<table>
<thead>
<tr>
<th>Year of Survey</th>
<th>Current Workers (%)</th>
<th>Former Workers (%)</th>
<th>Never Worked (%)</th>
<th>Total no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>42</td>
<td>13</td>
<td>46</td>
<td>585</td>
</tr>
<tr>
<td>2006</td>
<td>32</td>
<td>18</td>
<td>50</td>
<td>682</td>
</tr>
</tbody>
</table>

The above findings do not discriminate between the three intervention conditions and it is possible that the work status patterns vary across these conditions. Table A7 (page 31) summarises the percentage of students within each work status category across all three intervention conditions. It is evident that the decline in the percentage of current workers identified above is evident within Conditions I and II. However, in the third intervention condition, the non-intervention schools, we see a slight increase in the number of current workers.
Table A6: Work Status and the Intervention Conditions: Year 11 (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Current Workers (%)</th>
<th>Former Workers (%)</th>
<th>Never Worked (%)</th>
<th>Total no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condition I 2004</td>
<td>84</td>
<td>7</td>
<td>9</td>
<td>98</td>
</tr>
<tr>
<td>2006</td>
<td>60</td>
<td>25</td>
<td>16</td>
<td>85</td>
</tr>
<tr>
<td>Condition II 2004</td>
<td>48</td>
<td>13</td>
<td>39</td>
<td>180</td>
</tr>
<tr>
<td>2006</td>
<td>28</td>
<td>24</td>
<td>48</td>
<td>241</td>
</tr>
<tr>
<td>Condition III 2004</td>
<td>25</td>
<td>14</td>
<td>61</td>
<td>307</td>
</tr>
<tr>
<td>2006</td>
<td>28</td>
<td>13</td>
<td>60</td>
<td>356</td>
</tr>
</tbody>
</table>

Closer analysis of these variations showed that for Condition I and II there was a significant decline in the number of students currently employed in the pre- and post-intervention period ($\chi^2 = 14.99$, df = 2, $p < 0.002$; $\chi^2 = 18.47$, df = 2, $p < 0.001$, respectively). In the case of Condition III there was no significant variation in the number of students within each work category across the period of the study.

This pattern of results reflects the same trends identified in the Year 10 data but provides stronger evidence that the pro-active interventions may have had an impact on the employment levels amongst Year 11 students. As we noted earlier some caution is needed when considering these results. Students may, as a result of the interventions, be more aware of employment issues and as a result are censoring the information they provide. One argument against this interpretation is the time gap between the initial interventions and the collection of Year 11 data.

**Job Type**

Amongst all current workers in Year 11, the dominant employment sectors are Hotel & Catering and “Other”, and this remains the case across the pre- and post-intervention period (see Table A7). However, it is evident that the total percentage of students working in the Hotel & Catering sector has declined, though not significantly ($\chi^2 = 5.95$, df = 3, $p > 0.05$).

Table A7: Employed by Job Category: Year 11 (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Delivery %</th>
<th>Retail %</th>
<th>Hotel &amp; Catering %</th>
<th>Other %</th>
<th>Total no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>19</td>
<td>15</td>
<td>38</td>
<td>28</td>
<td>242</td>
</tr>
<tr>
<td>2006</td>
<td>21</td>
<td>11</td>
<td>31</td>
<td>37</td>
<td>217</td>
</tr>
</tbody>
</table>
Since one strand of the intervention programme was to target employers in this sector it is possible that this reduction is associated with this strategy. However, since this approach was only used in one of the three intervention conditions we should consider each condition in turn.

For Condition I (see Figure A13) it is evident that the dominant employment sector in 2004 and 2006 is the Hotel & Catering sector. There were no Year 11 students working in the Delivery sector, which we may anticipate since this school is based in a rural area and only a small number of Year 10 students worked in this sector.

Figure A13: Condition I: Pupils Employed by Job Categories: Year 11 (%)

There is a slight decrease in the percentage of pupils working in the Hotel & Catering sector, however, this is not significant ($\chi^2 = 3.04$, df = 2, p> 0.05). This suggests that the strategy of targeting employers in this sector did not significantly reduce the numbers employed or move the students into other forms of employment.

As we have noted earlier Conditions II and III did not involve the targeting of any specific employment sector. However it is apparent from Figure A14 (page 33) that there has been a shift in employment sectors in Condition II over the period of the project, furthermore this change was found to be significant ($\chi^2 = 9.92$, df = 3, p< 0.02). In 2006 fewer students than expected were employed in the Hotel & Catering sector compared to 2004, while more students were employed in the ‘Other’ sector in 2006.

This change mirrors the pattern that we found in Year 10 and cannot be explained by the intervention programme. As we indicated earlier one possibility is that we are uncovering changes in the local economy, for example the closure of a business within the ‘Hotel & Catering’ sector.
Figure A14: Condition II: Pupils Employed by Job Categories: Year 11 (%)

Figure A15: Condition III: Pupils Employed by Job Categories: Year 11 (%)
Figure A15 (page 33) shows the job sector profile for Condition III. It is evident that there has been some re-distribution of employees across the different sectors with an increase in the percentage employed in Hotel & Catering, however, this was not significant ($\chi^2 = 4.57$, df = 3, p > 0.05).

In addition to identifying changes in the numbers working within each job sector pre- and post-intervention Figures A13, A14 and A15 (pages 32 & 33) also show the variation in employment between the different geographical areas covered in this study. For example, the school in the first intervention condition is based in an area dominated by tourism and it has the largest percentage of workers in ‘Hotel & Catering’ and ‘Other’. In contrast Condition II and III include schools in urban settings. In both cases ‘Delivery’ is an important employer even in the later school years. This pattern was consistent and significant in 2004 ($\chi^2 = 53.25$, df = 6, p < 0.001) and 2006 ($\chi^2 = 23.14$, df = 6, p < 0.002).

