COST OF PROVISION FOR
DISADVANTAGED LEARNERS
FINAL REPORT
November 2002

BEN JOHNSON-HILL ASSOCIATES LTD Jarodale House, 7 Gregory Boulevard, Nottingham NG7 6LB

### Liability

In preparing this report Ben Johnson-Hill Associates Limited (BJHA) has taken great care to verify that the information contained herein is accurate. In doing so it has had recourse to a great deal of information provided by colleges in the FE college sector. Any action taken as a result of this benchmarking information is the sole responsibility of the LSC, and BJHA cannot share any responsibility for these actions.

## CONTENTS

.

## Page

# **1** Executive Summary

1.1	Aims of Projecti
1.2	Methodologyi
1.3	Main Conclusions Reachediii
1.4	London Weighting Factorv

# 2 Detailed Analysis

2.1	Higher Direct Teaching Costs	1
2.2	Higher Non-Teaching Costs	6
2.3	Lower Income Due to Lower Retention	9
2.4	Lower Income Due to Lower Achievement	11
2.5	London Weighting Factor	13

-

# **3** Appendices

Appendix 1 – Invitation from LSC to carry out the research project
Appendix 2 – BJHA proposal to carry out work
Appendix 3 – Security costs per Inflated Unit
Appendix 4 - 16-18 FT Learners - Average Loading per Learner Started
Appendix 5 – 16-18 FT Learners – Average BJHA Retention %
Appendix 6 – 16-18 FT Learners – Average BJHA Achievement %
Appendix 7 – Direct Teacher Pay Costs per Inflated Unit

# **SECTION 1**

# **EXECUTIVE SUMMARY**

.

#### **1 EXECUTIVE SUMMARY**

In this Executive Summary, we recap on the aims of the project, we comment briefly on the methodology of the research, and we summarise the main conclusions reached. We also briefly discuss the London weighting.

### 1.1 Aims of Project

In outline, the aims of the project were to identify those extra costs and any loss of income which were directly attributable to having disadvantaged learners within a college. Full details of the brief are set out in the letter from Geoff Daniels to BJHA, as shown in Appendix 1. Our proposal to carry out the work, which was later accepted by Geoff Daniels, is enclosed in Appendix 2.

### 1.2 Methodology

The research work has been carried out in a number of separate phases, as described below.

- (a) We obtained clearance from the BJHA client base to use cost data held in BJHA's FE College Total Benchmarking database; as planned, agreement was obtained from 40 plus colleges which had been benchmarked recently; there were sensitivities from principals about the declaration to the LSC of individual college's results and of specific levels of cost; we have been able to do the research work without compromising these sensitivities.
- (b) We used the Total Benchmarking data to investigate every area of staffing and cost across all colleges; for every area, we plotted graphs of cost against WP level; for example, for the total cost of security, we plotted each college's expenditure (per learner FTE and per LSC unit generated) against its average WP level; from these graphs, the computer generated the lines of best fit. One of these graphs is shown in Appendix 3.

- (c) In parallel to this, we investigated the ISR data from 40 colleges in order to determine the effect of WP levels for each category of learner on:-
  - loading of learners FTEs (with BOPUs);
  - retention of learners;
  - achievement of learners.

Example graphs, showing the above, are included in the Report, for 16-18 full time learners, in Appendices 4, 5 and 6.

From all this, as shown in the detailed text, we calculated the relationship between increasing WP levels and reductions in income. In fact, after discussion with the NRAG committee, we chose to disregard the affect of loading on the reduction of income.

- (d) We have also considered the implications of all the above on London Weighting Allowance.
- (e) Finally, a special sub-committee, involving principals from high and low WP colleges together with John Bolt and BJHA, was formed to consider the results. The findings of this sub-committee form the basis of the conclusions.
- (f) In Section 2 of the Report, Detailed Analysis, we take the reader through the detailed steps in the analysis.

