



Final Report

# Careers Scotland Demonstrating Impact

1 May 2007

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**Private and Confidential**





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## **1 Introduction**

DTZ Consulting & Research was commissioned by Careers Scotland to provide consultancy support to help determine its impact. The purpose of the research is to enable Careers Scotland to demonstrate the contribution made by career planning to economic and social goals.

### **1.1 Study Aim**

The overall aim of the study is twofold: to investigate Careers Scotland's impact to date and to provide guidance on the future articulation of its impact. In order to achieve this DTZ has drawn upon our expertise in modelling economic impact and our knowledge of monitoring and evaluation to develop a methodology that has enabled us to demonstrate the impact of Careers Scotland, and to ensure that the organisation will be better able to demonstrate this impact in future through a more effective monitoring and evaluation framework.

It should be noted that the impact model presented shows the impact that it is possible to calculate from the evidence available at this time. The model is the first step on a journey and sets Careers Scotland on the right path to enable the organisation to develop its performance management tools and to assemble additional data to better equip it to demonstrate its impact in the future. This journey should be taken with Careers Scotland's partner organisations to allow shared outcomes to be developed.

### **1.2 Study Outcomes**

There are a number of outcomes from the study, as detailed below:

- Articulation of the impact and value of Careers Scotland services on individuals, communities, learning and training in Scotland and the wider economy.
- Guidance on how best to articulate the impact and value of career planning to stakeholders.
- Guidance on how best to articulate the impact and value of career planning to Careers Scotland management and staff.
- Identification of any gaps in management information and recommendations on how to address these gaps through revisions to the CRM System.
- Identification of performance measures that will clearly identify the impact of career planning in the future.
- Evaluation of the contribution and potential costs of longitudinal tracking to demonstrate impact.
- Recommendations on the current delivery model and its fitness for purpose in measuring impact.
- Recommendations on the internal evaluation of the Approach to Guidance to ensure impact can be measured effectively.

- Identification of the steps Careers Scotland needs to take in order to link career planning and GVA/GDP.

### **1.3 Report Structure**

The purpose of this Draft Final Report is to build upon the previous study outputs – the Inception Report, Interim Report and Update Paper to provide an overview of the research undertaken and a detailed assessment of the impact of Careers Scotland. The remainder of the report is set out as follows:

- Section 2 sets out the methodology used to calculate the impact of Careers Scotland and explains the “conceptual impact model” that is used as the framework for the research;
- Section 3 looks at the evidence relating to the outcomes from career guidance based on evidence from Careers Scotland, literature and existing external data sources before going on to calculate the impact related to these outcomes;
- Section 4 considers the implications for the Careers Scotland Performance Management system, identifying the current gaps in management information and recommending how to address these gaps and monitor performance in order for Careers Scotland to be able to demonstrate its impact more clearly in the future; and
- Section 5 concludes the report with a summary of the key findings and consideration on how best to articulate the impact and value of career planning to stakeholders and Careers Scotland staff, with guidance on the priorities for action moving forward.

## **2 Impact Methodology**

### **2.1 Introduction**

This section of the report sets out the background to the methodology we have developed in order to articulate the impact and value of Career Scotland services on individuals, communities, learning and training in Scotland and the wider economy. The background to the methodological design is set out and the “conceptual impact model” used as a framework for the calculation of impact is described. The section concludes with a description of the external data sources used in the impact assessment.

### **2.2 Background**

The National Institute for Careers Education and Counselling’s (NICEC) report *Career Planning and Career Guidance: Mapping the Research Base* (2003) explains that people with very different areas of expertise have undertaken evaluations of guidance. Some evaluation has been undertaken by guidance practitioners or expert ex-practitioners who start from the *a priori* assumption that career guidance is a good thing, whereas other work has been undertaken by research experts who start with the assumption that guidance is only a good thing if the null hypothesis that it is not can be rejected.

The purpose of evaluation (summative evaluation rather than formative evaluation) is to attempt to measure the outcomes and impacts of interventions. The Treasury *Green Book* defines evaluation as:

*“Retrospective analysis of a project, programme or policy to assess how successful or otherwise it has been, and what lessons can be learnt for the future.”*

In order to make a robust assessment of the success or otherwise of an intervention, evidence of the outcomes and impacts realised from the intervention is required. However,

*“Robust evidence about outcomes corresponding directly to the objectives of policy, especially educational motivation, participation and attainment, employment and wage effects, is scarce.”*

In general, as the NICEC report explains, studies in the UK have tended to demonstrate positive effects from guidance on participation in education and training, but any resulting effects on employment and wages, which are likely to emerge only in the longer term, have yet to be shown. This has the knock-on effect of limiting the work that can be undertaken to demonstrate the value-for-money of career guidance interventions as much of the evidence available relates to ‘soft’ outcomes rather than ‘hard’, quantifiable outcomes.

What this study has attempted to do is to take the plethora of studies evidencing causality between career guidance and positive outcomes – learning, economic and social - and develop a series of hypotheses or inferential statements. The statements represent a series of hypotheses developed from a consideration of what would appear to be a plausible outcome from the provision of career guidance and the subsequent instilling of career planning skills within individuals having received career guidance. The statements were developed in consultation with Careers Scotland.

These statements have then been tested by reference to existing research and longitudinal data sources to provide evidence or otherwise to support or disregard the statement, and to begin to provide some 'hard' outcomes that can be used to calculate the economic impact of career guidance.

The process involved a review of the evidence available on the outcomes from career guidance. The availability (or otherwise) of evidence was then mapped against the inferential statements under the headings of learning, economic and social outcomes. The next stage in the process was an assessment of the strength of the evidence in supporting the inferences that have been made.

In adopting a collaborative approach with Careers Scotland, with input from Professor Tony Watts, we have overcome some of the pitfalls identified above, and made innovative use of existing sources of information to demonstrate the impact of career planning using our expertise in modelling impact combined with our knowledge of monitoring and evaluation to develop a methodology that works in practice.

## **2.3 Conceptual Impact Model**

### **2.3.1 Background to Model**

It is helpful up front to set out clearly the distinction between career guidance and career planning. **Career guidance** is the main focus of what Careers Scotland is all about. Its aim is to help individuals to develop **career planning** skills, so that they are able to make well-informed and well-thought-through career decisions throughout their lives.

The central question to consider in this piece of work is ***does Career Guidance make a difference?*** Investigating the following questions can help to answer this:

- How can we measure whether or not individuals have career planning skills?
- How can this then be articulated in terms of placing a value on what Careers Scotland does?

The process of the measurement of outcomes and impact should wherever possible be part of the process of career guidance. Some measurement of individuals' outcomes, e.g. through follow-up, can add value to the career guidance process by providing continuity and potentially acting as a spur to action.

After reviewing the academic and policy literature, a conceptual model was developed detailing and linking all of the impact mechanisms flowing from inputs from Careers Scotland (finance and staff time), activities (career guidance delivery model and channel strategy), outputs (level of engagement in activities) and finally outcomes (real changes to client behaviour) contributing towards impacts, potentially growing Gross Value Added (GVA) or Gross Domestic Product (GDP), adding jobs to the economy, lifelong learning, improving productivity and raising incomes.

This model provides the framework to establish and measure the link between career planning and individuals, learning and training, communities and the wider economy, and allows us to investigate the modelling frameworks and data needed to evaluate each of the impact mechanisms.

### 2.3.2 Mapping of Careers Scotland Activities

In order for us to make a judgement on how to translate impacts at the individual level into **potential impacts** at the level of the wider society and economy it was critical to have a full understanding of the areas of activity in which Careers Scotland is involved. This is the first stage in determining how intervention by Careers Scotland can improve productivity through personal career planning.

Before looking in detail at the areas of activity, it is helpful to set out the role of career guidance. Careers Scotland provides:

- Career guidance services for all ages;
- Targeted support for those who need it most when making transitions; and
- An enterprising approach to career education to develop career planning skills as part of the curriculum.

Careers Scotland offers a range of career guidance products and services to meet its aim of improving productivity through personal career planning. These products and services are delivered to all ages. Table 2.1 sets out the activities of Careers Scotland and the products and services of most relevance to this assignment.

**Table 2.1 – Careers Scotland Products and Services by Target Group**

Target Group	Careers Scotland Products & Services
School pupils	<ul style="list-style-type: none"> <li>• <i>Basix</i> – Workshops for senior students to prepare them for the world of work – the World of Work and Skills for Life.</li> <li>• <i>Career Box</i> – Interactive resource targeted at 3-18 year olds through direct delivery and the web.</li> </ul>
Young people	<ul style="list-style-type: none"> <li>• <i>Activate</i> – Transitional support to young people identified as being at risk of failure in progressing into a positive destination on leaving school.</li> <li>• <i>Enhanced Resource Pilot</i> – Aims to reduce school leaver unemployment by 50% over the next 2 years.</li> <li>• <i>Worknet and Worknet ESF</i> (NEET Reduction) – A specific group of activities designed to prepare young people to enter the labour market delivered by specially trained staff</li> <li>• <i>Keyworker</i> – Working closely with clients to access the opportunities in the labour market, arranging interventions required by the client, and continue to support the client to help them sustain opportunities.</li> <li>• <i>Employability Options</i> – Activities carried out in order to increase the employability skills of clients.</li> </ul>



Target Group	Careers Scotland Products & Services
All ages	<ul style="list-style-type: none"> <li>• <i>Redundancy Advice Service</i> – A customised guidance service for redundant workers, which aims to enhance Careers Scotland’s PACE activities. It is primarily targeted at SMEs where employees are faced with redundancy.</li> <li>• <i>Career Planning activity</i> – The process of equipping clients with the skills to make well-informed and realistic decisions about their career choices, identify suitable opportunities and take appropriate action through the provision of career guidance support.</li> </ul>
Source: Careers Scotland Performance Management Guidelines 2006/07, Version 2.0, 24 July 2006	

### 2.3.3 Nature of Impacts

The OECD (2004) has a helpful explanation of the nature of the effects of career planning:

*“The potential effects of career planning can be thought of as operating at three stages: **immediate** attitudinal changes and increased knowledge; **intermediate** behavioural changes for example through improved search efficiency and persistence, or through entering a particular career path, course or job as a result of career guidance; and **longer-term** outcomes such as success and satisfaction.”*

This highlights that it is important to recognise that some of the outcomes and therefore the impacts of career planning will be **longer-term**. There are several points to take into account in this respect:

- If the goal of career guidance is to provide clients with career planning skills, this should help decision-making in the future as well as in the shorter-term;
- There can be a delay before action is taken (a “sleeper” effect);
- Once the action has been taken, the potential benefits from having taken this well-informed action can follow on, e.g. increased satisfaction/motivation leading to increased productivity;
- There can also be other wider benefits or unintentional effects arising from an intervention over the longer-term e.g. social and health benefits.

A distinction can be made between the direct (intended) benefits for individual clients (or particular groups of clients) and indirect benefits that are essentially by-products of achieving the first set of benefits. Furthermore, the assessment of impact has to consider **the counterfactual** – or what would be the case if Careers Scotland were not there.

It is important to recognise that the outcomes and impacts of career guidance are likely to vary according to the individual circumstances of the clients. Indeed, Mayston (2002) notes that:

*“Career guidance may succeed in achieving a **higher value added** to individuals who are initially **under informed** about the career opportunities that are available to them, and who have a **low initial income**, than it does to individuals who are already well-informed and have a high initial income.”*

However, it should be recognised that there can be a degree of judgemental stereotyping in this regard, and it is not necessarily those clients who are less educated that are under informed.

The outcomes of career planning can be framed in the terms of **sustainable employability**. An important goal and function of career planning skills is to enable individuals to sustain their “employability”. The impacts can also be framed in terms of supply-side and demand-side considerations. The growing focus of policy (especially following the recent Leitch Report) is on creating a **demand-led learning system**. Careers Scotland can help to create a **more ‘intelligent’ customer** who can adapt proactively to changes in the labour market by identifying skills needs and accessing appropriate education and training.

It is important to distinguish between (a) outcome measures that can be used to drive performance within the organisation (because they relate directly to the objectives of its activities) and (b) those on which evidence should be collected to demonstrate broader impact but not to drive performance (because they would distort practice in potentially harmful ways).

Figure 2.1 sets out a conceptual model for establishing the impact of Careers Scotland activity. The key task is to demonstrate a link between outcomes and impacts. A series of “inferential statements” or hypotheses have been developed and tested, and we will go on to discuss the findings in the following section of the report. Proxy measures may need to be considered where there is a lack of information on the link between outcomes and impacts. Data for a measure closely resembling an outcome could be used as a proxy rather than commonly cited hypotheses, particularly where hypotheses rely on conventional wisdom more than empirical evidence.

The model shows the iterative effect of longer-term outcomes and impacts. This recognises that once individuals develop their career planning skills they should be better able to make well-informed and well-thought-through career decisions throughout their lives and not just immediately following the career guidance intervention. For example, there could be an initial impact from moving an individual from unemployment into employment, but their increased motivation could then lead to productivity improvements or a move to a more suitable job over the longer-term that could also have an impact. This supports the Careers Scotland model of engagement that allows individuals to re-engage with the organisation at transitional periods.

#### 2.3.4 Definitions

For clarity it is helpful to define what is meant by each of the stages in the impact model. The definitions below have been drawn from a range of sources (HM Treasury, Balanced Scorecard Institute, Charities Evaluation Service):

**Inputs** - Resources put into an organisation to carry out an activity and to produce outputs and outcomes. Inputs may be human, material, financial or expressed as time.