**Hours Worked**

When we compared the average number of hours worked per week by Year 11 current workers it was evident that there was a significant drop pre-and post-intervention ($t (438) = 3.51$, p < 0.001). In the pre-intervention period the average hours worked per week was 7.87 and this dropped to 6.59 in the post-intervention sample.

While this may reflect the impact of the intervention programme we can only fully understand this by looking at each intervention condition. Table A8 summarises the average hours worked by current workers for each intervention condition across the time period of the study. In all cases the average number of hours has declined.

**Table A8: Mean Hours Worked: Year 11**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Survey year</th>
<th>Means hours worked per week</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>2004</td>
<td>7.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>6.94</td>
<td>$t(120) = 1.63$, p &gt; 0.05</td>
</tr>
<tr>
<td>II</td>
<td>2004</td>
<td>8.32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>6.37</td>
<td>$t(147.8) = 2.66$, p &lt; 0.01</td>
</tr>
<tr>
<td>III</td>
<td>2004</td>
<td>7.28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>6.57</td>
<td>$t(166) = 1.26$, p&gt; 0.05</td>
</tr>
</tbody>
</table>

However, this reduction is only significant in one condition, Condition II. If the intervention programme was a contributory factor to the reduction in hours worked we might have expected to have a significant drop for Condition I and II, while anticipating no significant change in Condition III, the non-intervention condition.
The results do not support this hypothesis suggesting that the reduction in hours across the period of the study may be due to other factors outwith the intervention programme. To explore this data in more detail and consider potential interactions between variables an ANOVA was carried for year of study (2) x intervention condition (3) x job type (4). The findings show that there was a significant effect for the year of study, i.e. pre- and post-intervention periods ($F(1,417) = 7.99$, $p < 0.01$) and job type ($F(3, 417) = 9.52$, $p < 0.001$). In the latter case post hoc tests show that those working in the delivery sector work fewer hours per week compared to the other job types.

We found no evidence that the reduction in hours could be attributed to the intervention condition ($F(2, 417) = 0.39$, $p>0.05$), nor did we find any indication of significant interactions between the variables. This pattern of findings is similar to the Year 10 data and it is likely that the reduction in hours is attributable to factors other than the intervention programme.

On the face of it this might be perceived as a negative finding, however, the intervention programme did not set out with the explicit aim of reducing the number of hours students worked. On a more positive note the reduction of hours worked has resulted in a significant reduction in the number of students who are working ‘excessive’ hours ($\chi^2 = 14.30$, $df = 2$, $p < 0.01$) (Table A9).

**Table A9: Hours Worked Per Week: Year 11 (%)**

<table>
<thead>
<tr>
<th>Year of survey</th>
<th>Less than 5 hours per week %</th>
<th>5.1 &lt; 10 hours per week %</th>
<th>More than 10 hours per week %</th>
<th>Total no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>27</td>
<td>57</td>
<td>16</td>
<td>233</td>
</tr>
<tr>
<td>2006</td>
<td>44</td>
<td>42</td>
<td>14</td>
<td>209</td>
</tr>
</tbody>
</table>
Permits

As we have already noted a key aim of the study is to evaluate whether an intervention programme can influence the number of permits that are held by those currently working. When we consider this issue in the context of the Year 11 data set we must remember that the intervention programme ended around 4 months previously. When considering the number of permits reported by Year 10 students it was evident that there was a significant change over the period of the study. A key question is to what extent is this mirrored in the Year 11 data.

Figure A16 shows the percentage of Year 11 current workers self-reporting a work permit for each survey period (27% vs. 44%). It is evident that there has been an increase in the number of permits for this Year group and the change from 2004 to 2006 is significant ($\chi^2 = 12.01$, df = 2, p < 0.01).

**Figure A16: Current Workers with Permits: Year 11 (%)**

Figures A17 and A18 (pages 37 & 38) show the percentage of Year 11 students, across the intervention conditions, with permits in 2004 and 2006. In 2004 within each of the intervention conditions approximately a quarter of workers had a work permit (Condition I: 26%; Condition II: 28%; Condition III: 27%). A comparison of the number of permits held in the different intervention conditions found that there was no significant between group variation ($\chi^2 = 0.074$, df = 2, p > 0.05).

This picture changes in 2006 the post-intervention period. As Figure A18 shows within each of the intervention conditions the number of permits has increased (Condition I: 44%; Condition II: 60%; Condition III: 32%). Comparing the intervention conditions with respect to number of permits held, we find that there is a significant between group
variation ($\chi^2 = 10.80, df = 2, p < 0.01$). Closer inspection shows that this significant outcome is due to Condition II having a higher than expected number of permits, while Condition III has a higher number of non-permitted workers. This pattern is in line with the hypothesised impact of the intervention programme. Further analysis shows that permit levels in Condition I have not changed significantly, that is, there is no evidence that the permit level in Condition I has been influenced by the intervention strategy.

**Figure A17: Self Reported Permit Levels by Condition in 2004 (%)**
As we have already noted the intervention strategy varied between Condition I and II. In the former case catering employers were visited and information on employment legislation was left with them. It is possible that there may be some evidence of this strategy in the Year 11 data set.

To gain some insight to the underlying changes in permit levels across the different job types we will consider the distribution of self reported permits in 2004 and 2006. Focusing on all current workers, Figure A19 and A20 (page 39) show the percentage of self-reported permits within each job sector.
Figure A19: Self Report Permit Levels by Job Type in 2004 (%)

Figure A20: Self Report Permit Levels by Job Type in 2006 (%)
A comparison of the number of students with permits within each job sector pre- and post-intervention failed to find any significant variation ($\chi^2 = 5.00$, df = 3, $p > 0.05$) suggesting that the strategy of targeting catering employers had not resulted in more permits being reported in this sector.

Since this analysis is based on all current workers we might anticipate that any effects are more likely to be found at the level of the individual interventions. As we noted within Year 10 the sample sizes start to introduce some constraints on the extent to which we can analyse this data.