#### **1.3 Main Conclusions Reached**

We summarise the conclusions under four main headings, namely 'higher direct teacher costs', 'higher non-teaching costs', 'lower income due to lower retention', and 'lower income due to lower achievement'; and then we bring all four sets of results together so as to draw conclusions for colleges overall. In every case we look at the effect of moving from a WP level of 1.000 to 1.080. We also draw conclusions regarding the London Weighting Factor.

#### (a) Higher Direct Teaching Costs

The BJHA databank showed an average increase in teacher cost of 11% or £0.95 per LSC unit; this was equivalent to £162 per learner FTE.

The special sub-committee contemplated all the factors which impacted on teaching cost; these were the cost weighting factor, the average salary levels paid to establish staff and to part-time/agency staff, the "intensity" of teaching, the average class size, and the average teacher utilisation. Making allowances for all of these factors, it concluded that the effect of high WP was to raise direct teaching costs by 8% or by £0.69 per LSC unit; this was the equivalent of £117 per learner FTE.

#### (b) Higher Non-Teaching Costs

The initial databank analysis showed 17 items of cost which increased with WP level; in total these summated to £228 per unit on £388 per learner FTE. The databank analysis also showed a wide range of costs which decreased with WP level; in total, these summated to £0.94 per unit of £160 per learner FTE.

After considerable contemplation, the special sub-committee concluded that the net effect of WP on non-teaching costs was to increase costs by  $\pounds 1.43$  per unit or by  $\pounds 243$  per learner FTE.

(c) Lower Income due to Lower Retention

The analysis of college ISRs confirmed the significant link between increasing WP levels and decreasing retention. For instance, the analysis showed that, for 16-18 full time learners, the average retention reduced by 2.5% from 90.3% to 87.8%. This lost retention brought with it lost income from most categories of LSC units, including from basic on-programme units and from achievement units.

The net effect of this loss of income was £0.47 per LSC unit or £80 per learner FTE, whether the college was sixth form, tertiary or general FE.

#### (d) Lower Income due to Lower Achievement

After taking into account the lost achievement units due to lower retention (in (c) above), our analysis showed that there was a further loss of achievement income due to the lower levels of achievement reached in high WP colleges. For instance, for 16-18 full time learners, the percentage achievement of completing learners fell by 9.0% from 78.5% to 69.5%. In income terms, the effect of this lower achievement was approximately  $\pounds 0.06$  per unit or £11 per learner FTE.

#### (e) Combined Effect of Higher Costs/Lower Income

The combined effects of (a), (b), (c) and (d) above, for an increase in WP level from 1.000 to 1.080, is set out in the table below.

ltem	£ per	£ per
	LSC Unit	Learner FTE
Higher Direct Teaching Costs	£0.69	£117
High Non-Teaching Costs	£1.43	£243
Lower Income due to Lower Retention	£0.47	£80
Lower Income due to Lower Achievement	£0.06	£11
Total WP Effect per Learner FTE	£2.65	£451

Therefore it was concluded that the full effect of WP, over the widest range of WP levels, from 1.000 to 1.080, was equivalent to  $\pounds 2.65$  per LSC unit or  $\pounds 451$  per learner FTE.

#### 1.4 London Weighting Factor

Based on our small sample of six London colleges, and assuming extra WP income was paid to colleges in line with the findings in this Report, it was calculated that the current London Weighting Factor might be overly generous. BJHA recommend that, if the London Weighting Factor was to be seriously reconsidered, then the analysis would need to involve a larger sample of London colleges, perhaps 15 rather than 6.

.

# **SECTION 2**

# **DETAILED ANALYSIS**

## 2 DETAILED ANALYSIS

We review our findings in four main sections: higher direct teaching costs, higher nonteaching cost, lower retention income, and lower achievement income.

### 2.1 Higher Direct Teaching Costs

#### (a) Overall Rise in Teaching Cost with WP

Overall, when we plot the cost of direct teaching per unit against the widening participation factor (as shown in Appendix 7), we see a cost increase of 11% or £0.95 per unit as we move from a WP of 1.000 to 1.080. This cost increase is the equivalent of £162 per learner FTE.