**Activities** – An activity is a clearly identifiable and measurable means of implementing a project or intervention.

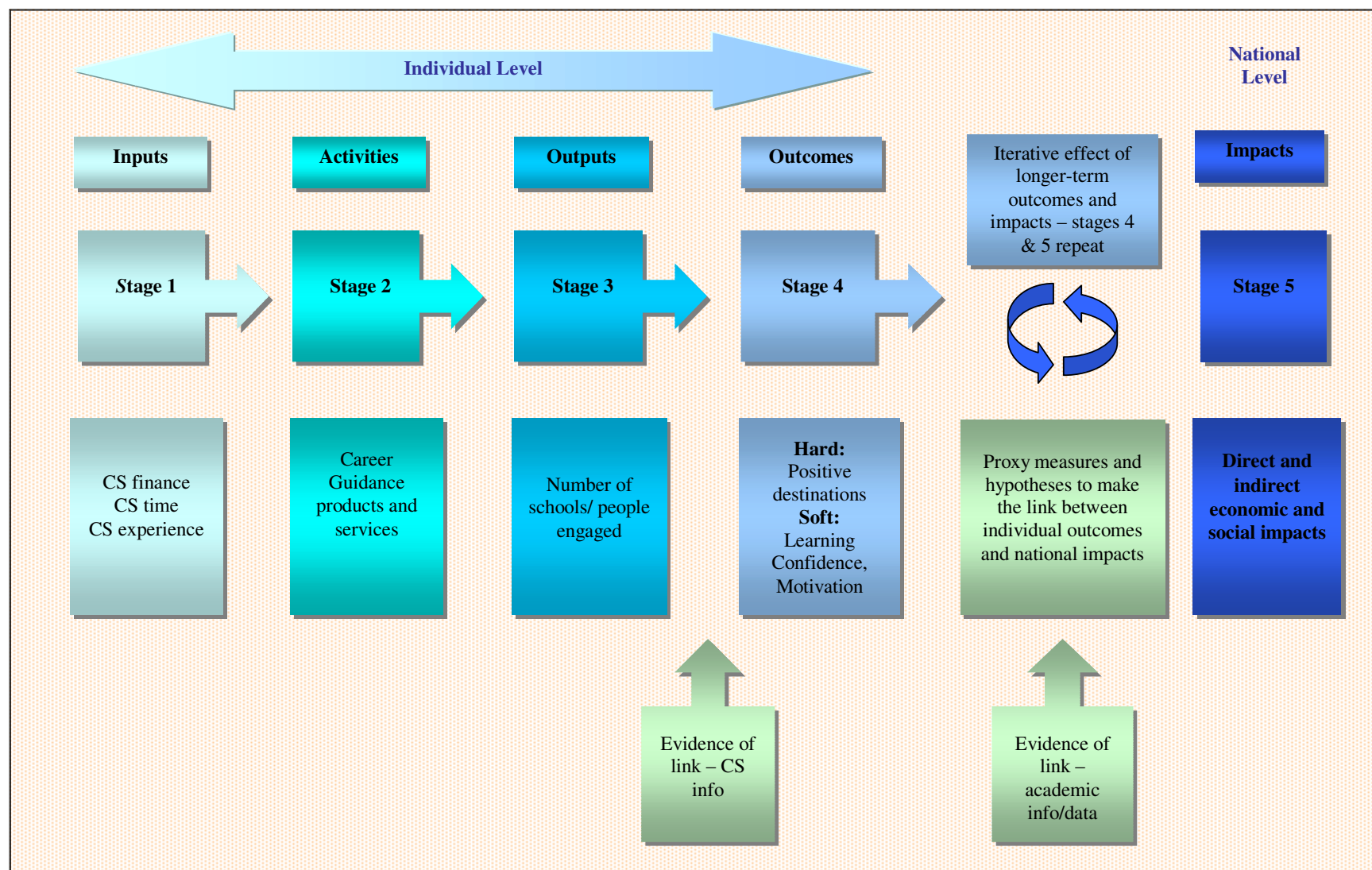
**Outputs** - Products and services delivered. Outputs are the immediate products of internal activity: the amount of work done within the organisation or by its partners.

**Outcomes** - The changes, benefits, learning or other effects that happen as a result of services and activities provided by an organisation. A description of the intended result, effect, or consequence that will occur from carrying out a program or activity or the end result that is sought. There are different types of outcomes to consider:

- Intermediate and end outcomes: intermediate outcomes are steps along the way to end outcomes. They are often smaller changes that need to happen before the final, desired outcome can be reached.
- Soft and hard outcomes: soft outcomes are typically defined as intangible, a matter of degree and more difficult to measure. They are commonly used for changes in attitudes, self-perception or certain skills areas. These are often, but not always, intermediate outcomes. Hard outcomes are defined as quantitative and often more easily measurable.

**Impacts** - The changes, effects or benefits that result from the activities on a wider society than its direct users or the changes in outcomes that can be attributed to a particular project, program or policy, in a situation where there may be many other influences on outcomes.

Figure 2.1 – Conceptual Impact Model



## 2.4 Scottish School Leavers Survey (SSLS) database

The surveys of school leavers and young people currently sponsored by the Scottish Executive have been running since the early 1970s. The SSLS was designed to collect information about people's experiences as they leave school and go on to education, training, work and raise families, including questions centred on:

- What young people do after leaving school;
- Help with choosing education or training courses;
- Careers decisions;
- Support received from careers advisers and Careers Scotland;
- Employment; and
- Family life.

The SSLS survey was reviewed in 1996, and amended to sample cohorts, or groups, of young people in their fourth year (S4) and through time, collecting data on the same sampled young people on 3 subsequent occasions: spring of the following year, 2 years after that, and 4 years after that. In other words, after their fourth year the same young people are surveyed at ages 16-17 (Sweep 1), 18-19 (Sweep 2) and 22-23 (Sweep 3).

Given increasing policy interest in later youth transitions, it was decided in 2002 to refine this design further by extending the period of follow-up to 24 and to bring forward slightly the age group for the third Sweep (from 22-23 to 21-22). Each cohort will now be surveyed on 4 occasions covering those aged 16-17, 18-19, 21-22 and 23-24 (Scottish Executive, 2005).

In this study, 2 cohorts of young people were investigated:

- Cohort 2 were first contacted in 1996 aged 16-17 (at Sweep 1), then aged 18-19 (at Sweep 2) and finally aged 23-24 (at Sweep 4); and
- Cohort 3 were first contacted in 1998, recruited in 1999 aged 16-17 (at Sweep 1), aged 18-19 (at Sweep 2) and finally aged 21-22 (at Sweep 3).

Using Cohorts 2 and 3 it was possible to make a comparison over time. This is a crucial benefit in using longitudinal data. As a result, it was possible to measure long run outcomes associated with career guidance activities such as the status of the respondents, including employment conditions at different ages. Questionnaires were relatively similar between Cohorts and Sweeps; however, Sweep questionnaires did have some important but minor differences:

- Sweep 1: Recruitment questions focusing on background with less focus on attitudinal questions;
- Sweep 2: Qualifications, aspirations and intentions for further study;
- Sweep 3: Similar to Sweep 2 (although not asked in Cohort 2); and
- Sweep 4: Similar to Sweep 2 & 3 but with additional attitudinal questions.

### 3 Career Planning Outcomes and Impacts

#### 3.1 Introduction

As explained earlier, this study considered the plethora of studies evidencing causality between career guidance and positive outcomes – learning, economic and social - and develops a series of hypotheses or inferential statements. We tested these statements by reference to existing information sources, including longitudinal data, to provide evidence or otherwise to support or disregard the statement. This process was also useful in providing a platform to develop ‘hard’ outcomes used to calculate the economic impact of career guidance. The statements are as follows, and are split into outcomes and impacts:

Career planning leads to the following **Learning Outcomes**:

- Greater access<sup>1</sup> to education and training
- Greater participation in education and training
- Improved retention rates in education and training
- Greater education and training attainment and higher skill levels
- Improved motivation and hence attainment in education and training

The Learning Outcomes lead to the following **Learning Impacts**:

- Higher wage levels through gaining higher qualifications

Career planning leads to the following **Economic Outcomes**:

- Higher levels of participation in employment
- Lower levels of unemployment
- Improved job tenure through increased motivation at work
- A more responsive and flexible workforce
- Improvements in the employability of individuals

The Economic Outcomes lead to the following **Economic Impacts**:

- Higher wage levels
- Improved productivity

Career planning leads to the following **Social Outcomes**:

- Increased confidence
- Increased well-being which contributes to health benefits for society
- Reductions in crime and offending behaviour
- Greater levels of social inclusion

The Social Outcomes lead to the following **Social Impacts**:

- Reduction in lost earnings and lower productivity through lost education and training
- Reductions in social security, NHS and other public costs

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<sup>1</sup> Access to education and training is about universally encouraging take up whereas participation is about targeting specific groups where take up is an issue.

A selection of key evidence linking career guidance to positive outcomes is summarised below under the themes of learning, economic and social. The summary of evidence provides context for the inferential statements and subsequent data analysis. Learning, economic and social themes were agreed with Careers Scotland and Professor Tony Watts as being both relevant to the activities and objectives of Careers Scotland while providing a reasonable fit with the relevant information and literature.

The thematic presentation of statements does not imply learning, economic and social outcomes arise in isolation. Indeed there is symbiotic relationship between the themes, for example improved learning outcomes through greater attainment in education and training are likely to benefit economic outcomes through higher wage levels. The inferential statements within each theme were developed following a review of a selection of the relevant literature and were also agreed with Careers Scotland and Professor Tony Watts.

Underpinning end outcomes within each of the themes are intermediate outcomes of improved motivation, confidence and well-being. Figure 3.1 outlines the relationship between intermediate and end outcomes in the conceptual framework used to guide impact calculations.

Figure 3.2 provides a summary of the **availability of evidence**, based on our review of available data, a selection of the relevant literature and in-house information maintained by Careers Scotland. Categories were assigned according to the availability of evidence either supporting or contradicting each inferential statement.

Satisfactory evidence was noted where there was sufficient evidence covering the link between career planning skills and stated outcomes. Sufficient information was available across a number of sources with at least an element of robust empirical evidence such as monitoring information or a survey.

Partial evidence was noted where there was incomplete evidence covering the link between career planning skills and stated outcomes. Information was typically available across one or two sources and for some stated outcomes, sources lacked empirical evidence.

A lack of evidence was noted where there was no robust evidence covering the link between career planning skills and stated outcomes. A lack of evidence typically meant an absence of empirical evidence with no source of information directly and adequately addressing the link between career planning skills and stated outcomes

Figure 3.2 shows that across all themes inferential statements were categorised as having either satisfactory or partial evidence to make it possible to evaluate the effect of career planning skills on the stated outcomes. This should not be surprising; the inferential statements were selected from hypotheses most commonly cited in the relevant career guidance literature. Where statements were commonly cited in the relevant career guidance literature they were often accompanied by some form of evidence resulting in at least partial evidence for each of the selected inferential statements.

To summarise our approach, broad themes and inferential statements were developed following a review of a selection of the relevant literature. The themes and inferential statements were agreed with Careers Scotland and Professor Tony Watts. The availability of evidence covering each inferential was assessed based on our data review, a selection of the relevant literature and in-house information maintained by Careers Scotland. The available balance of evidence was used to estimate the likely effects of career guidance for each inferential statement as shown in Figures 3.2 and 3.4.



**Figure 3.1 Relationship between intermediate and end outcomes**

Career planning leads to the following *intermediate outcomes*:



Improved motivation  
Increased confidence  
Increased well-being  
Learning

These intermediate outcomes can be the **indirect cause** of end outcomes or the end outcomes can be a **direct result** of career planning



Career planning leads to the following *end outcomes* (directly or indirectly):



<u>Learning</u>	<u>Economic</u>	<u>Social</u>
Greater access to education and training	Higher levels of participation in employment	Reductions in crime and offending behaviour
Greater participation in education and training	Lower levels of unemployment	Health benefits
Improved retention rates in education and training	Improvements in the employability of individuals	Greater levels of social inclusion
Greater education and training attainment and higher skill levels	A more responsive and flexible workforce	
	Improved job tenure	

These outcomes (directly or indirectly) lead to the following impacts:



Higher wage levels through gaining higher qualifications	Higher wage levels and improved productivity through higher levels of participation in employment	Reductions in lost earnings and lower productivity through lost education and training and reductions in social security, NHS and public costs
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Figure 3.2 Availability of evidence for inferential statements