In the case of Condition I Figure A21 and A22 (page 41) show the percentage of current workers with permits within each job sector. As we already noted Delivery work is rare in this area due to the rural nature of the locality and in 2004 and 2006 none of the Year 11 students were employed in this sector. As we can see from a comparison of the 2004 and 2006 profiles the percentage of self reported permits has increased across all of the job sectors; however, the change in Hotel and Catering is small (2004: 37% ; 2006: 43%). The largest change is to be found in the Retail sector. This would lead us to conclude that within the Year 11 data set the strategy of targeting catering employers has not produced a major change in the number of employees with permits in this sector.

**Figure A21: Condition I: Permits and Job Type 2004 (%)**
If we now consider the pattern of permits across the different job categories for Condition II (Figures A23 and A24, page 42) we can see that there is an increase in the percentage of self-reported permits across all sectors. This is not surprising given our earlier finding of a significant increase in the total number of permits held by employees in this intervention condition.

In this case the intervention strategy did not target a specific job sector therefore the fact that we find a general increase in permits across all sectors is in line with expectations. It is worth noting the high percentage of Retail and Delivery sector employees who report having a work permit. Previous research has shown that permit levels are higher in the Delivery sector, possibly linked to the National Federation of Retail Newsagents’ policy of highlighting this issue for their members.

The pattern of results for Conditions I and II supports the view that the intervention strategy has had some impact on permit levels. However, in the context of Year 11 students there is no support for the view that the targeting of employers in Condition I has had any major impact on permit levels within this sector.
Figure A23: Condition II: Permits and Job Type 2004 (%)

Figure A24: Condition II: Permits and Job Type 2006 (%)
The impact of the intervention programme

Up to this point we have looked at the findings for the Year 10 and Year 11 students separately. For both year groups the survey of part-time employment was carried out after the intervention strategy, i.e. post-intervention. However the distance between the intervention and the survey varies for each year group. We should consider in a little more detail the variation of the intervention over time.

Previous research has shown that older school students may differ from their younger peers by working in different job sectors and by committing more time to their part-time jobs (Hobbs and McKechnie, 1997). Our interest does not lie in exploring the extent of these variations. Rather our focus is on the permit levels for each year group.

As we have seen, the findings from this study show that permit levels in Year 10 and 11 have increased from the pre- to the post-intervention period. We now need to consider whether the level of increase is maintained over time.

By focusing our attention on the 2006 survey findings we can compare the permit levels recorded for Year 10 and Year 11. Figure A25 shows that over the time period of the two surveys there has been a drop in the total number of permits reported, from 52% down to 44%. While this reduction looks large it is not significant ($\chi^2 = 2.02$, df = 1, $p > 0.05$).

Figure A25: Year 10 and Year 11 Self Reported Permits in the Post-intervention Period (%)
This trend might start to raise some questions about the longer term impact of the intervention strategy. Over time we might find the permit levels returning to their pre-intervention levels. However, is this pattern similar in all of the intervention conditions?

The picture in Condition I (Figure A26) is similar in that we can see a reduction in permit levels from 53% to 44% in Year 10 and 11 respectively. This drop in permit levels is not significant (\(\chi^2 = 1.99, \text{df} = 1, p > 0.05\)). For Condition II (Figure A27, page 45) permit levels remain constant over the time period, 59% and 60% for Year 10 and 11, while Intervention III (Figure A28) shows a decline in permit levels from 39% to 32%. The latter reduction was not significant (\(\chi^2 = 0.77, \text{df} = 1, p > 0.05\)).

What does this pattern of results imply? As we have already suggested the earlier findings indicate that the intervention strategies have had an impact on permit levels. However we need to remember that school students move in and out of employment. Therefore one explanation for the decline in permit levels is that students who had work permits have left their jobs while those moving into employment do not register for a work permit. This would explain the patterns that we have found in Figures A26, A27 and A28 (pages 44 & 45).

Condition II is the only case where we find no reduction in permit levels. It is possible that the level of movement in and out of work is less pronounced in this case and permit levels are therefore maintained. Alternatively it may be that the intervention strategy in this school has been enhanced by some particular action of the school.

**Figure A26: Condition I: Post-intervention Permit Levels, Year 10 and 11 (%)**
Figure A27: Condition II: Post-intervention Permit Levels, Year 10 and 11 (%)

Figure A28: Condition III: Post-intervention Permit Levels, Year 10 and 11 (%)
Summary of Section A

Focusing on the Year 10 pre- and post-intervention results the main findings are:

- The level of part-time employment had declined between the survey periods. However, this decline may not be as a result of the interventions.
- In one intervention condition, Condition II, there was evidence of a significant change in the types of jobs that students had. This change was not attributed to the intervention programme.
- Comparing pre- and post-intervention data showed that the average number of hours worked were lower in the post-intervention period. Analysis of the data indicated that the decline in hours worked was not linked to the intervention and was most likely linked to changes in job type.
- Between the pre- and post-intervention period there was a significant increase in the number of work permits. The results support the view that the intervention programme did have an impact on work permit levels.
- There was limited support for the idea that the intervention strategy may have improved permit levels within a specific sector (hotel and catering).

Focusing on the Year 11 pre- and post-intervention data analysis the main findings are:

- As with Year 10, the data shows that there was an overall decline in the number of employed students. In this case the trend was significant for the two proactive interventions, Condition I and II. However, we should be cautious in attributing this change to the intervention programme.
- Comparing job type in the pre- and post- intervention periods we found that in Condition II there was evidence of a significant change in the types of jobs that students had. This change was not explained by the intervention activities.
- Comparing pre- and post-intervention data showed that the average number of hours worked were lower in the post-intervention period. Analysis of the data indicated that the decline in hours worked was not linked to the intervention programme. As was the case in Year 10 this change may be associated with changes in the types of jobs that students undertake.
- There was a significant increase in the number of work permits in the post-intervention period. Closer inspection shows that there was some support for the argument that the interventions had influenced permit levels, especially in the case of Condition II.
- There was no evidence that the strategy of targeting a specific employment sector (hotel and catering) had any impact on permit levels in this sector.
- Comparing Year 10 and 11 data sets shows that there was a noticeable, though not significant, decline in the number of permits. This trend suggests that the impact of the intervention programme may decline over time.
Section B: Cumbria County Council Permit Database

This section will focus on the data provided by Cumbria County Council on the number of permits issued within their area. CCC employs an in-house database system which contains the education records for each child. This database also includes information on work permits. The database does not include the entertainment licence information as this is recorded separately.

