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Management Service



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Report - RS01SE

Assessing the Link between Qualifications & Occupations

Identifying if certain types of qualification have led to certain types of employment, during the NOMS CFO programme in the South East

NOMS CFO,
1100 Daresbury Park,
Daresbury,
Warrington,
WA4 4HS

Enquiries contact
the CFO Helpdesk:

Tel: +44(0)1925 423400
Fax: +44(0)1925 423500

NOMS Co-financing Research & Statistics Team November 2013

Marek Musiol
Lead Manager (Research & Statistics)

Adam Bennett
Research Statistician

marek.musiol@noms.gsi.gov.uk

adam.bennett@noms.gsi.gov.uk

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Overview

This is the first in a series of short statistical reports aimed at better understanding the nature of the participants worked with on the NOMS Co-financing programme, and the mechanisms that help move them towards employment and reduce reoffending. For more information on this report, please contact the Research & Statistics team via the CFO Helpdesk.

Data presented in this report is taken from CATS (Case Assessment & Tracking System), for the second round of the CFO programme through to October 2013. Analysis is restricted to those participants that started on the programme in the South East, attaining at least one qualification (including education/training hard outcomes) and went on to gain employment with a known occupation.

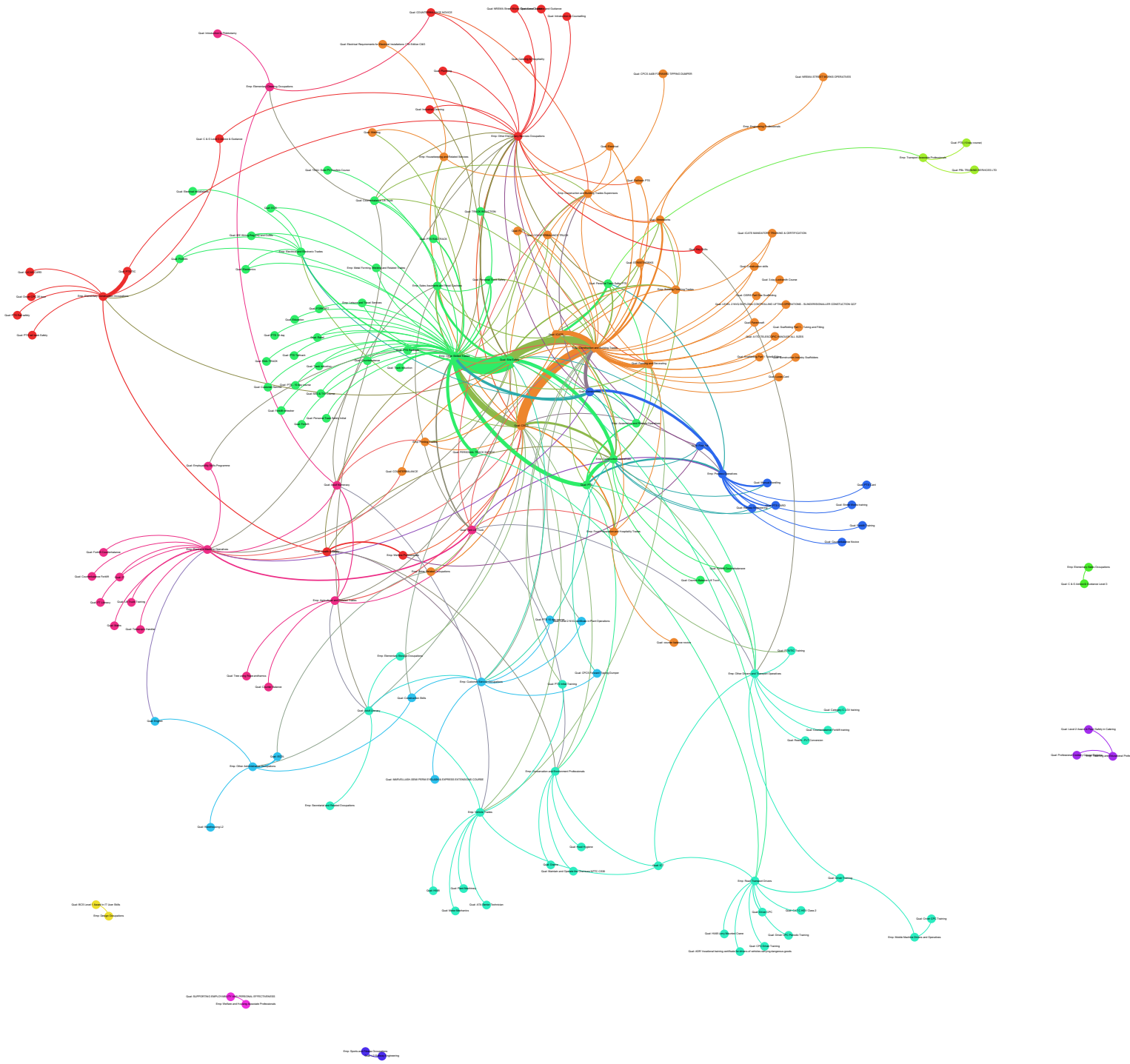
The aim of this report is to identify links between the subject nature of qualifications achieved and the occupations that have been entered. For example, we may expect that those who gained qualifications relating to health & safety to go into higher risk occupations such as construction. In contrast, we may not expect a participant who has achieved qualifications in hair & beauty to go on to gain employment in engineering. Here we use statistical analysis to identify '*clusters*' of qualifications and occupations. The qualifications in a given *cluster* are likely to lead to the occupations also assigned to that *cluster*, and less likely to lead to the occupations found in other *clusters*. This report highlights such *clusters* and describes in more detail the most prevalent *clusters*.