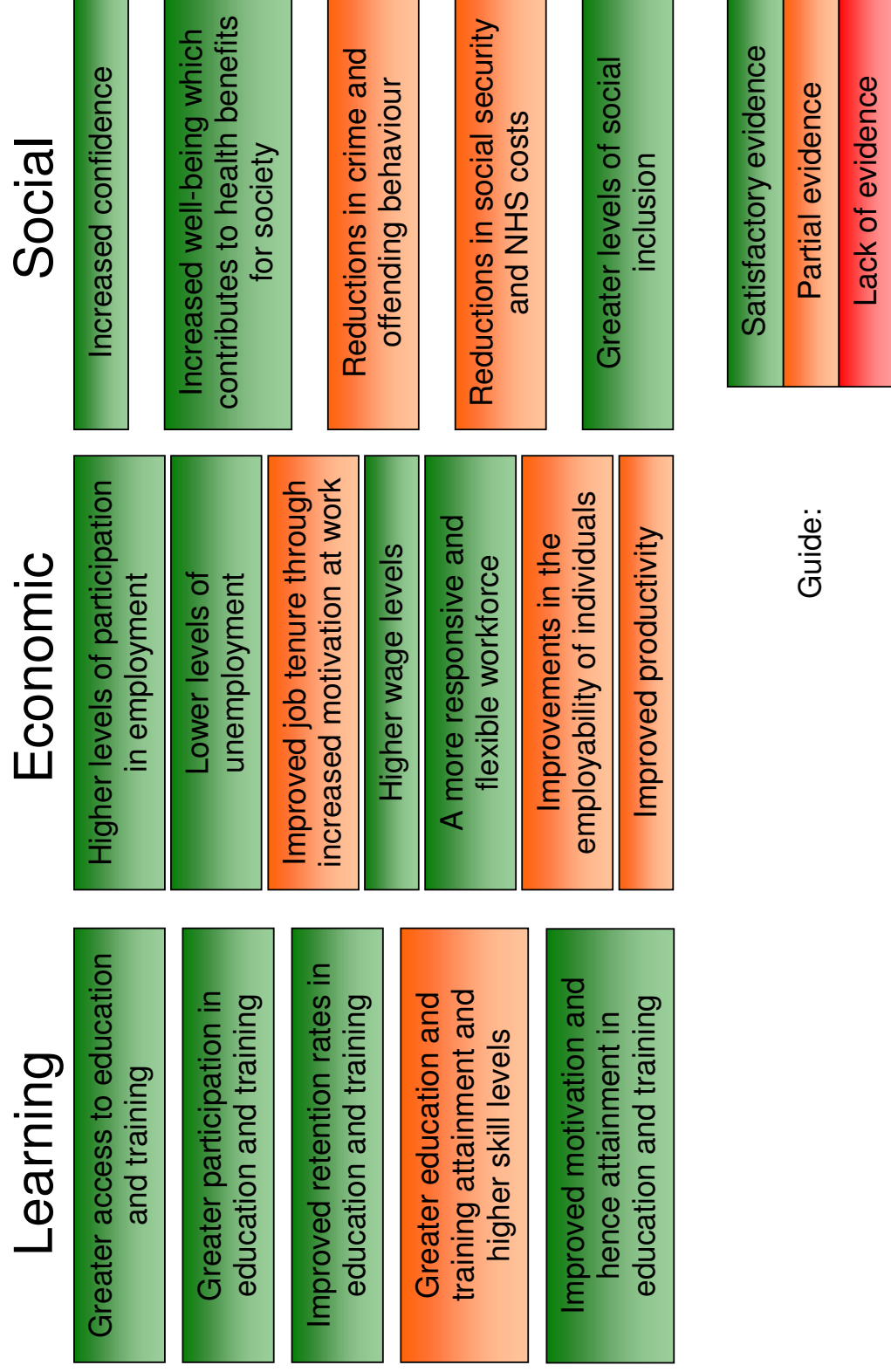


Figure 3.4 provides a summary of the **likely effects** of career guidance on outcomes, based on our review of available data, a selection of the relevant literature and in-house information maintained by Careers Scotland. Categories were assigned according to the likely effect of career guidance and imparted career planning skills on each stated outcome.

An improvement was noted where there was sufficient evidence showing a clear improvement in outcomes following career guidance. Evidence supporting an improvement was available across a number of sources with at least an element of empirical evidence such as monitoring information or a survey.

A potential improvement was noted where the balance of evidence suggested an improvement in outcomes following career guidance. There was either incomplete evidence, typically lacking robust empirical evidence, or at least one key source of information suggesting little or no improvement in outcomes.

No improvement was noted where the balance of evidence suggested outcomes did not improve following career guidance. Evidence suggesting a lack of improvement was available across a number of sources including an element of empirical evidence.

Across all categories the 'causal relationship' between the stated outcomes and career guidance was accounted for. The causal relationship considers the extent to which the initial effect of career guidance can reasonably be shown to have a direct consequence on outcomes. This is an important point as improved outcomes may simply reflect the influence of other factors associated with those seeking career guidance. For example, learning outcomes may be higher for those that received career guidance. However, this may reflect individuals with a greater interest in learning or of higher academic ability being more likely to seek career guidance. Additionally, factors such as support from wider social networks, employers or educational institutions may influence outcomes and might be linked to career guidance. In such cases learning outcomes may improve independently of any career guidance received and it would be difficult to argue that improved outcomes are a direct consequence of career guidance.

The causal relationship was accounted for by considering evidence where possible from 'controlled experiments' whereby outcomes for those that had received career guidance were compared with a control group who had not received career guidance. For example, Killeen and White's (2000) study on the impact of career guidance on adult employed people weighted effects on economic outcomes according to a wide range of characteristics such as age, gender and qualifications held prior to receiving career guidance. Even though a thorough account was taken of wider characteristics, the authors caution against concluding career guidance being wholly responsible for improved outcomes. Furthermore Killeen and White (2000) stated that their results were not wholly conclusive due to unobservable differences between the control and guidance groups and that some impacts may arise more than a year or two after receiving career guidance.

The causal relationship was also accounted for by using longitudinal evidence, primarily from the SSLS as outlined in the previous section. Longitudinal evidence offers two significant improvements over the controlled experiment approach outlined above. Firstly, improvements in outcomes can be observed over several years rather than shortly after delivery of career guidance as in most of the controlled experiments reviewed in this study. Secondly, longitudinal data track the same individual over time providing a much better account of changes in 'unobserved' characteristics over time.

The SSLS is of particular use as it allows outcomes to be observed up to eight years after receiving career guidance and specifically references Careers Scotland. Additionally, the SSLS covers individuals in Scotland whereas most of the career guidance literature focuses on England or America. Empirical analyses from England and America, even from more sophisticated 'controlled' studies, may be of limited application to careers guidance in Scotland as they fail to account for local labour markets, society and fundamental differences in the education and training infrastructure inherent to Scotland.

In evaluating the effect of career guidance we have considered the balance of evidence across a range of studies and variety of information. We have attempted to make best use of empirical evidence directly relevant to Scotland in order to build up a picture for Scottish career guidance, rather than risk developing a generic model of career guidance. Even so, it must be emphasised that these are first steps towards a more robust impact assessment with several key areas requiring incremental research.

Figure 3.4 shows that most economic outcomes are improved following career guidance. Within the learning and social themes only access to education and training and confidence are improved. Sufficient evidence was available to suggest that career guidance does not improve job tenure through increased motivation at work or improve retention rates in education and training. A summary of the availability of evidence and likely effects across the inferential statements within each theme is provided after Figure 3.4. The balance of evidence across all themes considers a wide range of empirical evidence including surveys, controlled experiments and econometric studies.

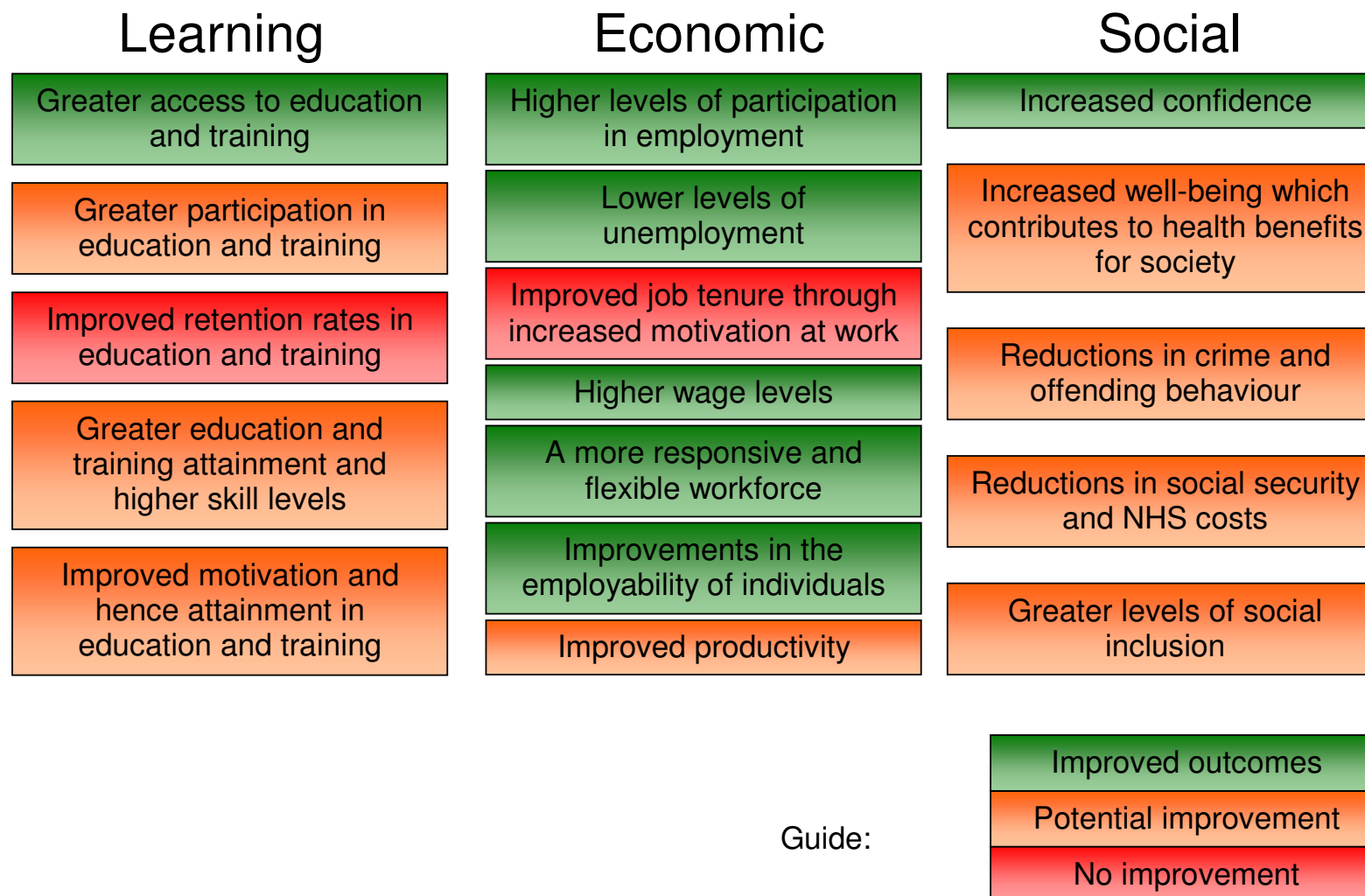
Where analyses of data have been undertaken in this report, all findings are based on robust sample sizes. For example, the SSLS provides information for 11,699 young people (4,277 in cohort 2 and 7,422 in cohort 3). Figure 3.3 below demonstrates the statistical significance of improvements in confidence among young people after talking alone with a careers advisor in their fourth year of schooling (S4). This outcome is discussed in more detail later in this section.

**Figure 3.3: Statistical significance of confidence levels of young people, father not in professional or managerial employment**

School helped give confidence to make decisions			
	Talked alone with careers advisor	Did not talk alone with careers advisor	Total
Agree	1,730 (72.5%)	594 (64.8%)	2,324
Disagree	657 (27.5%)	323 (35.2%)	980
Total	2,387 (100%)	917 (100%)	3,304
1 degree of freedom, chi-square - 18.824 (significant at 3.84 or greater, 95% confidence)			

SOURCE: SSLS (Cohort 2), adapted by DTZ

Figure 3.4 Likely effect of career guidance on inferential statements



### 3.2 Learning

Inferential outcomes	Evidence	Improvements
Greater access to education and training	Scottish School Leavers Survey, Killeen and White (2000), Killeen (1996), Beinart and Smith (1997)	Improvement in outcomes
Greater participation in education and training	Scottish School Leavers Survey, Killeen and White (2000), Killeen (1996), Barham et al (2000)	Potential improvement
Improved retention rates in education and training	Scottish School Leavers Survey, Killeen and White (2000)	No improvement
Greater education and training attainment and higher skill levels	Scottish School Leavers Survey, Labour Force Survey, Killeen and White (2000), Careers Scotland (2004) (limited)	Potential improvement
Improved motivation and hence attainment in education and training	Scottish School Leavers Survey	Potential improvement

Killeen and White's (2000) study on the impact of career guidance on adult employed people aimed to provide a rigorous evaluation of the net impacts of guidance on adult employed people, with particular emphasis on economic outcomes. The data reported focussed particularly on a series of learning and employment outcomes. The main results were:

*"The guidance participants benefited from guidance through an **increased entry rate** into both full-time continuing education and training, and through increased participation in other (part-time) education and training which was not arranged by their employers. The overall effect of this increased participation was an **enhanced rate of qualification**. Participants expressed appreciation of the value of guidance in helping them to access education and training opportunities. In these important respects, the guidance services appear to have been successful."*

Indeed, the study found that over the two-year follow-up period, 8% of the guidance sample entered full-time education, **more than four times** the proportion in the comparison sample. Furthermore, the guidance sample was **more than twice** as likely to get a qualification from a course that they had initiated, than the comparison sample.

Killeen (1996) found that **about a third** of those who had received career guidance reported that it led them to make applications for education or training. Furthermore, **about a quarter** said they entered education or training because of the guidance.

Further evidence of improved learning outcomes was presented by Barham et al (2000) in evaluating personal adviser pilot projects found that 63% of the young people who had left New Start achieved a 'positive' destination. Of those who had achieved positive outcomes just over one third entered full-time or part-time education and 57% entered training or a job with training.

Across the learning theme it was important to identify the extent of gaps in careers information among potential learners thus providing evidence on the potential for Careers Scotland to develop more intelligent customers. Beinart and Smith (1997) identified a lack of information about learning opportunities as one factor in discouraging participation in learning. Around **one in five respondents said they knew very little about learning opportunities** available to them and one in ten would like to do some learning but could not find the right opportunity.

Careers Scotland (2004) commissioned research on the link between career goals and educational attainment. The study found that **pupils with clear goals have stronger educational ambition and expectations**. The study also found that S4 and S5 pupils with clear goals outperformed S4 and S5 pupils without clear goals in terms of educational attainment. However, the study can only offer limited evidence, as it did not control for other factors that may also influence educational attainment such as socio-economic background.

In the SSLS data, career guidance delivered to schoolchildren in S4 has a **limited impact** on learning over the **short run**. Immediately after leaving school, the proportion of leavers going on to full-time education or training does not appear to be affected by career guidance received.