Permits across Cumbria

We start by considering the total number of permits that have been issued by CCC. The current database was introduced in 2003 and the previous data is considered less reliable. We have therefore focused on three time periods, 2003-04, the academic year when the new database started, 2004-05 the year that the original base level survey was carried out and 2005-06 the year that the intervention programme was instigated. At the time of writing the permit information for 2006-07 is unavailable since the academic year is not finished.

Figure B1 shows the total number of permits issued by Cumbria County Council over the three academic years, irrespective of students’ school year. The figures indicate the number of new permits issued within each of these time periods. As we can see the number of new permits issued each year has declined, though comparable levels of permits were issued in 2004-05 and 2005-06.

Figure B1: Total Number of Permits Issued in 2003-2006
permis across districts

Cumbria County comprises six districts. Employing the CCC database, we were able to look at the number of permits issued to students in each school across the districts. We averaged these figures across all the schools within a district to provide a picture of the extent of variation in permit activity. Based on the permits issued in academic year 2005-06 Table B1 show the average number of permits within each of these districts. These figures represent permits issued to students from Years 8 – 11.

In a small number of cases, a student recorded on the database as having a permit was attending a school outside of Cumbria. We have excluded these cases from the present data.

Table B1: Permit Levels across Districts 2005-2006

<table>
<thead>
<tr>
<th>District</th>
<th>Average No. of Permits per School</th>
<th>No. of Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlisle *</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>South Lakeland*</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>Barrow-in-Furness*</td>
<td>23</td>
<td>8</td>
</tr>
<tr>
<td>Copeland*</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Allerdale</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>Eden</td>
<td>17</td>
<td>5</td>
</tr>
</tbody>
</table>

*Districts containing schools included in the present study.

While there is some variation across the districts, the differential between the districts is limited. In this regard, the four districts included in the present study may be regarded as typical of the county including, as they do, both the districts with the highest average of permits per school, Barrow-in-Furness and South Lakeland, and the district with the lowest, Copeland.

Permits and the Schools in the Study

Figure B2 (page 48) shows the number of permits issued to students, Years 8 to 11, across all of the intervention schools for the three academic years since 2003-04. There is some evidence of an increase in total permits in 2005-06, the year of the intervention strategy. This general pattern contrasts with the trend for all permits in CCC that we saw in Figure B1, where global permit levels show a reduction over the same time period.
While this trend is interesting we need to be able to consider the extent to which there are variations in permit levels that reflect the different intervention strategies.

**Cumbria’s Permit Information and the Intervention Conditions**

In Table B2 we consider the variation in permits for each of the intervention Conditions across the three academic years. The table shows that for Condition I there is evidence of an increase in the number of permits recorded in 2005-06, the target year of the intervention programme. In contrast the level of permits recorded in Condition II is relatively static over the time period, while Condition III shows a decline in permit levels. This variation was found to be significant ($\chi^2 = 22.49$, df = 4, p< 0.001).

**Table B2: Permit Levels in the Intervention Conditions**

<table>
<thead>
<tr>
<th></th>
<th>03/04</th>
<th>04/05</th>
<th>05/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition I</td>
<td>30</td>
<td>17</td>
<td>52</td>
</tr>
<tr>
<td>Condition II</td>
<td>35</td>
<td>39</td>
<td>35</td>
</tr>
<tr>
<td>Condition III</td>
<td>60</td>
<td>70</td>
<td>48</td>
</tr>
</tbody>
</table>

However, as we noted earlier, the intervention strategy targeted Year 10 students but the above table aggregates all students across Year 8 -11. To consider the potential impact of the intervention programme we have broken down permits by school year group for each academic year. Table B3 (page 50) summarises this information.
We analysed this information for each year group across the three academic years to investigate whether there was any significant variation in the number of permits held by students. For example, in Year 8 there was no significant difference in the number of permits held across the time period from 2003 to 2006 ($\chi^2 = 7.13$, df = 4, $p > 0.05$). This non-significant pattern was repeated for Year 11, there was no evidence that permit levels for this Year group varied across the time period ($\chi^2 = 8.36$, df = 4, $p> 0.05$).

In contrast for Year 9 the variation in permits across the three academic years approached significant levels ($\chi^2 = 9.35$, df = 4, $p = 0.053$). However, closer inspection shows that this is due to the fact that permit levels in 2004-05 were higher than expected in two of the intervention conditions, II and III. This cannot be attributed to the intervention programme since it had not been in place during this period. During the period of the intervention, 2005-06, permit levels declined for this year group.

The results for Year 10 support the argument that the intervention programme had an impact on permit levels. Comparing the number of permits shows that there was a significant increase in permits for 2005-06 and that this was due to the two intervention conditions, I and II, having a greater increase in number of permits than Intervention III ($\chi^2 = 12.52$, df = 4, $p< 0.02$).

The latter finding supports the argument:
- that the intervention programme had an impact on permit levels for the target group, Year 10
- that this effect was not mirrored in any of the other year groups
- that the effect was due to an increase in permits in the two pro-active intervention conditions.
Given the nature of this data we are not able to examine the potential differential impact of the different strategies underpinning Condition I and II. However, the findings mirror the pattern of results that emerged from the survey data in Section A.

**Summary of Section B**

In this section we focused on the work permit data sets provided by Cumbria County Council.