#### (b) Factors Which Effect Teacher Cost

There are a number of factors which impact on teacher cost, as set out below; we also show how each factor changes between WP of 1.000 and 1.080.

FACTOR	% Change from WP
	of 1.000 to 1.080
Cost Weighting Factor	+ 10.3%
Average Salary Established Staff	+ 22.0%
Average Salary Hourly Paid/Agency Staff	+11.6%
Intensity (BOPU per GLH)	- 2.4%
Class Size	+13.5%
Teacher Utilisation	- 9.3%
Other Units	- 2.6%

The relationship between the above factors is complex and is outlined in a chart on the following page.

#### ELEMENTS WHICH EFFECT DIRECT TEACHING COST



(c) Are Changes in Each Cost Factor caused by an Increase in WP?

The special sub-committee considered whether certain changes in cost are directly attributable to increases in WP. In general, colleges with high WP are found in city centres and they are therefore normally larger than those elsewhere. Such colleges normally pay higher teaching salaries; however, they can also enrol more learners per course and so class size is usually higher. It is these sorts of complications that were considered by the special sub-committee.

Bearing in mind the above, the following conclusions were reached:-

- Cost Weighting Factor: it was considered that the type of courses usually studied by disadvantaged learners were those that attracted a higher weighting; this effect is therefore thought to be a justified cost of WP;
- Average Salary of Employed Staff: as discussed above, the majority of high WP colleges are in inner cities where average salaries are higher; this increase is thought to be a justified cost of WP;
- Average Salary of hourly paid staff: again this increase is thought to be a justified cost of WP;
- Teaching Intensity (BOPU per GLH): a decrease in intensity produces an increase in course length; this effect is thought to be a justified cost of WP;
- Class size: the increase in class size is likely to be due to an average increase in college size as WP increases; this effect is thought to be a justified cost of WP;
- Teacher utilisation: a decrease in lecturer utilisation would suggest that the lecturers in high WP colleges have a heavier non-teaching workload which may be related to disadvantaged learners; we therefore presume that this is a valid extra cost of WP;
- Other Units: the results show that, as you move towards a high WP, there is a small decrease in the number of enrolment units, fee remission units, achievement units and tuition fee equivalent

units earned; we investigated this element under loss of income in Sections 2.3 and 2.4 and therefore to avoid double accounting we remove this element from the overall direct teacher cost.

#### (d) Conclusion of Direct Teaching Costs

From the opinion outlined above, the special sub-committee concluded that the justified direct teaching cost of moving from a WP of 1.000 to 1.080 was £0.69 per equivalent LSC unit or £117 per learner FTE. The calculation of this figure is detailed in the chart shown on the following page.

#### ELEMENTS OF DIRECT TEACHING COST ATTRIBUTABLE TO WP LEVEL



## 2.2 Higher Non-Teaching Costs

BJHA have reviewed all items of college expenditure outside of direct teaching. From our analysis, we have estimated the average change in cost per equivalent LSC unit delivered, between WP of 1.000 and 1.080. The key results of the analysis are summarised below.

#### [a] Items which increase in cost

Below we show the items which are shown to increase in cost and the amount by which they increase in £ per LSC unit.

-	Technician staff pay	£0.33
-	Curriculum development/co-ordination staff pay	£0.14
-	Library staff pay	£0.22
-	Admission staff pay	£0.14
-	Counselling/welfare/general staff pay	£0.19
-	MIS/computing management/analysts staff pay	£0.09
-	Computer support staff pay	£0.07
-	MIS data clerks staff pay	£0.18
-	Exams staff pay	£0.03
-	Stationery/photocopies	£0.03
-	Finance staff pay	£0.19
-	Reception staff pay	£0.05
-	Insurance (non-premises)	£0.02
-	Legal fees	£0.04
-	Marketing/income generation staff pay	£0.02
-	Security costs	£0.45
-	Cleaning costs	£0.09

The total average increase in cost of the above areas is  $\pounds 2.28$  per unit or  $\pounds 388$  per learner FTE.