Career guidance, imparted career planning skills and changes in behaviour take many years to affect a change in learning outcomes. However, eight years after receiving career guidance in S4 there is a **significant rise** in the proportion of young people from **lower socio-economic backgrounds** achieving qualifications at SVQ Level 4 or higher. This is shown in Table 5A in the appendix and summarised in Figure 3.5 below.

**Figure 3.5: Highest qualification held eight years after S4, by socio-economic background and career guidance** (SOURCE: SSLS (Cohort 2), adapted by DTZ)

	All school leavers		Not spoken alone with a CA, spoken to by a CA or visited a careers office	
	Professional & Managerial	Other	Professional & Managerial	Other
None, standard grades	4%	17%	<1%	28%
Level 1-3, highers	15%	28%	<1%	30%
Level 4-5, degree	80%	55%	100%	43%

There is also a **significant fall** in the proportion of young people from **lower socio-economic backgrounds** holding no qualifications or qualifications below SVQ Level 1.

For school leavers from **professional or managerial** socio-economic backgrounds (based on their father's occupation), there is **no significant impact** on learning outcomes in either the short or long run. This may reflect the wider support mechanisms and social networks available to those from higher socio-economic backgrounds. It does not mean that there may not be other forms of impact on learning outcomes for such groups. Additionally, we have not considered the effectiveness of wider social networks, which may also benefit from support and information from Careers Scotland.

#### *Summary of Learning Outcomes*

If someone has contact with a careers advisor or clear career goals then they are more likely to gain a qualification, have stronger educational ambition and expectations and more likely to achieve an advanced qualification.



### 3.3 Economic

Inferential outcomes	Evidence	What the evidence says
Higher levels of participation in employment	Scottish School Leavers Survey, Labour Force Survey, Killeen (1996), Evaluation of the All Age Guidance Projects (2005), Careers Scotland Monitoring Data, OECD (2004)	Improvement in outcomes
Lower levels of unemployment	Scottish School Leavers Survey, Labour Force Survey, Killeen (1996), Evaluation of the All Age Guidance Projects (2005), OECD (2004)	Improvement in outcomes
Improved job tenure through increased motivation at work	Scottish School Leavers Survey (limited), OECD (2004) (limited)	No improvement
Higher wage levels	Scottish School Leavers Survey, Killeen and White (2000)	Improvement in outcomes
A more responsive and flexible workforce	Scottish School Leavers Survey, Killeen and White (2000)	Improvement in outcomes
Improvements in the employability of individuals	Careers Scotland Monitoring Data, The National Evaluation of the Careers Scotland Inclusiveness Projects (2004)	Improvement in outcomes
Improved productivity	Scottish School Leavers Survey (limited), Mayston (2001)	Potential improvement

The Centre for Guidance Studies (CeGS) report *The Economic Benefits of Career Guidance* (2002) recognises that the challenge in assessing the economic benefits of career guidance is to provide funding agencies with clear evidence of both impact and outcomes, including the direct economic benefits of guidance. Furthermore, they note that this has not always been a priority in the past. They explain:

*“Measuring the economic benefits of guidance is problematic mainly because guidance effectiveness research in the UK is usually short-term and focused on immediate effects.”*

However, some evidence of economic outcomes is available from previous studies. Killeen’s (1996) study on the impact of career guidance found that **about a third** of those receiving guidance reported that it led them to make job applications. In addition, **about 5%** said they entered jobs because of the guidance. However, in terms of considering the additionality of the guidance support it is important to note that more than half already had some kind of offer or chance of a job or training, or were waiting to hear. Furthermore, **about a quarter** of those attributing entry into work, education or training to their ‘Gateways’ guidance also attributed such an effect to **other guidance** they had experienced in the period.

An evaluation of the All Age Guidance Projects (AAG) (SQW with TNS, 2005) found that in terms of the extent to which the clients interviewed considered the AAG support to have influenced the achievement of outcomes, where clients have started a job or new job, overall, **66%** thought that there had been some influence.

Killeen and White’s (2000) study on the impact of career guidance on adult employed people found that there was **no reliable evidence** of guidance affecting earnings over a period of two years. There was, however, clear evidence that the guidance sample made more frequent moves in the external job market, and they were also more likely to move into **full-time employment**.

The nature of the support package provided appears to have an influence on outcomes, and previous evaluations of ESF funded projects (Allen et al, 1999) found that after controlling for a range of personal characteristics, those on more **integrated projects** where clients are given advice, training and support rather than one element of intervention, are more likely to be in work 6 months after leaving their Objective 3 project.

Further analysis suggests that integration has greatest impact on the level of positive outcomes of those from **disadvantaged groups**, in particular for single parents, those over 50, people with a disability, and the long-term unemployed. There is also some evidence that those with low or no previous qualifications benefit more than those with middle or higher-level qualifications from a more integrated package of support in terms of boosting positive outcomes.

The evaluation of Careers Scotland’s Inclusiveness Projects (SQW, 2004) found that clients reported significant **decreases** in the **barriers** that faced them in the labour market – particularly in terms of self-esteem, confidence, literacy and numeracy - and **improvements** in terms of their **employability** in a range of other criteria such as motivation and emotional control.

There was also an improvement in **soft skills**, with 80% reporting that their key worker helped increase their confidence. In terms of distance travelled, there were significant improvements in self-esteem and in confidence, leadership, time management, motivation and emotional control.

Mayston (2001) explored the relevance of careers guidance to 'human capital' by improving the investment decisions, which individuals make in undertaking further education and training or other career moves. By adopting a decision analysis approach, the report examined the difference which career guidance can make to these investment decisions. Mayston examined the macro-economic benefits that careers guidance can yield by improving the functioning of the labour market and the degree of skills and geographical mismatch, which may exist between supply and demand in the labour market.

The OECD (2004) suggested evidence on the benefits of career guidance is limited but may improve short-term outcomes i.e. some cognitive, motivational and attitudinal outcomes. Evidence on the impacts on long-term outcomes and economic outcomes are limited and more longitudinal analysis was advocated exploring the relationship between immediate learning outcomes and long-term outcomes. The OECD suggested that if developed correctly, indicators on learning outcomes could be valued in their own right. This supports the distinction between intermediate and end outcomes highlighted earlier in this report.

Career guidance delivered to schoolchildren in S4 has a **limited impact** on labour market outcomes over the **short run**. On first appearance, labour market outcomes for those that received career guidance are similar for schoolchildren that did not receive any career guidance.

Over the **long run**, however, those that talked alone with a careers advisor in S4 are **more likely** to be in work and **less likely** to be unemployed (out of work and looking for a job) (Reference: Table 1). The long run nature of career guidance impacts is important to recognise when considering the continuing support offered by Careers Scotland after pupils leave school and throughout their careers.

Labour market outcomes are strongly influenced by socio-economic background (Reference: Table 2). School leavers whose father works in an unskilled manual or unclassifiable occupation experience higher unemployment and inactivity over the long run.

After accounting for socio-economic background career guidance still has a **limited impact** on labour market outcomes over the **short run** (Reference: Tables 3A-3C). Over the **long run** labour market outcomes **improve marginally**, with those that spoke to a careers advisor alone having significant (although marginal) improvements in labour market outcomes.

Over the **long run**, school leavers from **lower socio-economic** backgrounds that spoke to a careers advisor alone are **less likely to be unemployed** (2.0%) than those that did not speak to a careers advisor alone (4.7%). Those that visited a careers office exhibit weaker long run effects.

A **stronger long run** effect is witnessed by **combining** the effects of speaking alone with a careers advisors, being spoken to by a careers advisor and visiting a careers office and where the effects are controlled by socio-economic background (Reference: Tables 3D). This key finding may be linked with Careers Scotland perception that career guidance is more effective when delivered as part of a wider package such as training or education.

For young people from **lower socio-economic** backgrounds the combined career guidance effect is felt in a **lower incidence of unemployment** and **higher rate of employment** (both are significant outcomes).

For young people from **professional or managerial** socio-economic backgrounds combined career guidance has **little effect**.

An **improved outcome** arising from career guidance is shown for wages (Reference: Figure 4). The limited number of empirical studies highlighted in our work to date focused on labour market outcomes and wages shortly after users received career guidance.

A **long run uplift** is witnessed in wages for those that received some form of career guidance. This may be due to a better understanding of the skills needed to progress their careers or positioning themselves appropriately in Scotland's dynamic labour market.

Among young people in their mid-twenties that did not receive any career guidance, nearly **one in five** (19%) were earning **£450 or less** per month, compared to just over **one in ten** (11%) that had been spoken to by a careers advisor in S4.

Young people in their mid-twenties that did not receive any career guidance were also **least likely** to be represented among **higher earners**. Young people that had been spoken to by a careers advisor or spoken with a careers advisor one to one were **more likely** to be **higher earners** by their mid-twenties.

#### *Summary of Economic Outcomes*

If someone has had a one to one with careers advisor then they are more likely to be in a job, more likely to stay in the workplace and more likely to be financially successful.

### 3.4 Social

Inferential outcomes	Evidence	What the evidence says
Increased confidence	Scottish School Leavers Survey, Evaluation of the All Age Guidance Projects (2005), Careers Scotland Monitoring Data	Improvement in outcomes
Increased well-being which contributes to health benefits for society	Hughes (2004)	Potential improvement
Reductions in crime and offending behaviour	Hughes (2004), Godfrey et al (2002)	Potential improvement
Reductions in social security and NHS costs	Hughes (2004), Godfrey et al (2002)	Potential improvement
Greater levels of social inclusion	Scottish School Leavers Survey, Careers Scotland Monitoring Data, Godfrey et al (2002)	Potential improvement

Killeen's (1996) study on the impact of career guidance via Gateways to Learning identified a number of positive outcomes on behaviour and knowledge from career guidance. The majority of participants were made more hopeful about the future and/or reported becoming more informed about opportunities, their own skills, etc. Additionally, **nearly half** said their guidance helped them to search more effectively. Furthermore, the **perceived effects** on feelings, knowledge and behaviour were **correlated** with **attributed effects** on entry into education, training and jobs.

Similarly, the evaluation of the All Age Guidance Projects (SQW with TNS, 2005) found that there was evidence of more people making more informed decisions, including specific groups that would previously have found access to information, advice and guidance more difficult. Furthermore, the projects **influenced outcomes**, which were perceived by clients to be better than otherwise, and also **enhanced skills and confidence**, which, in the longer term, should strengthen their performance in the labour market.

A wide range of research studies highlight social exclusion and social security benefits as areas in which significant cost savings for society arise from improving peoples' outcomes and careers. The key findings of several research studies are summarised by Hughes (2004) shown below:

#### **3.4.1 Social exclusion**

The additional lifetime costs of young people being excluded from education, training and employment at age 16-19 are estimated as being £7 billion in resource costs, and £8.1 billion in public finance costs, at 2000/01 prices. This represents an average per capita cost over a lifetime of £45,000 in resource costs and £52,000 in public finance costs. If the size of this group were reduced by 10,000 (less than 10% of its estimated current size), the long-term savings would be £450 million in resource costs and £520 million in public finance costs.

#### **3.4.2 Social security benefits**

In 2002/03 expenditure on social security benefits in Great Britain was £110 billion (ONS) This includes benefits to the elderly, sick and disabled, family, unemployed, widows and others. Unemployed benefit was equal to 4% of the total social security benefit: £4.4 billion. If more UK citizens of working age were able to connect with steady work, this could result in significant savings. If there were a one percentage point decrease in unemployed social security benefits being paid, a saving of £44 million could be made.

#### **3.4.3 Public finance costs**

Godfrey et al (2002) found that the additional lifetime costs of young people being excluded from education, training and employment at age 16-19 are estimated as being £7 billion in resource costs, and £8.1 billion in public finance costs, at 2000/01 prices. This represents an average per capita cost over a lifetime of £45,000 in resource costs and £52,000 in public finance costs. If the size of this group were reduced by 10,000 (less than 10% of its estimated current size), the long-term savings would be £450 million in resource costs and £520 million in public finance costs.

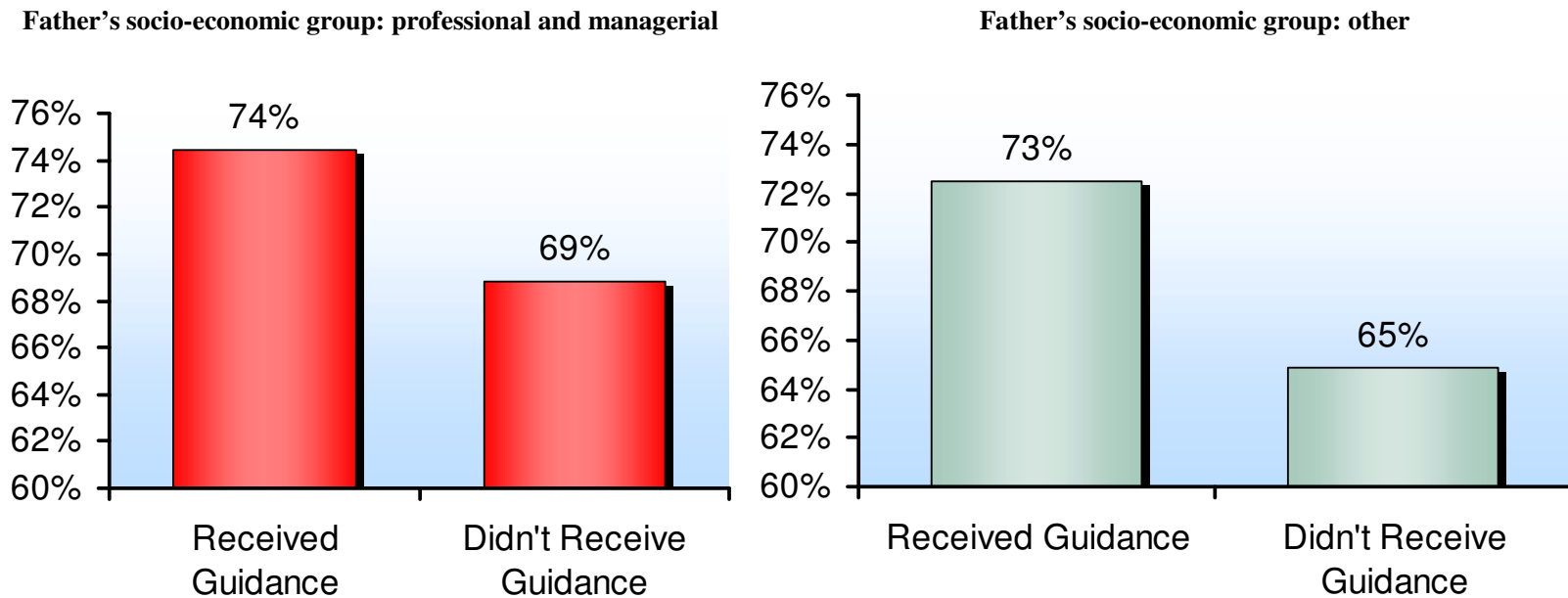
#### **3.4.4 Scottish context**

The Framework for Economic Development in Scotland (Scottish Executive, 2004) states, "There is little doubt that economic growth contributes to the improvement of health and that health itself is an important driver of economic development. Good health can boost productivity, while ill-health can impose significant costs on the economy in terms of lost working time, lost output, and less productive working time."