By studying the identified clusters of qualifications and occupations, we gain insight into how certain qualifications lead to particular occupations. We are also able to identify qualifications that may be seen as irrelevant to the type of employment gained. This judgement however is subjective and left to the reader to determine.

Results

On the next page can be found an interactive high-resolution map of the links between qualifications and occupations. This map has been made 'zoomable', so that the detail can be seen as you zoom in while capturing the entire map on a single page. Each labelled marker represents either a qualification or occupation as entered on CATS. The thicker the link between them, the more participants have achieved both that qualification and occupation. Finally, the map is colour-coded to show the different clusters found. All of the qualifications and occupations with the same colour marker have been statistically determined to have a relationship between them.

*Qualifications are presented as they are entered on CATS. As such, several spelling variations of the same qualification may be seen in the map overleaf. The decision not to 'merge' the same or similar qualifications into a standardised 'label' was both a practical and analytical one, ensuring we capture as much information about the mechanisms as possible.



Identified qualification/occupation clusters

Below are the five most prevalent qualification/occupation clusters identified in this analysis. Each table relates to a specific cluster, detailing the occupations and qualifications it contains. For brevity, these tables are limited to the top 10 most commonly claimed outcomes where applicable. Please note that the figures in these tables are the number of participants that have achieved that qualification/occupation, and is limited to those participants who have been included in this analysis - participants who have gained both at least one qualification and employment with a known occupation. Percentages in each table will not necessarily sum to 100%.

Finally, consideration should be given to the limitations of the data below. Many occupations and qualifications are only achieved by a very small number of participants (often only a single individual). For example, looking at the first cluster (Other Skilled Trades) only one participant gained training in Customer Service. Although we can be confident that this individual belongs to this cluster in this instance, it should not be inferred that Customer Service training always leads to the types of occupations in this cluster. As the number of participants gaining an occupation/qualification increases, the more confident we can be that the occupation/qualification belongs to the cluster.