(b) Items which Decrease in Cost

BJHA reviewed all the main items which show a decrease in cost as the WP level increases. The total decrease in cost across all non-teaching areas (when moving from a WP of 1.000 to 1.080) is £0.94 per equivalent LSC unit or £160 per learner FTE.

- (c) Opinion of which Extra Costs are Incurred as a Result of Higher WP The special sub-committee considered the increases and decreases of nondirect teaching costs.
  - The increases in costs were:
    - Technician pay costs: this increase was considered to be due to the nature of the courses usually studied by disadvantaged learners; this effect is therefore thought to be a justified cost of WP;
    - Curriculum development/co-ordination staff costs: this increase was considered to be due an increase in community based learning (disadvantaged learners are often taught away from main college sites and such teaching involves an increase in coordination and development staff); this effect is therefore thought to be a justified cost of WP;
    - Library pay costs: given the acknowledgement above, of a related increase in WP to an increase in community learning, the increase in library staff costs was thought not to be a justified cost of WP;
    - Admissions staff pay costs: this increase was again considered to be due to an increase in community provision, with disadvantaged learners more likely to enrol away from main college sites; this effect is thought to be a justified cost of WP;
    - Counselling/welfare/general staff pay costs: disadvantaged learners were considered to warrant more support than other learners, the increase in counselling/welfare/general staff costs was therefore thought to be a justified cost of WP;
    - MIS/computing management/analysts, computer support and MIS data clerks staffing pay costs: these increases were considered not to be a justified cost of WP;

- Exams staff pay costs: this increase was also considered not to be a justified cost of WP;
- Stationery/photocopies expenditure: this increase was considered not to be a justified cost of WP;
- Finance staff pay costs: this increase was considered not to be a justified cost of WP;
- Reception staff pay costs: given the acknowledgement above, of a related increase in WP to an increase in community learning, this increase was not thought to be a justified cost of WP;
- Non-premises insurance: this increase was thought to be a justified cost of WP;
- Legal fees: this increase was not considered to be a justified cost of WP;
- Marketing/income generation staffing costs: this increase was considered to be related to the difficulties in attracting disadvantaged learners to study at the college; therefore this effect is thought to be a justified cost of WP;
- Security costs: this increase was considered to be a justified cost of WP;
- Cleaning costs: this increase was considered to be a justified cost of WP.
- The decreases in costs were not thought to be a reflection of cost savings related to disadvantaged learners, but more of the need to cut back on expenditure in some areas, in order to afford to pay for the extra costs attributable to disadvantaged learners. All decreases in costs were therefore considered not to be a justified saving of WP.

#### (d) Conclusion of Non-Teaching Costs

The special sub-committee concluded that that the non-teaching costs that are attributable to high WP total £1.43 per equivalent LSC unit or £243 per learner FTE.

### 2.3 Lower Income Due to Lower Retention

BJHA considered the effect of retention on the level of income in four steps. Firstly, we analyse the level of retention across each learner cohort, secondly we apply the retention figures to the average planned income per learner FTE, thirdly we review the actual average income loss for various types of college, and finally we conclude our findings.

### (a) Average Reduction in Retention

Learner	Average Retention	Average Retention	Decrease in
Cohort	at WP Level of	at WP Level of	Retention
	1.000	1.080	
16 – 18 FT	90.3%	87.8%	2.5%
16 – 18 PT	86.5%	86.0%	0.5%
19+ FT	93.5%	90.5%	3.0%
19+ PT	93.4%	90.5%	2.9%

The average reduction in retention is set out below:-

(b) The Average Loss of Income per Learner FTE due to Retention

The average loss of income is set out below:-

Learner	Avg. Planned	Retention	Av. Loss of	Learner	Loss of
Cohort	Income per	Loss	Income per	Headcount	Income
	Learner	Due to	Learner	conversion	per
	Headcount	WP	Headcount	to Learner	Learner
				FTE	FTE
16 – 18 FT	£3174	2.5%	£79.4	1.00	£79.4
16 – 18 PT	£859	0.5%	£4.3	0.22	£19.5
19+ FT	£2597	3.0%	£77.9	1.00	£77.9
19+ PT	£464	2.9%	£13.5	0.15	£90.0

The average planned income in column 2 includes BOPU, average cost weighting factor, fee remission, achievement and tuition fees.