The *Curriculum for Excellence* (Scottish Executive, 2004) is central to the Scottish Executive's education reform programme, and clearly identifies the creation of "confident individuals" as one of the four "capacities of education".

For all young people, regardless of socio-economic background, confidence levels are **raised** after receiving career guidance as shown in Chart 3.1 below. The rise in confidence levels is more marked for young people from **lower socio-economic** backgrounds.

**Chart 3.1: One to one career guidance in S4 at school and proportion reporting that school helped give confidence to make decisions by father's socio-economic group**



**SOURCE: SSLS (Cohort 2), adapted by DTZ**

*Summary of Social Outcomes*

If a young person has contact with a careers advisor they experience higher confidence levels, with a marked improvement for young people from lower socio-economic backgrounds.

### 3.5 Impact of Careers Guidance

Improvements in outcomes for individuals arising from career guidance can be used to estimate society and economy wide impacts. Individual estimates have been made for learning, economic and social outcomes with allowances made for impacts falling across more than one theme. A step-by-step approach is provided below outlining how the balance of evidence considered within this study can be used to illustrate the impact of career guidance across each theme. A summary of the calculations employed for each of the themes is provided at the end of impact theme.

#### 3.5.1 Economic impact

Although still presenting significant challenges, improvements in economic outcomes were the most straightforward of all the themes in terms of measuring impact and this theme was dealt with first. The stated economic outcomes were more readily translated into an economic value through increased workforce participation and productivity improvements related to workforce participation.

Figure 3.6 below shows the proportion of young people in employment eight years after their fourth year of schooling (S4) by the type of career guidance received for those whose fathers were employed in non-professional or managerial occupations. Considering the balance of evidence and the causal relationship outlined earlier in this report, our impact estimates are based on the assumption that outcomes for young people from higher socio-economic groups are not significantly and directly improved by career guidance. In economic appraisal terms this is a 'deadweight' effect. The ratio of employment rates shown in Figure 3.6 can be used to indicate the potential difference in the overall level of employment in the absence of career guidance.

**Figure 3.6: Employment rate eight years after S4, father not in professional or managerial employment (SOURCE: SSLS (Cohort 2), adapted by DTZ)**

Career guidance received	Employment rate	Ratio of employment rates
Spoken alone with a careers advisor, spoken to by a careers advisor and visited a careers office	77.8% (A)	94.7% (B/A)
Not spoken alone with a careers advisor spoken to by a careers advisor or visited a careers office	73.7% (B)	
Spoken alone with a careers advisor	80.6% (C)	97.0% (D/C)
Did not speak alone with a careers advisor	78.2% (D)	
Spoken to by a careers advisor	80.6% (E)	99.0% (F/E)
Not spoken to by a careers advisor	79.7% (F)	



Figure 3.7 below shows overall employment levels for Scotland (Futureskills Scotland), Scotland's working age population (General Register Office for Scotland) and an estimate of the working age employment rate covering the population of those aged 16-64/59<sup>2</sup>. Applying the ratio of employment rates to the relevant population (accounting for deadweight outlined above) in Figure 3.7 demonstrates the potential impact of career guidance on the overall level of employment in Scotland.

**Figure 3.7: Employment, population and employment rate for Scotland**

Year	Employment (000's)	Working Age Population (000's)	Employment rate
2004	2,522	3,175	79.4%
2005	2,529	3,190	79.3%
2006	2,537	3,205	79.2%

SOURCE: Futureskills Scotland and GROS, adapted by DTZ

The contribution of career guidance to the Scottish economy can be estimated by assuming workforce participation is unaffected for those from professional or managerial backgrounds, but that workforce participation among young people from lower socio-economic backgrounds improves for those receiving career guidance – reflecting the movement away from unemployment demonstrated in the tables appended. Career guidance is assumed to impact on those from non-professional or managerial backgrounds and those whose father was unemployed, sick or disabled.

Using data from the SSLS the deadweight effect is around 25.4%. A further effect must be accounted for in that the SSLS shows that 7.1% of young people from lower socio-economic backgrounds reported no contact with a careers advisor whilst at school. It is reasonable to discount this section of society as having no impact from career guidance as either no contact was made or the individual was unable to recall contact with a careers advisor; in either case it is difficult to argue that improved employment outcomes could be attributed to career guidance.

The data appended from the SSLS suggest marginal improvements in economic outcomes are only significant after eight years. Outcomes from the SSLS observed closer to the point at which career guidance was delivered reflect findings from studies such as Killeen and White (2000) with limited or no improvement. A further discount must therefore be introduced to allow for the time taken for career guidance to take effect. A recent report for Universities Scotland estimating the economic outcomes of Higher Education uses an average career length of around forty years (McLellan, 2006). This would suggest a further discount rate of 20% is reasonable (8 years/40 years).

Based on the above parameters it is possible to estimate the level of employment in Scotland in the absence of career guidance. The smallest of the improvements presented in Figure 3.6 was used to estimate the likely employment rate in the absence of career guidance. This is shown in Figure 3.8 with an implied employment rate and employment differential. In the absence of career guidance employment would be around 14,000 jobs lower (around 0.6% of the Scottish workforce). This estimate does not take into account the quality of any additional

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<sup>2</sup> Pensionable age is 65 for men, 60 for women until 2010; between 2010 and 2020 pensionable age for women increases to 65.

**Figure 3.8: Employment, population and employment rate for Scotland**

Year	Base case		Absence of career guidance		
	Employment rate	Employment (000's)	Employment rate	Employment (000's)	Employment differential
<b>2004</b>	79.4%	2,522	79.0%	2,508	14,300
<b>2005</b>	79.3%	2,529	78.8%	2,515	14,300
<b>2006</b>	79.2%	2,537	78.7%	2,523	14,400

SOURCE: Futureskills Scotland and GROS, adapted by DTZ

Scottish Executive data from the Annual Business Inquiry (ABI) and Input-Output (IO) tables suggest that income from employment accounts for most of the Gross Value Added (GVA) or Gross Domestic Product (GDP) in Scotland. Therefore the simplest and most transparent method of translating overall employment impacts into a GVA/GDP estimate is to multiply the employment differential by average earnings available from the Annual Survey of Hours and Earnings (ASHE).

As workforce participation is unaffected for those from professional or managerial backgrounds it would be inappropriate to use average earnings. Earnings are likely to be lower among workers from non-professional or managerial backgrounds and those whose father was unemployed, sick or disabled. Therefore the 40<sup>th</sup> percentile of earnings was used to estimate the GVA/GDP impact, this is shown in Figure 3.9. The 40<sup>th</sup> percentile of earnings is lower than both median and mean earnings.

**Figure 3.9: Economic impact Gross Value Added (GVA) £million**

Year	Annual earnings (40 <sup>th</sup> percentile)	Employment differential	Impact Gross Value Added (GVA) £million
<b>2004</b>	£14,289	14,300	£205
<b>2005</b>	£14,328	14,300	£210
<b>2006</b>	£14,374	14,400	£218

SOURCE: Annual Survey of Hours and Earnings, adapted by DTZ

#### *Summary of approach*

Career guidance is assumed to impact on those from non-professional or managerial backgrounds and those whose father was unemployed, sick or disabled. The aforementioned group accounts for 74.6% of the population with a 25.4% deadweight effect. A further 7.1% of young people from lower socio-economic backgrounds reported no contact with a careers advisor whilst at school; this section was also discounted, this gives an overall deadweight figure of 31%.

Based on the above figures it would not be unreasonable to assume 31% of workers are unaffected by career guidance. For the remaining 69% of workers an effect of increased employment participation is assumed with the smallest of the improvements shown, and thus the most conservative, used to estimate the likely effect on employment in the absence of career guidance.

The ratio of employment rates of those spoken to by a careers advisor and not spoken to by a careers advisor is 99.0%, as shown in Figure 3.6. It is therefore reasonable to assume in the absence of career guidance, the employment participation of those influenced by career guidance, excluding deadweight, will fall by 1.0% (100.0% - 99.0%). In 2004, the overall employment rate for Scotland was around 79.4%, as shown in Figure 3.7. Assuming the aforementioned reduction in overall employment rate would fall to 78.9%.

A further discount of 20% was introduced to reflect the time taken for career guidance to take effect. After accounting for this further discount the overall employment rate would fall to 79.0% in the absence of career guidance. The fall in the employment rate from 79.4% to 79.0% amounts to an employment differential of 14,300 jobs, as shown in Figure 3.8. By multiplying the wages associated with the employment differential, the impact on GVA/GDP can be estimated. Figure 3.9 shows annual earnings of £14,289 across 14,300 jobs amounts to £205 million.

### 3.5.2 Learning impact

To provide a consistent review of the learning impact, all parameters employed in the economic impact were used to inform the learning impact. Therefore the learning impact assumes learning outcomes are unaffected for those from professional or managerial background. Career guidance is assumed to impact on the learning outcomes of those from non-professional or managerial backgrounds and those whose father was unemployed, sick or disabled.

Again, the deadweight effect is around 25.4% with a further discount for 7.1% of young people from lower socio-economic backgrounds reporting no contact with a careers advisor whilst at school. A final discount to allow for the time taken for career guidance to take effect on learning outcomes of 20% was assumed again.

Figure 3.10 below, sets out the median earnings that can be expected with each qualification level as calculated by the Scottish Executive (Learner Views of College, 2006). Expected earnings are adjusted for the likelihood of being employed with that qualification level.

**Figure 3.10: Expected earnings from qualification levels**

Qualification level	Adjusted expected earnings
SVQ Level 4 HNC,HND,BTEC or above etc	£17,114
SVQ level 3	£14,228
SCE higher or equivalent	£12,988
SVQ level 2 or equivalent	£9,062
Standard Grade grade A-C or equivalent	£10,767
SVQ level 1 or equivalent	£7,737
Standard Grade below grade c	£9,258
No qualifications	£6,839

**SOURCE: Learner Views of College, Scottish Executive 2006**

Figure 3.11 below shows the proportion of young people holding qualification levels eight years after their fourth year of schooling (S4), this is an abridged version of the data table presented in the appendix. Figure 3.11 shows qualification levels by career guidance received for those whose fathers were employed in non-professional or managerial occupations.

**Figure 3.11: Highest qualification held eight years after S4, father not in professional or managerial employment**

Highest qualification level	All individuals	No career guidance	Difference
SVQ 4-5, honours, ordinary or higher degree	55%	43%	+12%
Level 3	6%	4%	+2%
Highers	14%	20%	-6%
Level 1-2	8%	6%	+2%
Standard Grades	11%	13%	-2%
None	7%	15%	-8%

**SOURCE: SSLS (Cohort 2), adapted by DTZ**

The Scottish Executive (Learner Views of College, 2006) estimate a GVA impact for Further Education sector by multiplying additional expected earnings (based on Figure 3.9) by the number of learners achieving additional levels of qualifications. The same calculation can be performed for individuals with improved learning outcomes through careers guidance. This is shown in Figure 3.12 with the average earnings for all individuals at £14,337 and for those who received no careers guidance estimated at £13,357.

Using the same approach as the Scottish Executive outlined above, this suggests there is a career guidance premium of nearly one thousand pounds less (£980). This conservative estimate is based on the difference between the average individual and individuals who have not received any career guidance; as with the economic impact outlined above this provides a more marginal improvement.

**Figure 3.12: Additional earnings stimulated by career guidance, father not in professional or managerial employment**

Qualification level	Adjusted expected earnings	Weighted earnings		Difference
		All individuals	No career guidance	
SVQ Level 4 HNC, HND, BTEC or above etc	£17,114	£9,413	£7,359	£2,054
SVQ level 3	£14,228	£854	£569	£285
SCE higher or equivalent	£12,988	£1,818	£2,598	-£779
Level 1-2	£8,400	£672	£504	£168
Standard Grades	£10,013	£1,101	£1,302	-£200
No qualifications	£6,839	£479	£1,026	-£547
<b>Total expected earnings</b>		<b>£14,337</b>	<b>£13,357</b>	<b>+£980</b>

SOURCE: DTZ

The deadweight and discount effects discussed earlier in this section were applied; those from professional or managerial background were unaffected, those lacking contact were discounted with a discount to allow for the time taken for career guidance to take effect on learning outcomes. The additional 14,300-14,400 jobs outlined in the economic impact were excluded from the learning impact to avoid double counting.

Grossing the career guidance premium across the individuals described above provides a gross impact of **£1.37 billion** for 2006. This is of a similar magnitude to the overall gross economic impact of Further Education outlined by the Scottish Executive using the same approach. Discounting benefits over time using a 'social time preference rate' used for appraising government spending we find that the present value of the gross benefits delivered by the college system is around **£1.2 billion**. Social discounting lowers the gross impact figure.