- There was evidence to suggest that the number of permits issued across all of the schools in this study had increased. Closer inspection of the data shows that this pattern varied across the intervention conditions. In Condition III, the control condition, there was a significant decline in permit levels in the post-intervention period.

- Comparison of permit levels within school each school supports the view that the pro-active intervention conditions were significantly associated with increased permit levels.

- The findings from the CCC data sets support the patterns identified when using the survey findings. The intervention programme had an impact on work permit levels.
Section C: Compatibility of the Data Sources

We now turn our attention to the question of the comparability between the two data sets that have underpinned Sections A and B. The data sets differ in that one, Section A, reported the findings from self-report survey data, while Section B has drawn upon Cumbria County Council’s work permit database.

We would anticipate some degree of discrepancy given the particular strengths and weaknesses of both data sets. The unique nature of this project does provide the opportunity to examine the type of discrepancies which might emerge.

We shall focus on three aspects when comparing the data sets: (i) permit status, (ii) the school year in which the permit was applied for, and (iii) the type of job that the student gained the permit for and the job reported in the survey.

Permit Status

In the Year 10 and 11 survey students are asked to indicate whether they have a work permit. In this section we focus on those students we classify as Current Workers and compare their survey responses to the CCC work permit database. As we can see from Figure C1 in both Year 10 and 11 there is a high degree of consistency between the two databases.

Figure C1: Consistency between Databases on Permits: Year 10 and 11 (%)

In Year 10, 74% of responses were consistent across the databases while the comparable figure for Year 11 was 73%. This leaves a number of responses where the survey data and the council data sets are not in agreement. This lack of agreement took two forms.
First, there are those students who reported that they had a permit on the survey but were not recorded on the CCC data set. Second, there are those who did not report having a permit in the survey but were recorded as having a permit on the council data set. Both sources of disagreement are of interest.

In the case of students who self-reported having a permit on the survey but were not on the council’s data set, it is obviously possible that students, knowing the legal requirement to have a permit, might have pretended to have one when they did not. However, this is by no means the only explanation. We must also allow for uncertainty and confusion existing about the permit system. During data collecting, some students asked the researchers what a work permit was and then proceeded to say that they thought they had one but were not sure. In these cases the researcher instructed the students to indicate that they had a permit. Confusion may arise from a number of sources. Students may have assumed that their employer took care of this when they were employed or that some other document such as a contract that they signed was a work permit. Alternatively, some young workers could have started the procedures for applying for a work permit but then, for one reason or another, failed to complete the process.

The argument that discrepancies arise from misunderstanding rather than from an intention to mislead is strengthened by the existence of the second type of discrepancy, where a student, whose permit is on record in the council’s database, states that he or she does not have a permit. There seems little reason for a student with a work permit to seek to conceal the fact. Failure of memory or failure to grasp the nature of a work permit are much more likely explanations.

**Year of Permit Application**

In Section B we drew attention to the importance of considering when the students applied for their permits. Based on the timing of the intervention programme we hypothesised that this would peak in Year 10.

The council data set records when students apply for their work permit. We compared the extent of variation in the pattern which emerged depending on whether we used the council or the self-report survey permit information. In Year 10 there is no significant variation between the data sets in regard to when workers applied for their permits (Figure C2, page 52). This result is replicated for Year 11 (Figure C3, page 52). In both year groups the peak of permit application is Year 10. These findings are consistent across the two data sets.
Figure C2: Permit Application School Year: Council and Survey Data Year 10 (%)

Figure C3: Permit Application School Year: Council and Survey Data: Year 11 (%)

Work Permit and Job Type

A number of researchers have drawn attention to the degree of movement in the school student labour market (Hobbs and McKechnie, 1997). Strictly speaking, a student requires a new work permit, if he or she moves from one job to another, even if the type of work does not change. Data supplied to the researchers from the Cumbria County Council’s database suggest that it is relatively unusual for a student to have applied for more than one work permit. It should also be noted that the council has no procedures for following up students who have been awarded a work permit to check whether they have changed jobs or indeed to check whether they are still employed.

Since both of the data sets that we draw upon in this project have a job classification variable, it is possible to determine whether a working student still has the same type of job for which the permit was issued. We decided to make the comparison for four broad categories of employment, Delivery, Retail, Hotel & Catering, and Other. Note that in posing the question “Is the student still working in the field for which the permit was issued?” we are not asking the relatively strict question “Is the work permit still valid?” We have made a broad assumption, that where a student moves to another, but similar, job, the lack of a new work permit is a comparatively trivial matter. However, moving to a different type of job, without a new permit, is potentially more serious. (For example, no check has been made to the job or the conditions are legal.)

We focus our attention here on those students who are current workers and who appear on both data sets as work permit holders. This is a subsection of the overall database and we need to be conscious of the fact that we are working with a smaller sample group.

For Year 10 students, it is evident that the level of consistency in job type varies across the different sectors (Table C1, page 56). There is little variation between the two databases in Delivery and Hotel and Catering sectors. However, in Retail and in Other there is more indication of a mismatch between the survey reported job and the job that the permit was issued for. In Year 11 there is less variability between the job types reported in the two databases (Table C2, page 56).
Table C1: Level of Agreement between Permit and Current Job Type: Year 10 (%)

<table>
<thead>
<tr>
<th>Council Permit Job</th>
<th>Survey Job</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Delivery</td>
</tr>
<tr>
<td>Delivery</td>
<td>96%</td>
</tr>
<tr>
<td>Retail</td>
<td></td>
</tr>
<tr>
<td>Hotel &amp; Catering</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>25%</td>
</tr>
</tbody>
</table>

Table C2: Level of Agreement between Permit and Current Job Type: Year 11 (%)

<table>
<thead>
<tr>
<th>Council Permit Job</th>
<th>Survey Job</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Delivery</td>
</tr>
<tr>
<td>Delivery</td>
<td>83%</td>
</tr>
<tr>
<td>Retail</td>
<td></td>
</tr>
<tr>
<td>Hotel &amp; Catering</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>20%</td>
</tr>
</tbody>
</table>

As we noted earlier, we are working with a reduced data set and this should make us cautious about generalizing our findings. Although the majority of students are working in the job category for which the work permit was issued, there appears to be a minority of workers who have made substantial job changes. This dynamic aspect of employment represents a challenge for the work permit system, since at present these changes in employment go unrecorded and unmonitored.