#### (c) Loss of Income due to Retention by College Type

We show typical mixes of learner cohorts for three different types of college:-

Learner Cohort	Sixth Form	Tertiary College	General FE
	College Learner	Learner FTEs	Learner FTEs
	FTEs		
16 – 18 FT	83.6%	51.1%	32.9%
16 – 18 PT	0.6%	2.5%	3.5%
19+ FT	4.9%	14.2%	30.1%
19+ PT	10.9%	32.2%	33.6%
	100%	100%	100%

Combining the typical mix of learner cohorts and the average loss of income per learner FTE, we set out below the expected loss of income losses per learner FTE in three different college types:-

College Type	Calculation of income loss across	Total Loss of Income	
	the four learner categories	Per Learner FTE due	
		to retention	
Sixth Form College	£66.4*+£0.1+£3.8+£9.8	£80.1	
Tertiary College	£40.6+£0.5+£11.1+£29.0	£81.2	
General FE	£26.1+£0.7+£23.4+£30.2	£80.4	

For example \*  $\pounds79.4 \times 0.836 = \pounds66.4$ 

#### (d) Conclusion of Income Loss Due to Lower Retention

We conclude that the average income loss pertaining to retention was around £81 per learner FTE, regardless of college type.

## 2.4 Lower Income Due to Lower Achievement

BJHA considered the effect of lower achievement on the level of income in four steps. Firstly, we analyse the level of achievement across each learner cohort, secondly we apply the achievement figures to the average planned achievement income per learner FTE, thirdly we review the actual average income loss for three different types of college, and finally we conclude our findings.

### (a) Average Reduction in Achievement

The average loss of reduction in achievement is set out below:-

Learner Cohort	Average Achievement	Average Achievement	Decrease in
	at WP Level of 1.000	at WP Level of 1.080	Achievement
16 – 18 FT	78.5%	69.5%	9.0%
16 – 18 PT	65.7%	63.0%	2.7%
19+ FT	81.2%	72.5%	8.7%
19+ PT	69.5%	69.5%	0.0%

### (b) Average Loss of Income per Learner FTE due to Achievement

The average loss of income is set out below:-

Learner	Avg. Planned	% Loss of	£ Loss of	Learner	£ Loss of	
Cohort	Achievement	Achievement	Achievement	Headcount	Achievement	
	Income per	Income per	Income per	conversion	Income per	
	Learner	Learner	Learner	to Learner	Learner	
	Headcount	headcount	Headcount	FTE	FTE	
16-18 FT	£177	9.0%	£15.9	1.00	£15.9	
16-18 PT	£46	2.7%	£1.2	0.22	£5.6	
19+ FT	£156	8.7%	£13.6	1.00	£13.6	
19+ PT	£23	0.0%	£0.0	0.15	£0.0	

## (c) Loss of Income due to Achievement by College Type

Combining the typical mix of learner cohorts and the average loss of income per learner FTE, we outline the typical income losses per learner FTE in the three different college types:-

College Type	Calculation of income loss	Total Loss of		
		Income Per		
		Learner FTE		
		due to loss of		
		achievement		
Sixth Form College	£13.3+£0.0+£0.7+£0.0	£14.0		
Tertiary College	£8.1+£0.1+£1.9+£0.0	£10.1		
General FE	£5.2+£0.2+£4.1+£0.0	£9.5		

### (d) Conclusion of Income Loss Due to Lower Achievement

The data shows that the average income loss pertaining to lower achievement ranges from £9.5 per learner FTE in a general FE college to £14.0 per learner FTE in a typical sixth form college. For simplicity we consider the average to be £11 for all colleges.