The Scottish Executive estimate forms part of a fuller cost-benefit analysis and appraisal, which is beyond the remit of this study. Social discounting has therefore not been applied to the gross figure for careers guidance presented above for the same reason. It is worth noting that leakages (benefits engendered by Careers Scotland arising outside of Scotland) have not been estimated but leakages are also not considered within the estimates for Further Education.

Additionally it will be important to develop a fuller consideration of 'shared outcomes'. As outlined below it is likely that positive outcomes and resulting impacts are the result of a package of support and interventions across a wide range of stakeholders including Careers Scotland, employers, universities and colleges.

A more appropriate comparison figure from the Further Education impact is the total gross annual benefit (calculated for a single year without social discount) estimated to be in the order of £55 Million. Using the average career length of around 40 years learning impacts for career guidance corresponding to the £55 million for Further Education are shown in Figure 3.13 below:

**Figure 3.13: Learning impact Gross Value Added (GVA) £million**

Year	Learning impact
2004	£33.9
2005	£34.0
2006	£34.1

SOURCE: DTZ

Some of the learning impact claimed by Further Education (and other education and training institutions) can be attributed to Careers Scotland and vice versa. We have articulated the benefits accruing the economy once individuals have engaged with the engine of education and training through career guidance. A wider consideration of value for money for Further Education would need to recognise the contribution (and costs borne) by organisations such as Careers Scotland responsible for moving individuals towards the world of work, education and training. Similarly the outcomes attributed to Careers Scotland would need to recognise the role played (and costs borne) by employers, universities and colleges in developing the workforce.

#### *Summary of approach*

All parameters employed in the economic impact were used to inform the learning impact with an overall deadweight figure of 31%. Figure 3.10 shows earnings associated with different qualification levels and Figure 3.11 shows the influence of career guidance on qualification levels. Figure 3.12 provides the step-by-step calculations to show average expected earnings compared to those who did not receive career guidance, this involved multiplying both columns from Figure 3.11 by the column from 3.10 to provide the estimates shown in Figure 3.12.

Figure 3.12 show the average earnings for all individuals at £14,337 and for those who received no careers guidance estimated at £13,357. The deadweight effects discussed earlier in this section were applied and the additional 14,000 jobs outlined in the economic impact were excluded from the learning impact to avoid double counting. This suggests the educational attainment of around 1,732,000 workers may be influenced by career guidance during 2004. Multiplying the number of workers by the £980 from Figure 3.12 gives a figure of £1.697 billion.

Applying a discount of 20% to reflect the time taken for career guidance to take effect gives a gross impact of £1.36 billion for 2004 and £1.37 billion for 2006. A more appropriate comparison figure is the total gross annual benefit (calculated for a single year without social discount. Dividing £1.36 billion for 2004 gives an estimate of £33.9 million as shown in Figure 3.13.

### 3.5.3 Social impact

The social impact presents the greatest challenge in developing robust impact estimates. Apart from improvements in confidence there is relatively little evidence linking career guidance directly with the stated social outcomes outlined earlier in this report. Most of the relevant literature divides social costs into two categories. The first covers resource costs typically including lost earnings and lower productivity through lost education and training. Both of these areas are already covered in the economic and learning impacts outlined above.

The second set of costs identified in the relevant literature relates to income support, additional health costs, additional costs related to crime and the use of other public sector resources. This second set of costs are not covered by the economic and learning impacts and can be developed without risk of double counting.

Godfrey et al (2002) estimate the additional lifetime costs of young people being excluded from education, training and employment at ages 16-19 are estimated on average per person at £45,000 in resource costs and £52,000 in public finance costs over a lifetime. The economic impact suggests there are around 14,000 individuals in employment that might otherwise have been not in employment, education or training in the absence of career guidance.

Assuming around 60,000 school leavers from 2004 to 2006 the social impact (costs saved) are presented in Figure 3.14 based on the capacity of career guidance to help young people avoid not being in employment, education or training. However, these estimates may underestimate the overall impact value due to a lack of reliable evidence and impacts may ultimately be higher. For example, a recent report by The Prince's Trust and The Royal Bank of Scotland Group (RBS), found that the UK government pays out £20 million-a-week in Jobseeker's Allowance with youth crime costing the UK £1 billion every year.

**Figure 3.14: Social impact, costs avoided £million**

Year	Social impact
2004	£0.46
2005	£0.47
2006	£0.47

SOURCE: DTZ

#### *Summary of approach*

Godfrey et al (2002) estimate the additional lifetime costs person as £52,000 in public finance costs over a lifetime, over forty years around £1,300 per annum. As outlined in the summary impact below, between 300 to 400 additional jobs per annum may be added. By multiplying the additional jobs per annum by cost savings per annum indicative public finance cost savings can be estimated, as shown in Figure 3.14. This excludes resource costs, which are subsumed within the economic impact estimates.

### 3.6 Summary of impacts

Figure 3.15 provides a summary of impacts resulting from improvements in economic, learning and social outcomes. Importantly our impacts are based on the assumption that Careers Scotland will continue to provide a comprehensive careers guidance service to schoolchildren, adults and hard to reach groups with career guidance and imparted career planning skills filtering throughout the workforce and society over time. It is important to

emphasise that these figures estimate the impact of career guidance drawing upon the available data and other evidence. As outlined throughout this report there are several key areas lacking the evidence to fully articulate the impact of career guidance.

**Figure 3.15: Total impact, costs avoided £million**

Year	Economic impact	Learning impact	Social impact	Total impact	Jobs (total)
2004	£205	£33.9	£0.46	£239	14,300
2005	£210	£34.0	£0.47	£244	14,300
2006	£218	£34.1	£0.47	£253	14,400

**SOURCE: DTZ**

Of the three themes, the learning impact is most robust as it follows an approach established by the Scottish Executive whilst making best use of empirical data linking learning outcomes with career guidance. Adjustments for leakages could be considered when developing impact information, although treatment of learning impacts is consistent with Scottish Executive estimates.

The economic impact is a reasonably robust but simple treatment of improvements in economic outcomes. The employment rate approach is based on workforce participation but will also reflect job tenure and flexibility. However, this does not account for a more detailed understanding of how career planning skills may better prepare the Scottish economy for ongoing change or major impacts.

The additional jobs presented in Figure 3.15 outlines the total impact of career guidance across the workforce. Based on the overall impact career guidance raises overall employment levels by between 300 to 400 additional jobs per annum. Similarly, in a wider cost-benefit analysis the financial economic impact should ideally be discounted based on social time preference, although the impacts remain cumulative and discounted may be close to £200 million per annum.

The social impact requires additional research as this has been developed through inference and based on improvements in economic outcomes. It would be worthwhile to further explore the extent to which career guidance can better target education and training resources, but this is already partly captured though the learning impact outlined above. Although it would be useful to explore this area further it must be recognised that evidence linking career guidance with social outcomes scarce and most social outcomes are inherently difficult to value.



## **4 Careers Scotland Performance Management System**

### **4.1 Introduction**

The review of Careers Scotland's performance management system has been undertaken in two stages:

- i. An assessment of the suitability of the current performance management system for providing evidence to calculate the impact of Careers Scotland; and
- ii. Recommendations and options for changes to the performance management system in the future.

The findings and conclusions from each of these stages are presented below.

### **4.2 Review of Current Performance Management System**

#### **4.2.1 Assessment of Current System**

The objective of this stage of the study was to critique the current performance management system to assess if it is 'fit for purpose' in terms of determining impact. In order to do this, a desk review was undertaken to assess the 'fit' of the current suite of performance information (monitoring information, internal reviews and evaluations of products and services) with what is required to demonstrate the impacts discussed in the previous section.

The Study Brief issued by Careers Scotland for this piece of work recognised that while Careers Scotland can evidence the impact of career planning on individuals, it cannot currently demonstrate its impact on society and the wider economy. The assessment of impact in Careers Scotland is currently based on the Kirkpatrick Model:

- Level 1 Impact: Satisfaction – individuals can demonstrate and express their degree of satisfaction with their experience of Careers Scotland.
- Level 2 Impact: Learning – individuals can demonstrate and express that they have learned something from their experience with Careers Scotland.
- Level 3 Behaviours – individuals can demonstrate or articulate that they have decided to make changes as a result of Careers Scotland interventions.
- Level 4 Results – individuals who have made changes can demonstrate over time that they have made appropriate choices or have demonstrated the skills to make further changes.

In terms of the fit with the Conceptual Impact Model shown in Figure 2.1 above, this framework provides evidence of the link between outputs and outcomes. It does not directly contribute to an assessment of the wider impacts of career planning.

The Performance Management Guidelines provide a useful framework for monitoring performance, but there are a number of observations we would make relating to this framework:

- i. Firstly, the three priorities under which the performance measures sit are confusing as the first two are really client groups rather than priorities and the third is an overarching priority covering all client groups. It is recognised that these priorities have been changed during the course of this study as the organisation moves forward, and

we would suggest that the future priorities should be structured around the aims and objectives of the organisation rather than the client groups with whom the organisation will work.

- ii. Secondly, many of the performance measures used are measures of activity and volume rather than of the effectiveness of the support. While recording the volume of activity clearly has a role in the monitoring of interventions, it is not in itself a measure of performance. The design of PMs and KPIs in the future should be more aligned to measuring outcomes from career guidance.

Careers Scotland has a number of processes and systems in place to monitor its performance, but perhaps needs to move the emphasis on to the more useful elements of monitoring data. One example of this is the Client Achievement Summary (CAS), which records valuable information on the employability of priority clients.<sup>3</sup> This information does not appear to be reported in a structured manner, and consideration should be given to firstly, developing a method of aggregating this distance travelled information for reporting purposes and secondly, to the possibility of extending this assessment tool to all Careers Scotland clients.

The final point relates to programme or project evaluations. The majority of evaluations of Careers Scotland's activity are focussed on measuring client satisfaction or the immediate outcomes from activity. In commissioning evaluations in future, Careers Scotland should give guidance on the importance of establishing the wider impacts that could potentially be realised from career planning.

#### **4.2.2 Gaps in Performance Information**

Careers Scotland has a range of monitoring information that can help to establish that there is a link between Inputs, Activities, Outputs and Outcomes for career guidance activity. However, it cannot demonstrate a direct link to wider social and economic impacts. Therefore, it is necessary to draw upon secondary sources of data to help inform the link between outcomes and impacts as illustrated in the Conceptual Impact Model.

In addition to a review of all data held by Careers Scotland, we investigated relevant external data sources. The key data sources we used (as detailed in the previous section) are:

- Scottish School Leavers Survey (SSLS) - The SSLS is a valuable source of information that Careers Scotland has an opportunity to shape in the future. The survey captures a large sample of school leavers and tracks them over time with the most recent data showing behaviour up to eight years after leaving school. The survey provides information about careers guidance sought at school, which can be linked to outcomes later in life.
- The Labour Force Survey (LFS) – The LFS can be used for a wider benchmark to show the outcomes for people (of all ages) who have made use of careers advisory services. This may include securing employment, changing career, improving job

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<sup>3</sup> From 2004/05 the priority clients included WorkNet EBD ESF beneficiaries, Activate participants, Supported Employment clients, Inclusiveness Key Worker clients, Get Ready for Work clients (sample) and Other WorkNet Participants (including some adults). From 2006/07 this was extended to Enhanced Resource Pilot school pupils

tenure, improved wages or satisfaction at work. The LFS sample was recently boosted through additional resources provided by Futureskills Scotland.

### 4.3 Recommendations and Options for Changes to Performance Management System

#### 4.3.1 Introduction

The objective of this stage of the study was to build upon the information gathered on the gaps in the current performance management system described above to develop a series of options and recommendations for changes to the Careers Scotland performance management system. These changes are designed to ensure that the organisation is collecting the right information moving forward to enable it to demonstrate its impact, both in the short term and in the longer term. This will help Careers Scotland set targets to help the organisation improve quality.

The Careers Scotland Performance Management Guidelines provide a useful framework for monitoring performance, and allows the organisation to provide evidence of the link between outputs and outcomes. However, it does not directly contribute to an assessment of the wider impacts of career planning. The Conceptual Impact Model shown in Figure 2.1 illustrated the link between all elements of monitoring and evaluation through inputs, activities, outputs, outcomes and impacts. Careers Scotland has to get smarter at demonstrating the outcomes from its intervention so that this information can be used to calculate the impact that the organisation has on the economy and society through helping individuals to develop their career planning skills. By providing the evidence that is needed to support the inferential statements on outcomes, Careers Scotland will then be able to use this evidence to model impact as shown in Section 3.

The findings from this stage of the study are organised under the following three headings:

- i. **Options for Changes to System** – suggestions on how the performance management system (including the Insight CRM system) can be adapted or revised in order to ensure that it is ‘fit for purpose’ moving forward and can provide Careers Scotland with the management information it requires to be able to monitor its impact to best effect.
- ii. **Development of Performance Management** – identification of the performance measures that can be used by Careers Scotland to clearly articulate its impact on individuals, communities and the economy, including suggested changes to the performance management system.
- iii. **Requirement for Longitudinal Tracking** – recommendations on the best means of measuring client outcomes over time, and where appropriate linking into existing mechanisms.

#### 4.3.2 Options for Changes to System

Careers Scotland has a client tracking system to record performance information – *Insight*. This system is designed so that staff can record all their activity with clients, not just that relevant to particular KPIs or PMs. Performance reports are extracted from Insight on a monthly basis. The data is then entered into *PB Views*. This is the system used by Careers Scotland to monitor its performance against targets. Managers can then report their team’s

performance against targets monthly, with a commentary to explain any variance against planned targets.