Cluster Description:			A: Other Skilled Trades				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Other Skilled Trades		131	65%	Site Safety	94	48%	
Construction Operatives		36	18%	PTS	57	29%	
Sales Assistants and Retail Cashiers		16	8%	FLT	18	9%	
Electrical and Electronic Trades		10	5%	Track Induction	9	5%	
Assemblers and Routine Operatives		8	4%	Electronics/Electrical	5	3%	
Leisure and Travel Services		1	0%	PASMA	3	2%	
Metal Forming, Welding and Related		1	0%	ECS	2	1%	
				Customer Service	1	1%	
				Education	1	1%	
				MIG & TIG Course	1	1%	

Cluster Description:			B: Construction & Building				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Construction and Building Trades		110	67%	CSCS	68	41%	
Construction and Building Trades (Super.)		13	8%	ICATS	26	16%	
Food Preparation and Hospitality Trades		12	7%	Streetworks	21	13%	
Building Finishing Trades		10	6%	Painting & Decorating	16	10%	
Housekeeping and Related Services		6	4%	FLT	10	6%	
Printing Trades		5	3%	Construction	4	2%	
Engineering Professionals		4	2%	Electrical	4	2%	
Sales Related Occupations		4	2%	Scaffolding	4	2%	
				PTS	3	2%	
				Lucas Card	2	1%	

Cluster Description:	C: Elementary
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Occupations (Top 10)	No.	%
Other Elementary Services	28	55%
Elementary Construction Occupations	18	35%
Welfare Professionals	5	10%

Qualifications (Top 10)	No.	%
Health & Safety	10	23%
PTS	12	28%
FLT	4	9%
Key Skills	3	7%
Advice & Guidance	3	7%
Catering & Hospitality	2	5%
Industrial Cleaning	2	5%
Lucas Card	2	5%
Plumbing	2	5%
Driver CPC	1	2%

Cluster Description:	D: Process Operatives
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Occupations (Top 10)	No.	%
Process Operatives	36	100%

Qualifications (Top 10)	No.	%
Construction	29	50%
First Aid	8	14%
Manual Handling	5	9%
PTS	5	9%
Railway Engineering	5	9%
FLT	5	9%
Streetworks	1	2%

Cluster Description:	E: Transport
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Occupations (Top 10)	No.	%
Road Transport Drivers	12	26%
Other Drivers and Transport Operatives	11	24%
Vehicle Trades	10	22%
Conservation and Environment	8	17%
Elementary Storage Occupations	2	4%
Mobile Machine Drivers and Operatives	2	4%
Secretarial and Related Occupations	1	2%

Qualifications (Top 10)	No.	%
Driver Training	12	33%
Adult Literacy	6	17%
ICT	4	11%
PTS	4	11%
FLT	2	6%
HIAB	2	6%
ATA Senior Technician	1	3%
Drama	1	3%
Food Hygiene	1	3%
Chainsaw	1	3%

Describing the nature of participants found within each qualification/occupation cluster

The table below details the demographic and assessment characteristics of the participants found in each of the five qualification/occupation clusters presented previously.

Factor	Other Skilled Trades	Construction & Building	Elementary	Process Operatives	Transport
Demo: % Aged 50 or over	5.7%	2.8%	1.1%	0.0%	8.5%
Demo: % Aged Under 21	7.1%	9.2%	7.6%	1.1%	15.9%
Demo: % BAME	14.0%	16.9%	30.4%	26.7%	9.8%
Demo: % Custody Starts	10.8%	9.8%	43.5%	8.9%	17.1%
Demo: % Female	1.7%	0.9%	3.3%	0.0%	13.4%
Assess: % Alcohol Need	28.1%	37.1%	48.9%	25.6%	14.6%
Assess: % Attitude & Life Skills Need	59.6%	61.7%	66.3%	74.4%	70.7%
Assess: % Drugs Need	20.4%	32.2%	20.7%	18.9%	34.1%
Assess: % Education Need	96.8%	95.1%	89.1%	97.8%	92.7%
Assess: % Financial Status Need	49.3%	41.4%	30.4%	42.2%	45.1%
Assess: % Health Need	13.8%	16.9%	14.1%	21.1%	12.2%
Assess: % Housing Need	34.5%	27.0%	28.3%	56.7%	54.9%
Assess: % Relationships Need	7.6%	13.8%	6.5%	11.1%	15.9%
Assess: % Low Motivation on Starting	32.5%	24.8%	29.3%	10.0%	6.1%
Total Participants in Cluster	406	326	92	90	82

Here we can see that the profile of the participants within each cluster varies somewhat. For example, those participants in the 'Elementary' cluster were much more likely to have started on the project in custody, while the 'Transport' cluster contains a higher proportion of women than the other clusters.