#### 2.5 London Weighting Factor

It has been concluded in this report that fairly sizeable cost increases and income losses are attributable to high WP levels. These cost increases/income losses relate to an equivalent on-cost of over 15% for a College with an average WP of 1.080. We understand that this is higher than the current level.

As things stand, London colleges receive extra allowance as a percentage of their ALF on top of their WP units. We comment on this.

Of the 40 colleges assessed, six were in the London Area and they had an average WP level of 1.040. Their average total operational costs per unit were £17.27. Yet our graphs suggest that, based on the results of the remaining 34 colleges, we would expect the total costs to be £16.79 for the average college with WP of 1.040. Hence the extra level of London cost, above our own average for all colleges, was £0.48 per unit. We note that the London colleges were receiving an average of 9.04% income for London Weighting; this was the equivalent of £1.63 per unit. Clearly this is over three times the extra London cost.

Our conclusion is that, if new WP allowances were introduced to colleges on the basis of the findings in this Report (i.e. at 15% for WP of 1.080), then it is likely that the extra London Weighting Factor should be reduced. However, the investigation should be widened to include more than six London colleges so as to recalculate the London Weighting.

# **SECTION 3**

# **APPENDICES**

# Appendix 1

Invitation from LSC to carry out the research project

101 Lockhurst Lane Foleshill Coventry CV6 55F

T 0845 019 4170 F 02476 703334

www.lsc.gov.uk info@lsc.gov.uk

8 April 2002

Ben Johnson Hill Managing Director Ben Johnson-Hill Associates 7 Gregory Boulevard Nottingham NG7 6LB

Learning+Skills Council

Lockhurst Lane Direct line 024 7670 3413 Direct fax 024 7670 3415

Oat Ber

## **Costs of Provision for Disadvantaged Learners**

Thank you for the opportunity to discuss issues around the costs of disadvantaged learners and for your outline note.

I would like to commission you to undertake some work on disadvantage costs to supplement the report produced by RSM Robson Rhodes for the National Rates Advisory Group. I enclose a copy of the report. The key questions we are seeking to answer are:

a) Is the overall level of funding uplift for disadvantaged enough to meet the additional costs incurred by institutions?

The average uplift in further education is 10% - we need a robust model of the cost elements linked to disadvantage and a reasonable estimate of the additional costs incurred. A further related question is whether the uplift should be applied as a percentage increase – at the moment it is applied to the programme weighted funding per student (so an engineering student gets more than an humanities student – is this justified?)

b) Is it appropriate to vary the amount of funding uplift according to the disadvantage of the learner?

At present the postcode based uplift varies from about 5% to 20% according to the DLTR index of disadvantage. Is this range reasonable or should it be wider/narrower?

To illuminate these issues we would ask you to produce evidence on:

- 1) The increased costs of meeting the needs of disadvantaged students resulting from higher than normal use of resources.
- 2) The greater loss of income per student, through lower loading of qualification aims, higher dropout, and lower achievement.

Ideally we would like to see evidence linked to groups of colleges with high, medium, and low widening participation factors, the size of the groups being sufficiently large to produce statistically significant results. The evidence should enable us to assess the match between additional costs, loss of income, and additional funding received through the widening participation factor. We understand that participation in this work is subject to agreement from client, colleges. We would also undertake to support the work with additional data from the ISR22 where appropriate.

The report on the proposed work would need to be completed in early September in order to feed into the consultation on funding rates for 2003/04. Disadvantage is one of the elements of the funding approach where changes are likely to be recommended; other elements include area costs (including London Weighting) and programme weighting.

I understand that BJH Associates does have views on the current widening participation measure and that you feel it is not at all consistent or fair from college to college. You would wish to recommend to us that a more robust basis is used in the future. Whilst this would be helpful to the Council, I would like this to form a separate or supplementary report, as the focus of the current study is on costs of disadvantage rather than the method of allocating funds.

