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Management Service



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Report - RS01NW

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
North West (inc. Merseyside)

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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 North West (including Merseyside), attaining at least one qualification (including education/training hard outcomes) and went on to gain employment with a known occupation.

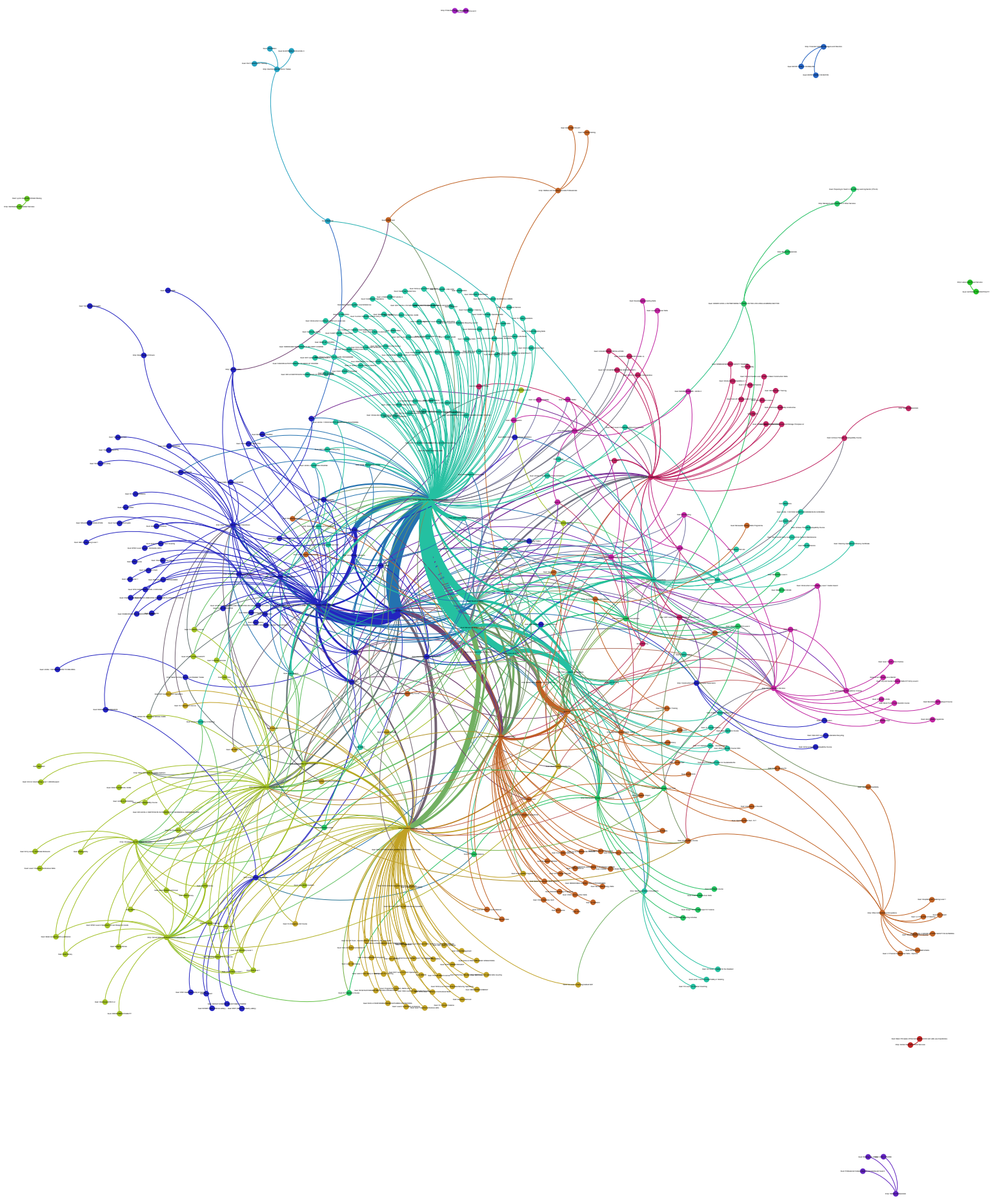
The aim of this report is to identify links between the subject nature of qualifications achieved and the occupations that have been entered. For example, we may expect that those who gained qualifications relating to health & safety to go into higher risk occupations such as construction. In contrast, 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 (Elementary Services) seven participants gained training in Catering. Although we can be confident that these individuals belong to this cluster in this instance, it should not be inferred that Catering 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: Elementary Services				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Other Elementary Services Occupations	373	72%	FLT	133	23%		
Plant and Machine Operatives	75	14%	Manual Handling	112	20%		
Sales Related Occupations	44	8%	Health & Safety	99	17%		
Elementary Agricultural Occupations	11	2%	Recycling	60	11%		
Sports and Fitness Occupations	9	2%	Food Hygiene/Safety	36	6%		
Transport Associate Professionals	6	1%	EASE Employability	22	4%		
			Plant Operations	15	3%		
			Adult Literacy/Numeracy	10	2%		
			Mind Over Matter	9	2%		
			Catering	7	1%		