Summary of Section C

This section focuses upon a comparison of the two data sets used in this study. The main findings are:

- A comparison of the survey response and the CCC data sets showed that there was a high degree of consistency in the work permit information from the two data sources.
- However, some variations were found between the two data sets. These variations indicate that work permit status is not a salient feature of employment for all students.
- Comparing the data sets highlights the fact that there are discrepancies between the job type that a permit was issued for and the job being done at the time of the survey. The permit system has issues to face in dealing with the dynamic aspect of moving between jobs.
DISCUSSION

At present debates about child employment legislation have reached an impasse. There is a recognition that the current policy and practice in this area is not working. This position is appreciated by researchers and policy makers. However, there appears to be no desire from government to tackle this issue. This leaves us in the situation where the existing legislation must continue as the primary means of protecting young employees.

It is against this background that the present project was instigated. The aim of the study was to evaluate an intervention programme which had as its primary goal increasing levels of compliance with the existing legislation. In practical terms this translates into influencing the level of work permits amongst child employees.

Lack of compliance with the work permit system has been attributed to a number of factors including: lack of resources, lack of awareness and the largely reactive strategies adopted by most local authorities in dealing with this issue. The intervention strategies used in this project tackled each of these factors with the intention of assessing whether the present system could be made to work.

Permit Levels

A central tenet of the existing legislation is that it seeks to protect young employees in their early work experiences. In order to achieve this we need to know who is employed and the circumstances of their employment. Local authority byelaws seek to achieve this goal through issuing work permits. This permit effectively makes the young employee ‘visible’ allowing others to assess the working conditions and hours that the young person is committing to their job.

In the results section we show that for Year 10 students work permits increased from 15% to 52% of current workers in the post-intervention time period. In the non-intervention control, Condition III, there was some increase in permits (18% vs. 39%). However, the most significant variations were found in the two proactive interventions. In intervention Condition I permits levels in the pre-intervention period were 7%, while this rose to 57% in the post-intervention period. For intervention Condition II, the figures were 27% and 59%, respectively.

This suggests that the intervention strategies had an impact on the self-reported work permit levels. However, while permit levels significantly increased in both intervention conditions, it is worth noting that there are still over 40% of current workers in both conditions who do not have work permits.

In Condition I, we targeted employers in the hotel and catering sector, which is a major employer of young people. It is in this intervention that the most striking rise in percentage of current workers who had work permits occurred. This might be due to the fact that local employers received letters and visits to their premises. However, we need to be cautious, since sample size issues constrained the analysis.
This study had two stages of intervention. Each stage was essentially a one off event targeted at Year 10 students. A common problem with such approaches is that the impact they have, if any, is short term. To allow us to consider this issue we returned to the same schools to repeat the survey of students as they entered Year 11. Our findings raise a number of issues.

In general the Year 11 data shows a similar pattern to the Year 10 cohort when comparing the 2004 base data with the post-intervention 2006 survey findings. For example, the total number of permits has increased (2004: 27% vs. 2006: 44%) and permit levels in the proactive intervention schools reflect this. There is evidence that the variation in permit levels is significant. For intervention Condition I, permit levels in 2004 indicate that 26% of current workers have the necessary permits and this rises to 44% in the post-intervention survey. For intervention Condition II the respective figures are 28% and 60%, while non-intervention Condition III shows the smallest change, 27% and 32%.

However, when we compare post-intervention permit levels amongst Year 10 and Year 11 students there is some indication of a decline in the overall number of permits, a drop from 52% to 44%. The extent of the drop in permit levels is mainly due to the decline amongst current workers in intervention Condition I. The analysis shows that these reductions are not significant but the downward trend raises questions about the impact of the intervention activities over time.

A key issue is that school students move in and out of employment which means that any intervention strategy needs to accommodate this dynamic. The most obvious approach is to repeat the intervention activities at regular intervals to ensure that each new wave of employees and potential employees receive the information. Such an approach would have implications for resources. This resource issue could be tackled by adopting alternative ways of delivering the intervention activities. For example, we could embed the activities into the school curriculum through existing PSE classes. In addition, rather than sending letters to parents individually, the material could be included in the normal mail that flows between schools and parents.

It may be that supporting intervention activities over a period of a few years would lead to a change in attitudes and standard practices amongst employers such that it would be possible to scale down the resource commitment over time. However, there is no denying that the resources required for such a strategy would be greater than authorities are currently committing to this area.

The study provided the unique opportunity to access Cumbria County Council’s own database on work permits. Since the CCC database shows that there was a slight decline in applications for work permits between 2004 and 2006, the rise in the number of workers in the intervention school who had permits becomes even more striking.
More importantly by using the CCC data we are able to show that, across Years 8 to 11, it was only amongst the Year 10 group, which was the target of the interventions, that we found that permit levels were higher during the period of the intervention programme.

**Indirect effects of the Intervention programme**

While our primary aim was to influence the number of permits held by current workers, it is possible that the intervention activities had other, indirect, effects. For example, those in employment may have reduced the number of hours they worked or some students may have decided not to work. Drawing on the survey data we are able to consider these possible outcomes.

Our analysis of the work status of school students in these two survey periods, 2004 and 2006, shows that there has been a significant drop in the number of current workers. For Year 10 the percentage of current workers drops from 44% to 32%, while the comparable figures for Year 11 are 42% and 32%.

Is this change linked to the intervention activities? If the intervention strategies are at the heart of this decline we would expect the decline to be most marked in the proactive intervention condition, that is Conditions I and II. Amongst the Year 10 students the results show that the reduction in current workers is most marked in intervention Condition II, but not intervention Condition I or III. In the case of Year 11 reduction is most marked in intervention Conditions I and II, the proactive conditions.