The *Insight* system contains a wealth of information on Careers Scotland's performance, but this is not reflected in the current reporting of monitoring information. It appears to be a time-intensive process to create new reports, so Careers Scotland should consider whether this process could be in any way simplified to allow the system to be more responsive to the needs of the organisation.

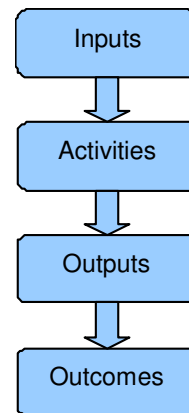
Any monitoring system for an organisation of this nature should be capable of providing the following information:

What are the **inputs** into Careers Scotland?  
Financial  
Non-financial

What are the **activities** of Careers Scotland?  
Products and services delivered

What are the **outputs** from this activity?  
Number of schools and individuals engaged

What are the **outcomes** from this activity?  
Positive outcomes  
Negative outcomes



By organising monitoring information in this way it is possible to gain an understanding of the ways in which the variables interact, for example to consider which activities produce the greatest outputs and to assess value-for-money in terms of where best to target inputs to produce the best outcomes.

In terms of current gaps in the information collected, building upon the discussion above, we would recommend the Careers Scotland should make the following changes to the monitoring information collected:

- **Inputs** – In order to monitor value-for-money effectively in the future, Careers Scotland has to be able to clearly demonstrate the inputs (both financial and non-financial) into its various strands of activity. This should be monitored both geographically and by product/service type.
- **Socio-economic data** – The evidence of the outcomes from the provision of career guidance described in the previous section of the report clearly shows the huge influence of socio-economic factors in determining outcomes. The CRM system does not currently collect this data. One option would be to use the postcode data currently collected as a proxy by linking to the Index of Multiple Deprivation (IMD).
- **Client Achievement Summary** – The CAS is currently under review following an evaluation carried out by Hoolet Ltd in March 2006. One of the findings of the evaluation was that feedback from careers advisers indicated that the CAS was not very user-friendly. The CAS presents a valuable way of gathering information on the employability and softer skills outcomes from career guidance. The tool should be simplified to encourage its roll-out across all client groups. The issue of how to use

this valuable information on individuals' distance-travelled to report at the national level should be addressed. It is outwith the scope of this piece of work to develop a reporting mechanism. However, there is a range of work being undertaken on the measurement of soft outcomes by a number of other organisations, and Careers Scotland should liaise with partner organisations to tie into any relevant work. For example, work in which DTZ has been involved in on behalf of the Scottish Executive on the Supporting People programme has looked at developing an outcomes reporting framework based on an assessment of the "number of places" travelled by clients. There are valuable lessons to be learned from work such as this, which could help Careers Scotland to progress in this area.

- **Career Plan of Action** – The Career Plan of Action enables the adviser and client to have an agreed record of key points in their discussion and the actions expected of each party: for example the agreed skills needed to take forward career planning and the associated benefits, with reference to what the next stage is and how it supports the progress to make a well-informed and realistic decision. This tool should be extended for use across Careers Scotland's client base to allow the organisation to effectively capture information on individuals' career planning journeys.

#### 4.3.3 Identification of Performance Measures

Careers Scotland's Performance Management Guidelines (2006) sets out the processes and systems in place to allow the organisation to measure its performance against set objectives. Targets have been set against the priorities of the organisation, with the aim that team level targets will allow staff to see how their work contributes to the overall performance of Careers Scotland through the delivery of its products and services. The Key Performance Indicators (KPIs) and Performance Measures (PMs) were radically reduced for 2006/07 to 8 KPIs and 38 PMs. There was also a greater emphasis placed on the quality of services delivered rather than the volume of services. The current KPIs are shown in Table 4.1 and the PMs in Appendix C.

**Table 4.1 – Careers Scotland KPIs**

Key Performance Indicators	Actual Figures (as at end February 2007)
SLDR % Positive Outcomes	84.7%
LEA Pupils engaging	233,999
LEA Schools engaging	1,681
NEET individuals engaging	10,869
NEET clients employability options uptake	83.7%
NEET client EET sustainability uptake	69%
NEET client progressions uptake	59.6%
Unique individuals engaged in career planning	181,503
Source: Careers Scotland	

These KPIs and PMs are concentrated on the activities and outputs area of the conceptual impact model. However, the *Insight* system has the potential to move Careers Scotland's Performance Management into the outcomes end of the monitoring process. It is evidence of the outcomes from the career guidance activity of Careers Scotland that will help the organisation to demonstrate its true value to the economy and society moving forward.

The KPIs and PMs for the organisation to monitor its performance should be clearly linked to the priorities of Careers Scotland. Furthermore, they should be explicit in describing the outcomes being measured: for example, **hard outcomes** such as people into full time

employment, people into FE/HE, people into training; and **soft outcomes** such as people demonstrating increased confidence or improved motivation.

Furthermore, the priorities of Careers Scotland that guide its activity should be linked to the aims and objectives of the organisation rather than to particular client groups as was the case with the previous set of priorities.

In general, there is scope for greater clarity in the terminology used, both in terms of an understanding of what is required to measure **performance** rather than **activity** levels.

This study has also involved detailed discussion on the distinction between career guidance and career planning. **Career guidance** is the main focus of what Careers Scotland is about. Its aim is to help individuals to develop their **career planning** skills so that they are able to make well-informed and well-thought-through career decisions throughout their lives. These two terms are not used consistently in Careers Scotland literature and this should be remedied in order to give greater clarity to what it is that the organisation does and the value of this activity.

Another means of improving the clarity of the performance management of Careers Scotland is in undertaking a review of career guidance **products and services**. There are a plethora of products and services under the umbrella of Careers Scotland and it is not immediately clear how they all fit together. There appears to be potential to **rationalise** the number of products and services. This would enable Careers Scotland to more easily articulate its impact by relating the impact back down the monitoring chain to outcomes, outputs, activities and inputs.

#### 4.3.4 **Requirement for Longitudinal Tracking**

Since June 2006, Careers Scotland has conducted a follow-up survey with a sample of customers to gather information on their level of satisfaction, reasons for contacting Careers Scotland, opinions of the services received and what they learned from their contact. Analysis undertaken in December 2006 (Careers Scotland, 2007) showed that the sample size stood at 3362. The balance of the respondents in relation to age was 73% under 20 year olds and 27% 20 or over.

The analysis found that the overall level of satisfaction remained high at 96%. The most common reason for all service users contacting Careers Scotland across all age groups was to find out about employment/training/education opportunities, with 'planning my future' being the second most common reason for both age groups.

In terms of learning, it appeared that the majority of service users do learn something from their contact with Careers Scotland. Furthermore, those acting on their learning or who plan to act on their learning remained high. However, we would argue that there is a more fundamental issue for the use of the follow-up survey moving forward. The survey should be asking clients about what they have actually done as a result of receiving careers guidance support. Satisfaction levels are high; therefore, it makes more sense to target resources to **establishing the outcomes** from career guidance intervention than to confirm that clients remain satisfied.

Following on from recommendations made by DTZ (2006) in evaluating the Redundancy Advice Service (RAS) relating to the inclusion of follow-up questions addressing the influence of the support on outcomes, this learning has been disseminated, and it is our understanding that the follow-up survey in future will take account of this good practice.

In addition, as noted in section 4.2.1, the majority of evaluations of Careers Scotland's activity are focussed on measuring client satisfaction or the immediate outcomes from activity. In commissioning evaluations in future, Careers Scotland should give guidance on the importance of establishing the **longer-term outcomes** and **wider impacts** that could potentially be realised from career planning.

This study has demonstrated the use that can be made of existing sources of data in order to provide evidence that career planning leads to series of outcomes which can then be translated into impact on the economy and society. Careers Scotland is already involved in undertaking the School Leaver Destination Return (SLDR) and is part of discussions on the future shape of the SSLS. The ongoing tracking of school leavers that is undertaken through this mechanism can provide Careers Scotland with access to data that will enable it to measure the longer-term outcomes from its activity.

Given the expense involved in designing a bespoke longitudinal survey with a sample size large enough to allow robust analysis, we would recommend that Careers Scotland continue to play a role in shaping the future questions for inclusion in the SSLS.

The nature of the survey allows Careers Scotland to control for factors such as gender, age and socio-economic background and to be able to compare outcomes for individuals who have received some form of career guidance against those who have not. In effect, therefore, the survey has a built-in **control group** capacity.

Given Careers Scotland's involvement in the survey, there is likely to be an opportunity to influence the format of the questions moving forward and to modify them where necessary, thus enabling the survey to provide a more robust **evidence base** in order to demonstrate the value of Careers Scotland activity. Consideration could be given to the SSLS operating a baseline other than S4 to reflect the fact that the majority of young people now remain at school beyond their statutory leaving date.

#### 4.4 Potential Areas for Future Research and Management Data Collection

The mapping of evidence against the inferential statements in Section 3 flagged up several areas where there is either evidence suggesting that there is no link between career planning and the outcome or that there is not enough evidence currently available to support the inference. Areas that Careers Scotland should consider investigating further include:

- The link between career planning, sustainability of choices and retention rates in education and training;
- Link between career planning, increased motivation and improved job tenure and /or increased productivity; and
- Careers Scotland in association with partner organisations should investigate the wider social benefits of career planning including health benefits and reductions in crime in order to set shared outcomes.

## **5 Conclusions and Recommendations**

### **5.1 Introduction**

This final section of the report concludes with a brief summary of the impact of Careers Scotland. A series of recommended actions for amending and developing the performance management of Careers Scotland were presented in Section 4. These actions are prioritised below. Finally, the communication of the impact both internally and externally is discussed.

### **5.2 Impact of Careers Scotland**

The evidence for the outcomes from career planning skills imparted through the provision of career guidance was presented and reviewed in Section 3. This evidence was then used to model the impact of Careers Scotland. It is recognised that this is a “first cut” at quantifying the impact, which has never been done before, and it is intended as a starting point for Careers Scotland to move forward from and develop as its performance management system matures.

The contribution of career guidance to the Scottish economy has been estimated by assuming workforce participation is unaffected for those from professional or managerial backgrounds, but that workforce participation among young people from lower socio-economic backgrounds improves for those receiving career guidance. We have used recent information relating to the uplift in wages arising from improved qualification outcomes. Therefore, the learning GVA impact is also presented (based on the qualification uplift outlined in the relevant literature and Scottish School Leavers Survey).

Finally, an initial estimate of social costs (avoided) related to health, crime and social security costs has been provided based on per capita costs stated in the literature. The social costs are based on inferential data and should be taken as indicative only.

Our impact estimates suggests career guidance has an impact of around £250 million per annum. In evaluating the impact of career guidance we have considered the balance of evidence across a range of studies and variety of information. Although these are first steps towards a more robust impact, the impacts presented are based on similar approaches and level of detail used to develop economic impact indicators by Scottish Enterprise and the Scottish Executive.

### **5.3 Performance Management Action Plan**

We made a number of suggestions in Section 4 on areas for Careers Scotland to consider in developing a more robust and effective performance management system. We have prioritised these into short, medium and long-term actions below (recognising that some actions will commence once the options appraisal on the future of Careers Scotland has been finalised - these actions have been put into the medium term):

#### **Short Term Actions**

- Redefinition of organisational aims, objectives and priorities
- Review of Insight data and classification into Inputs-Activities-Outputs-Outcomes
- Investigation of means of reporting on CAS data
- Communication with SSLS on potential for future collaboration



### **Medium Term Actions**

- Review of products and services
- Development of new PMs and KPIs
- Development of new performance management guidelines
- Investigation of stakeholder/partner organisations' monitoring and reporting systems
- Piloting of the CAS reporting system
- Review of customer follow-up survey content

### **Long Term Actions**

- Roll-out of the CAS to all clients
- Gathering of outcome data from evaluations

## **5.4 Communication Plan**

The study brief requested guidance on '*how best to articulate the impact and value of career planning*'. This applies to both Careers Scotland management and staff and stakeholders. We would also argue that there is a clear role in the articulation to a wider audience and the management of press and PR. We have designed the presentation of the outcomes and impact of Careers Scotland to be clear and transparent to allow the organisation to communicate this important work internally and externally.

A wide range of good practice has been identified throughout the report and this concluding sub-section provides DTZ's advice on how best to disseminate it. Our communication proposals represent the views of DTZ and it is recommended that these proposals be discussed with the Careers Scotland Senior Management Team (SMT), and that an agreed Communication Plan is approved for roll-out.

DTZ recommends a 'layered approach' to dissemination and communication:

- Level 1 – communication of report findings
- Level 2 – preparation of 'good practice pack'
- Level 3 – training and development support
- Level 4 – continuous improvement

### **5.4.1 Level 1 – Communication of Report Findings**

**Objective** – to ensure the findings of the impact study are communicated effectively to internal and external stakeholders and a wider audience.

**Tasks:**

- i. Issue hard copy reports to the SMT with a covering note from the Head of Career Guidance – responsibility of Careers Scotland.
- ii. Issue of electronic copy reports to other key senior staff within Careers Scotland with a covering note from the Head of Career Guidance – responsibility of Careers Scotland.
- iii. Presentation of the findings to the SMT to review and 'sign-off' on the high level issues and recommendations highlighted in the report – for example, changes to the performance management system - responsibility of Careers Scotland with potential input from DTZ.

- iv. Preparation of a shorter summary paper for dissemination to Careers Scotland staff – responsibility of Careers Scotland with potential input from DTZ.
- v. A series of regional briefing sessions to which staff are invited to review the findings and ask any questions for clarification. Possible use of break-out groups to review recommendations by topic - responsibility of Careers Scotland with potential input from DTZ.
- vi. Preparation of a shorter summary paper tailored as appropriate to be bespoke for each organisation, for dissemination to Careers Scotland stakeholders – responsibility of Careers Scotland with potential input from DTZ. DTZ would also be willing to provide bespoke feedback to stakeholders if appropriate.
- vii. Careful consideration of how best to manage and control the key messages that are taken from the study by the wider sector through use of press and PR.