Cluster Description:			B: Elementary Construction				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Elementary Construction Occupations	145	51%	CSCS	181	44%		
Other Drivers and Transport Operatives	33	11%	EASE	68	17%		
Elementary Cleaning Occupations	22	8%	Site Safety	30	7%		
Assemblers and Routine Operatives	20	7%	Construction	25	6%		
Elementary Storage Occupations	19	7%	Employability	19	5%		
Construction Operatives	13	5%	PTS	18	4%		
Engineering Professionals	13	5%	Solar Panel Course	5	1%		
Construction and Building Trades	8	3%	FLT	5	1%		
Vehicle Trades	6	2%	IT	4	1%		
Metal Forming, Welding and Related Trades	4	1%	Railway Engineering	4	1%		

Cluster Description:			C: Construction				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Construction and Building Trades	95	54%	FLT	72	44%		
Mobile Machine Drivers/Operators	45	26%	EASE	24	15%		
Other Administrative Occupations	13	7%	Employability	15	9%		
Agricultural and Related Trades	11	6%	CSCS	14	8%		
Customer Service Occupations	8	5%	Catering & Hospitality	4	2%		
Welfare and Housing Assoc. Prof.	4	2%	Electric Pallet	3	2%		
			Railway Engineering	3	2%		
			Stepladder Project	3	2%		
			IT	3	2%		
			Renewable Energy	3	2%		

Cluster Description:			D: Process Operatives				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Process Operatives	153	100%	Manufacturing Operations	42	38%		
			Warehousing & Distribution	15	14%		
			FLT	11	10%		
			First Aid	5	5%		
			Employability	5	5%		
			Recycling	5	5%		
			FA	4	4%		
			Stepladder Project	3	3%		
			Plant Operations	3	3%		
			Site Safety	2	2%		

Cluster Description:			E: Food & Hospitality				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Food Preparation and Hospitality	58	48%	Employability	31	27%		
Conservation and Environment	31	26%	Adult Literacy/Numeracy	31	27%		
Housekeeping and Related Services	23	19%	Retail	12	10%		
Sales Assistants and Retail Cashiers	7	6%	Customer Service	5	4%		
Legal Professionals	2	2%	Stepping Stones	5	4%		
			Volunteering	5	4%		
			Food Safety/Hygiene	4	3%		
			Solar Panel Course	4	3%		
			FA	4	3%		
			Health & Social Care	4	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	Elementary Services	Elementary Construction	Construction	Process Operatives	Food & Hospitality
Demo: % Aged 50 or over	3.8%	5.5%	13.6%	4.5%	7.2%
Demo: % Aged Under 21	9.1%	6.4%	3.2%	9.9%	10.1%
Demo: % BAME	11.0%	7.6%	6.8%	10.3%	6.8%
Demo: % Custody Starts	11.4%	18.2%	11.2%	2.5%	6.3%
Demo: % Female	6.3%	1.0%	2.1%	9.5%	60.3%
Assess: % Alcohol Need	34.6%	27.2%	32.4%	26.4%	15.6%
Assess: % Attitude & Life Skills Need	81.8%	73.4%	84.4%	84.7%	94.5%
Assess: % Drugs Need	33.2%	29.4%	27.4%	26.0%	39.7%
Assess: % Education Need	93.6%	91.7%	94.7%	83.5%	97.0%
Assess: % Financial Status Need	46.3%	40.5%	46.3%	29.3%	30.8%
Assess: % Health Need	20.4%	17.4%	21.5%	17.4%	57.4%
Assess: % Housing Need	22.2%	26.7%	31.9%	20.7%	15.6%
Assess: % Relationships Need	15.9%	16.6%	12.7%	12.0%	32.5%
Assess: % Low Motivation on Starting	42.3%	25.7%	26.3%	24.8%	53.2%
Total Participants in Cluster	1039	674	339	242	237

Here we can see that the profile of the participants within each cluster varies somewhat. For example, the participants in the 'Construction' cluster were generally older (14% aged 50 or over), while a large proportion (60%) of those participants in the 'Food & Hospitality' cluster were women.