I would be grateful if you could now work up a draft proposal to achieve our objectives. This would need to include a timetable and costs. It would be helpful if this draft could be prepared for us to discuss with you and a small number of colleagues involved in the work of NRAG in the week beginning 15 April.

I hope that this summarises our discussions reasonably and accurately. Please contact me or John Bolt for further information.

Loove

Geoff Daniels Assistant Director Funding Policy and Development

# Appendix 2

BJHA proposal to carry out work

# BEN JOHNSON-HILL ASSOCIATES LIMITED

Jarodale House, 7 Gregory Boulevard, Nottingham NG7 6LB, UK

Telephone: (0115) 955 9300 Fax: (0115) 962 5450 Email address: office@bjha.co.uk

Our ref: FEGen/LSC/GDaniels/BJH/gn

10<sup>th</sup> April 2002

Mr Geoff Daniels Assistant Director Funding Policy & Development Learning Programmes Learning and Skills Council 101 Lockhurst Iane Foleshill Coventry CV6 5SF

Dear Geoff

## COST OF PROVISION FOR DISADVANTAGED LEARNERS

Thank you for your invitation to undertake some work for you, as set out in your letter of 8<sup>th</sup> April. We have given some thought to the work we would need to undertake to provide you with the answers you need. I set these out below.

### 1. Proposed Programme of Work

There would be various elements to the project. We set these out in summary overleaf (with more detailed notes in an Appendix). Time would be critical in the project, first because of current pressures on BJHA staff time in May/June and second because of your need to complete the project by September. We have therefore added a target timescale to the programme of work. This shows that the majority of the work would be carried out in July/August.

### 2. Proposed Project Cost

Frankly we do not find it easy to estimate the consultant days for the various elements of the work. On the whole, we would not expect to do any data collection within colleges. The difficulties arise from the fact that the work will raise numerous questions, all of which will need to be dealt with. In truth, we need a lot of thinking time. Our first attempt at estimating the project cost, after allowing for the programming, the research, and the statistical aspects, resulted in an excessive estimate of consultant days. We have discounted this.

On reflection, we propose that we should charge a total fee of £2,000 plus VAT per college for the 40 colleges (including both the higher cost element and the lower income element, even if the mix of colleges in each element is different). Thus our total fee for the whole project would be 40 x £2,000 or £80,000 plus VAT. One way or another, we would deliver the full results within this charge, including travel and subsistence.

A member of the Tribal Group plc



Elements of Work		May	June	July	Aug	Sept
<ol> <li><u>Confidentiality</u> Seek permission from our college clients to use BJHA data; deal with queries.</li> </ol>						
2.	Additional Cost per Disadvantaged Learner (a) convert BJHA cost databank to a "cost per learner FTE" basis.					
	(b) select test group of, say, 40 colleges from BJHA clients.					
	[c] as necessary, obtain ISR22 data for these colleges from the LSC; run this data to measure the mix of learners, the average WP level and the average cost weighting factor for each college.					
	(d) this would be a major part of the work: for each college cost category, plot costs per learner FTE against WP levels; identify all those categories of cost affected by WP levels; consider the significance of the results.					
	(e) at the same time, plot costs per learner FTE against cost weighting factors; identify correlation if any.					
	(f) prepare evidence and overall conclusions for the LSC.					
З.	Greater Loss of Income per Disadvantaged Learner (a) with LSC, select test group of 40 colleges (20 high WP, 20 low WP); obtain ISR22s from LSC (even if we already have them).					
	(b) again a major part of work: analyse ISR22s for each college, for each main category of learner and for each area of potential loss (i.e. that due to loading, to retention, to achievement); consider the significance of the results.					
	(c) analyse effect of cost weighting factor on the loss of income; this may be significant.			,		
	(d) run two additional checks on loss of income, first by each ALI/OFSTED programme area and second by subdividing learners from different WP levels within the same college; consider results.					
	(e) prepare evidence and overall conclusions for LSC.					
4.	Reporting Bring all conclusions together; report back to LSC.					