**Outputs** – clarity within Careers Scotland, its stakeholder and the wider sector on the key findings of the study, and confirmation and further development of the key recommendations that the organisation would like to take forward.

#### **5.4.2 Level 2 – Preparation of Good Practice Pack**

**Objective** – to produce good practice guidance in an easy to communicate and user-friendly format to assist Careers Scotland staff in undertaking monitoring activity.

**Tasks:**

- i. Select the recommendations that Careers Scotland wishes to take forward and summarise them in a high quality folder format with inserts – one page per good practice theme, the top half covering good practice guidance and the bottom half giving real life examples. This publication should be complementary to, and supportive of, the revised Careers Scotland Performance Management Guidelines. It should be communicated via hard copy to the regions and available on-line - responsibility of Careers Scotland with potential input from DTZ.
- ii. Incorporation of this material into the planning and design of staff training and development within the organisation – responsibility of Careers Scotland.

**Outputs** – ready access to a range of good practice guidance, case studies and documentation which can be used in the induction, training and development of Careers Scotland management and guidance staff.

#### **5.4.3 Level 3 – Training & Development Support**

**Objective** – to disseminate and embed good practice through training and development

**Tasks:**

- i. A review of the implications of the good practice guidance for training and development within Careers Scotland, and to embed good practice in day-to-day management and delivery - responsibility of Careers Scotland.
- ii. Careers Scotland to open up communication channels with its stakeholders. The objective would be to assess the feasibility of integrated monitoring and evaluation tools to achieve economies of scale, and to exchange good practice for the benefit of all - responsibility of Careers Scotland and its stakeholders.

**Outputs** – the organisation working collaboratively in the exchange of good practice in the monitoring of career guidance and embedding this within their training provision and guidance material.

#### 5.4.4 Level 4 – Continuous Improvement

**Objective** – to ensure that the momentum of this study is maintained through a process of continual challenge to, and enhancement of, performance management in Careers Scotland.

**Tasks:**

- i. Formation of a ‘Community of Practice’ (CoP) to take ownership and lead the on-going development of good practice in performance management. The CoP should involve representation from all levels of staff. However, it is recommended that senior management should be involved, as this group needs to be led from the top. The CoP would meet on a regular basis - responsibility of Careers Scotland.
- ii. Dissemination of good practice from the CoP could involve all of the following:
  - Regional Managers to share good practice – this could work both ways: an exemplar region/centre helping a struggling region; or the Regional Manager of a struggling region/centre visiting a good practice region/centre.
  - Representative from good practice regions/centres presenting at events, seminars or annual meetings of Careers Scotland.
  - Regional task groups being formed to share good practice and learn from each other.
- iii. It is recommended that the CoP use an electronic ‘noticeboard’ via an intranet. This would enable staff to share experience across the organisation as part of a process of continuous improvement on a restricted access basis. Thought would have to be given as to the access restrictions and the other organisations and representatives that could share in this communication medium. For example, it would be possible to allow selected access to stakeholder organisations.

**Outputs** – an embedded culture of continuous improvement within Careers Scotland, that recognises the importance of performance management, allocates responsibility and ensures effective action is taken to keep Careers Scotland at the forefront of good practice.

## Appendix A – Reference List

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## Appendix B - Data Tables

**Table 1: Type(s) of career guidance in S4 at school and main activity eight years later**

	Talked alone with CA, Spoken to by CA and Visited Careers Office	Talked alone with CA and Spoken to by CA	Spoken to by CA and Visited Careers Office	Talked alone with CA and Visited Careers Office	Talked alone with CA	Spoken to by a careers advisor	Visited a careers office	None
Employed	74%	83%	67%	74%	85%	78%	87%	76%
Unemployed	3%	2%	11%	2%	1%	3%	7%	3%
Full-Time Training or Education	14%	9%	14%	15%	7%	15%	<1%	13%
Other	9%	5%	8%	10%	8%	4%	7%	8%

**Table 2: Father's socio-economic group and main activity of school leavers eight years later**

	Professional & Managerial	Other Non- Manual	Skilled Manual	Semi-Skilled Manual	Unskilled Manual	Unclassifiable	Total
Employed	76%	83%	80%	89%	88%	70%	79%
Unemployed	2.1%	1.7%	2.6%	0.8%	4.0%	6.0%	2.6%
Full-Time Training or Education	16%	12%	11%	4%	<1%	13%	12%
Other	6%	3%	7%	6%	8%	12%	6%

**Table 3A: Type(s) of career guidance in S4 at school, father's socio-economic group and main activity of school leavers eight years later**

Leaver activity \ Father SEG	Talked alone with CA		Did not talk alone with CA	
	Professional & Managerial	Other	Professional & Managerial	Other
Employed	78%	81%	73%	78%
Unemployed	1.7%	2.0%	3.0%	4.7%
Full-Time Training or Education	15%	10%	19%	12%
Other	5%	8%	6%	5%

**Table 3B: Type(s) of career guidance in S4 at school, father's socio-economic group and main activity of school leavers eight years later**

Leaver activity \ Father SEG	Spoken to by a CA		Not spoken to by a CA	
	Professional & Managerial	Other	Professional & Managerial	Other
Employed	75%	81%	83%	80%
Unemployed	1.9%	3.0%	1.7%	1.7%
Full-Time Training or Education	18%	10%	7%	11%
Other	5%	7%	9%	8%

**Table 3C: Type(s) of career guidance in S4 at school, father's socio-economic group and main activity of school leavers eight years later**

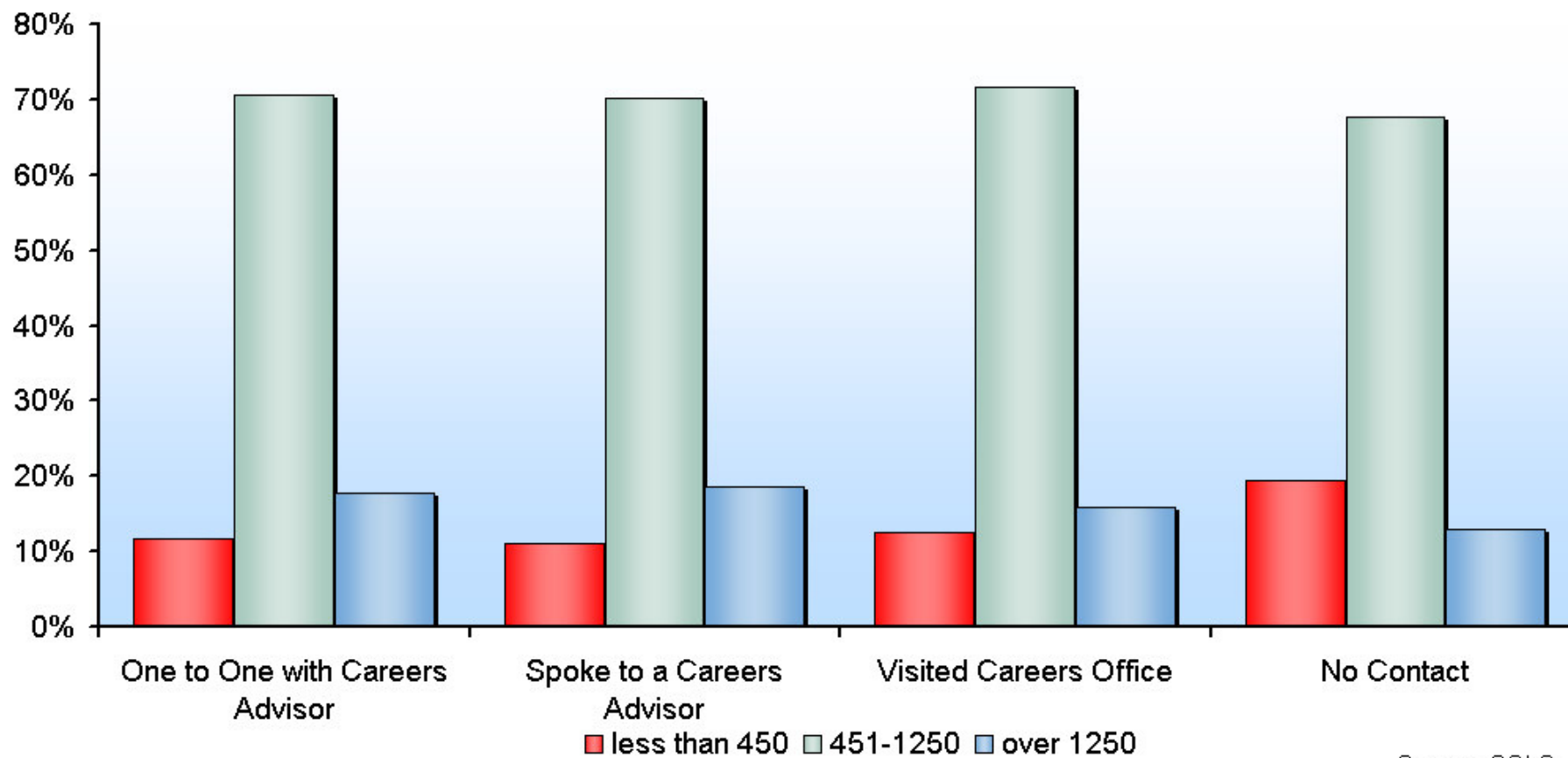
Leaver activity \ Father SEG	Visited a careers office		Not visited a careers office	
	Professional & Managerial	Other	Professional & Managerial	Other
Employed	73%	73%	77%	83%
Unemployed	<1.0%	4.8%	2.7%	2.1%
Full-Time Training or Education	24%	11%	14%	9%
Other	3%	10%	6%	5%

**Table 3D: Type(s) of career guidance in S4 at school, father's socio-economic group and main activity of school leavers eight years later**

Leaver activity \ Father SEG	Spoke alone with a CA, spoken to by a CA and visited a careers office		Not spoken alone with a CA, spoken to by a CA or visited a careers office	
	Professional & Managerial	Other	Professional & Managerial	Other
Employed	77%	78%	76%	74%
Unemployed	2.7%	2.8%	<1.0%	3.5%
Full-Time Training or Education	16%	9%	14%	12%
Other	4%	11%	10%	11%



Figure 4: Type(s) of career guidance in S4 at school and income (£) of school leavers eight years later



Source: SSLS

**Table 5A: Type(s) of career guidance in S4 at school, father's socio-economic group and highest qualification of school leavers eight years later**

	All school leavers		Not spoken alone with a CA, spoken to by a CA or visited a careers office	
	Professional & Managerial	Other	Professional & Managerial	Other
None	2%	7%	<1%	15%
Standard Grades	2%	11%	<1%	13%
Level 1-2	2%	8%	<1%	6%
Highers	11%	14%	<1%	20%
Level 3	3%	6%	<1%	4%
Level 4-5	13%	19%	*	15%
Ordinary degree	13%	10%	*	4%
Honours or higher degree	54%	26%	73%	24%

Note: The number of observations showing outcomes for professional and managerial backgrounds was low, but is provided for consistency with other tables

## Appendix C – Careers Scotland Performance Measures

Performance Measures	Relevant KPIs
PM1: Number of schools engaged PM2: Number of participants engaged PM3: Number of education and community partners receiving CPD PM4: Number of businesses engaged PM5: Number of business facilitators engaged PM6: Number of sessions	KPI 1: Positive destinations of school leavers. KPI 2: Local Authority Pupils P1 – S6 engaging. KPI 3: Local Authority Schools engaging.
NEET Avoidance PM 7: Clients participating – split by age gender and ethnicity. PM 8: Clients progressing into employment, education and training PM 9: Clients sustaining an opportunity for at least 3 months PM 10: Clients sustaining an opportunity for at least 6 months PM 11: Clients sustaining an opportunity for at least 12 months NEET reduction PM12: Number of Keyworked clients engaged with key workers by client definition PM13: Number of Keyworked clients engaged in employability options PM14: Number of Keyworked clients progressing into employment, education and training PM15: Number of Keyworked clients sustaining an opportunity for at least 3 months Client Achievement Summary PM16: Number of clients with a Client Achievement Summary by project PM17: Number of clients demonstrating progression through the CAS Get Ready for Work PM18: Number of GRfW Action Plans completed PM19: Number of GRfW Initial Reviews completed PM20: Number of GRfW On-going Reviews completed PM21: Number of GRfW Pre-Exit Reviews completed PM22: Number of GRfW Training Plans amended	KPI 4: NEET clients engaging KPI 5: NEET clients accessing employability options KPI 6: NEET clients progressing into employment, education and training KPI 7: NEET clients sustaining an opportunity for at least 3 months
Redundancy Advice Service PM23: Number of clients accessing career planning services from RAS by age, gender and ethnicity, qualification level and by size of employing company, and by PACE response. PM24: Number of RAS clients entering training to up-skill or re-skill PM25: Number of RAS clients securing employment with their existing employer PM26: Number of RAS clients securing appropriate employment within 6 months of becoming redundant Other Performance Measures PM 27 Number of clients from the Future Workforce	KPI 8: Number of unique individuals engaging with Careers Scotland in career planning split by age, gender and ethnicity.

PM 28 Number of clients In Work/Training PM 29 Number of clients from Minority Ethnic Communities Website PM30: Level 1 (access to website) - Visitors accessing Careers Scotland through the website split into New and Returning visitors PM31: Level 2 (registration) - Clients registering with the website. PM32: Level 3 (access to products) - Clients engaging in career planning through the website PM33: Clients accessing Careers Scotland through the Customer Contact Centre, PM34: Total clients engaging in career planning through the customer contact centre PM 35: Clients followed up by Customer Contact Centre. PM36: People attending events organised by Careers Scotland PM37: Clients engaging in career planning at these events PM38: Callers into Career Scotland Centres (split by self help and assisted level of intensity).	
Source: Careers Scotland	