However, we would advise some caution in interpreting these results as showing that the interventions led to young people being less inclined to seek employment. As with any study that is taking place in the ‘real world’, we face the problem of not being able to control all of the background factors that may influence the variables we are interested in. It is possible that the reduction in current workers is linked to changes in the local labour markets.

As a region Cumbria has witnessed a decline in manufacturing sector jobs and the growth of the service sector, in particular tourism. Balakrishnan (2007) reports that across Cumbria the number of migrant workers now forms 25% of the tourism workforce.

Our studies have shown that many school students work in the service sector (McKechnie, Anderson and Hobbs, 2005). It could be argued that the growth in the migrant labour force has reduced the reliance of local employers on school students to supplement their staff pool. Employers are now in the position where their staff demands can be met by this new influx of workers. This might explain the changes that we see in our study. Condition I was carried out in schools which are in major tourist areas which are often attractive centres for migrant workers.

There is some support for this argument in our Year 10 data for School and Family based intervention, Condition II. In this case we found a significant redistribution of student
employees across work sectors. In 2006 there was reduction in the percentage of current workers in hotel and catering, while the “Other” job category percentage increased.

The comparisons of the 2004 and 2006 survey material shows that, just as fewer students are employed, for Year 10 and 11 the average number of hours worked per week has declined for both year groups. We could find no evidence that this reduction was linked to the intervention activities.

One explanation is that the changing labour market structures have reduced the demand for the number of hours that school students are being asked to work by their employers. An alternative explanation may be that the number of current workers in sectors associated with lower working hours (e.g. delivery) has increased as an overall percentage of all workers, leading to a suppression of the average number of hours worked.

An indirect consequence of this change is that across the two survey periods a smaller percentage of students are working what might be considered ‘excessive’ hours. Research has shown that for this age group working for more than 10 hours per week is associated with poorer academic attainment (McKechnie and Hobbs, 2001). Amongst Year 10 students approximately 1:5 were working beyond this watershed in 2004. This has declined to 1:10 in 2006. The comparable figures for Year 11 show a significant increase in the numbers working less than five hours per week, while those working more than 10 hours show a small reduction from 16% of current workers in 2004 to 14% in 2006.

Consistency of the Data

In this study we had the unique opportunity to consider the consistency of our findings across two different data sets, the survey data and Cumbria County Councils database on work permits. By designing the study with a pre- and post-intervention survey we also have the opportunity to consider the variability between our two cohorts of school students.

The comparison of the survey findings from 2004 and 2006 provides grounds for the view that the two cohorts are comparable. In both surveys the majority of school students were, or had, experience of paid part-time employment. In both cohorts we can also show that the range of jobs that students work in is comparable.

When we compared the survey findings with CCCs data we found both consistency and variation. When we considered the year in which students made their permit applications we found a consistent picture emerged across both the survey and CCC databases. However, there was some variation in self report permit levels from the survey data and the CCC permit data. In a minority of cases we found that the self report and the CCC permit data did not match. This situation arose either because students self reported having a permit but they were not on the CCC database and in other cases they were on the CCC database as having a permit but self reported that they did not have a permit.
We would argue that, although it is possible that some students might wish to claim they had a work permit when they did not, the more likely explanation for both types of discrepancy lies in a lack of clarity amongst students as to the nature and function of permits. This represents a challenge to those who are seeking to make the permit system effective.

Another challenge for the permit system emerges when we consider job type. Each work permit is given to a student, based upon a specific application detailing the job they are going to be doing. In Year 10 and 11 it is evident that currently employed students who have work permits are not working in jobs consistent with the permit issued. As we have noted elsewhere young employees move between jobs and this dynamic aspect creates challenges for the present permit system.

Despite the existence of some variations in the information available from the two data sources, we should emphasise that the consistency between the two data sets is greater than any variations. Where variation does exist it is possible that it arises out of the difficulty of matching two different sources of information that have been designed to meet different goals.

Issues

In this project our primary concern was to influence compliance within the framework of the existing child employment legislation. We have shown that this can be achieved through the intervention activities. The number of work permits increased between the pre- and post-intervention periods and we are able to link this to the proactive activities contained in intervention conditions I and II. The change in permit levels manifested itself in the Year 10 and 11 post-intervention surveys suggesting that the intervention had a short and medium term effect.

However, there is a suggestion that in the longer term the intervention activity will need to be sustained if we are not to witness a reduction in permit levels. This would imply the need for adequate resources to be maintained to sustain the proactive activity over time.

This would have major implications for Cumbria County Council and indeed any authority wishing to follow this approach. The majority of authorities have what might be classified as a largely reactive system, responding to requests for work permits. Moving to a proactive system would have implications for staffing levels and the additional costs of sustaining activities comparable to the intervention used in this project.

Even though we were able to have a positive impact on permit levels amongst the current workers we did not achieve a 100% success rate in our two intervention schools. This suggests that other strategies are needed beyond the ones we used to impact on this group of employees and employers. This in turn would have cost implications.
While intervention conditions I and II shared a number of common activities, we did target a specific group of employers in Condition I. There was some evidence that this had an impact on our outcomes. However, it could be argued that working only through the schools and through parents, as was the case in Condition II, is equally as effective. That is not to suggest that employers are not important in influencing permit levels. Based on this study, the delivery sector appears to be one sector which has engaged with work permit issues. This is not consistent across all employers in this sector but it might be worth exploring why this sector has higher permit levels and whether any lessons could be learned for other employment sectors.

Would it be practical to apply the intervention activities that we used in this project to all schools in Cumbria? In designing this project we devised activities that were low cost and that could in theory be generalised across the region. However, the interventions were delivered by staff who are extremely knowledgeable about child employment legislation and related issues, namely the CEEOs. In this region there are two CEEOs and it is unlikely that they could sustain the activities outlined in this project across all of the schools in the region, particularly since these would have to be repeated at regular intervals.