As can be seen, May and June would be involved with preparation, July and August with all the main analysis and development of conclusions, leaving early September to report back to the LSC. There would be significant programming work involved in 2(a), 2(c), 2(d), 2(e), 3(b) and 3(c).

Page 3 Mr Geoff Daniels 10<sup>th</sup> April 2002

#### 3. Sharing of Data with LSC

There are some tricky confidentiality issues in the project. Obviously we must get agreemer from each college to use its data; we would promise complete anonymity of each college' individual results; we believe that this would be acceptable. There are also some confidentialit risks for BJHA, especially if we were to declare our databank information of the levels of staffin and cost right across college functions.

With all this in mind, we propose first that any college's individual data should be treated in stric confidence and that any data being passed to LSC would be multi-college without individua colleges' data identified. We also propose that we should only be required to declare to the LSC those categories of staffing and cost which are seen to increase with WP as well as the amount: of increase experienced in each; we should not be required to provide you with full databant printouts of all cost categories.

Geoff, I hope all this fits in with your aims. We would be setting out to provide you with a very thorough piece of research with meaningful results which you can use. We would approach the project without any preconceived notion of what these results would be. We look forward to discussing all this with you at 2pm on 18<sup>th</sup> April.

With best regards

Yours sincerely

1 Jen Drummin

Ben Johnson-Hill Managing Director

Page 4 Mr Geoff Daniels 10<sup>th</sup> April 2002

APPENDIX

### A1 Example of Individual Cost Analysis (Programme of Work 2(d))



This analysis of each cost category would enable us to determine which cost per disadvantage learner increased with increasing WP level and which did not (some might even decrease). We would produce charts of all areas found to be of significance.

### A2 Example of Chart Showing Total Extra Cost of Disadvantage



From all the individual cost charts (Chart 1), we would build up a picture of the total extra cost of disadvantage. This might be similar to our example Chart 2 above.



Page 5 Mr Geoff Daniels 10<sup>th</sup> April 2002

### APPENDIX (Continued)

### A3 Should the Extra Funding for Disadvantage be related to Basic On-Programme Units or to Weighted On-Programme Units? [Programme of Work 2[e]]

There could be a number of ways of determining this. One fairly simple approach might be simply to plot the Total Extra Cost of Disadvantage with the colleges' average cost weighting factor, as shown below:-



Colleges Av. Cost Weighting Factor

This may show no correlation (the line of best fit being a horizontal line) or a strongly sloping line, or may be something in between. It should provide your answer. We could discuss more sophisticated ways of assessing this matter.

#### A4 Loss of Income per Learner Starting through Lower Retention and Achievement, say for 16-18 FT Learners (Programme of Work 3[b])



College Av. WP level

Retention and Achievement are likely to fall away significantly with increase in WP level. Chart 4 above shows an example of how the income per learner may reduce. We shall measure this excluding and including the cost weighted element of the funding.

BEN JOHNSON-HILL ASSOCIATES LIMITED

# Appendix 3

Security Costs per Inflated Unit

Security Costs Per Inflated Unit



.

# Appendix 4

16-18 FT Learners

Average Unit Loading per Learner Started

.



#### 16-18 FT Learners - Average Unit Loading per Learner Started

# Appendix 5

16-18 FT Learners Average BJHA Retention %



### 16-18 FT Learners - Average BJHA Retention %

#### NOTE:

**BJHA Retention** - Here we use units rather than qual aims to calculate retention and show actual units against planned units. This ratio includes early and late withdrawls.

# Appendix 6

16-18 FT Learners Average BJHA Achievement %



### 16-18 FT Learners - Average BJHA Achievement %

#### NOTE:

**BJHA Achievement** - Is based upon the total of the lost achievement units through no exam/unknown and the lost achievement units through failure to achieve.

# Appendix 7

Direct Teacher Pay Costs Per Inflated Unit



.

Direct Teacher Pay Costs Per Inflated Unit