One possibility that we referred to earlier is the idea of embedding the intervention activities within schools. While this may help to reduce costs, once the teaching materials had been prepared, there are some potential issues with such a plan. As we have already indicated, staff would need a good working knowledge of the existing legislation and would need to be offered training in this area. However, an additional complexity is that students may respond to the intervention activities differently if they were delivered by their teachers. Research in Scotland has shown that many teachers have a negative attitude towards part-time work viewing it as an activity that competes with school (Howieson, McKechnie and Semple, 2006). School students may suspect the motivation of their school teachers in raising these issues and this in turn may impact on the effectiveness of the strategies.

What does the study tell us about current resource levels for child employment? Central government has argued that local authorities are currently funded to carry out their duties in this area. It is unclear to us what assumptions lie behind the current funding model. It has been shown that government assumptions prior to the 1990s were based upon the understanding that ‘few’ children worked. This premise has been undermined by the post 1990 research evidence. It is now acknowledged that having a part-time job is a majority experience. Has funding to local authorities been increased to accommodate this new evidence? Similarly local authorities appear to have put in place systems that are largely reactive (McKechnie, Hobbs, Anderson, Howieson and Semple, 2006). As this study shows there is a need for proactive systems if compliance with the current system is to be achieved. Funding would need to be made available to support such a change in strategy.

Would the additional costs be merited? The answer to this question is dependent on a number of other factors. If we are to assume that the existing legislation will remain in place and if we are to believe the rhetoric of ‘Every Child Matters’
then clearly the cost would be merited. The aim of the legislation is to protect child employees and it is difficult to conceive of the argument that would be put in place to suggest that this is one area where every child does not matter.

However, the cost may be questioned if we take a different stance. Is it worth putting resources into a system that few people have confidence in and that some would argue is not compatible with the demands of contemporary society? It could be argued that it would be better to consider resourcing a fundamental overhaul of the child employment legislation encouraging a debate about the nature of childhood, school and work and to develop policy and practice that has meaning in contemporary society.

Both approaches have cost implications. In that respect the present study has shown that moving this issue forward is not cost neutral. The only ‘cost neutral’ option is if we ignore all of the existing evidence and turn a blind eye to the fact that current child employment policy and practice is ineffective.

Moving Forward

The evidence from this study and its two predecessors (Cumbria’s working youngsters: A 2004 update and Cumbria’s working youngsters: Exploring their experiences) provide a level of insight into the issue of child employment that has been lacking in Britain. Our findings demonstrate that child employment is embedded in society and remains relatively consistent over time (see Cumbria’s working youngsters: A 2004 update). We are also able to demonstrate that the levels and forms of child employment reflect the nature of the local economies.

It is also apparent that the existing legislation is not achieving its aims when it comes to protecting young employees. The majority are working without work permits and are therefore not being monitored to ensure that their working environments are safe and that their part-time jobs are not interfering with other priorities such as education. The health and safety issue is one that needs to be taken seriously not least because existing findings may under-estimate the accident levels that this group of employee experience (see Cumbria’s working youngsters: Exploring their experiences).

The findings from the intervention programme shows us that compliance with the existing legislation, as measured by work permits, can be influenced by applying strategies aimed at raising the profile of the legislation. However, the fact that the intervention strategies had a limited success indicate that there is no “quick fix” for the current problems surrounding child employment legislation.

We would therefore propose that the way to move this issue forward is to consider both short and long term strategies. In the short term the current study, along with its predecessors, indicates that if we are to increase compliance with the existing legislation then local authorities should consider the following:
(i) Adopt a more proactive approach. The findings from the intervention programme show that levels of compliance with the legislation can be increased. This has the added value of raising awareness about child employment issues amongst key stakeholders (parents, employers and young people).

(ii) The cost implications of adopting a proactive approach will need to be considered. The present findings suggest that a one off intervention programme may have limited impact and that there is a need to sustain a proactive approach over time. To achieve this local authorities could consider a number of ways in which to proceed while managing the cost. For example, the material used in this intervention could be packaged and introduced into aspects of the school curriculum (PSE classes). This would involve the production of material and the relevant support packs for teachers but once prepared can be re-used and modified over time. At the same time rather than expecting CEEOs to be the sole local authority employees responsible for this a multi-agency approach could be developed. In the present study CEEOs and Environmental Health Officers worked in conjunction and this may provide a model for the future.

(iii) Acknowledge the need to target resources. As we have shown levels of child employment vary within a local authority area. In the case of Cumbria these variations reflect the different local economies. Given the cost issues it could be argued that targeting limited resources on areas where there are high levels of employment may in the short term have the greatest impact. It could also be argued that over time the general norms and attitudes may change or spill-over to other areas not directly targeted. The one caveat to this targeting strategy is that authorities would need some reliable information on existing employment patterns in their area.

While the above may provide a way forward for local authorities in the short-term we also need to acknowledge that there is a need for a long term strategy as well. As we saw in the present study the interventions increased permit levels. However, even where the interventions could be shown to have had an effect on work permit levels not all young employees had permits. We were also able to show that the present system has problems dealing with situations where young people have an existing permit but then change jobs. This dynamic aspect of employment places additional strains on the current system.

We also need to acknowledge the context in which present day debates about child employment are taking place. At present there are ongoing discussions about the relationship between work and education, with some suggesting that young people may benefit from their part-time jobs and that these gains should be acknowledged (see Tomlinson, 2004; Scottish Executive, 2002). In effect the current legislation is anachronistic and may not sit comfortably with contemporary society.

Against this background the long term aim should be for a comprehensive review of the present legislation. This will require discussion of the primary aims of the legislation and how these can be best achieved. The existing evidence clearly demonstrates the weaknesses of the current system. It is our view that while there may be some short term strategies that may help, in the long term the greater challenge is to re-consider the purpose of this legislation and whether we need to re-conceptualise these aims to make them fit for contemporary society.
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