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Management Service



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Investing in jobs and skills

Report - RS01SW

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 West (inc. Cornwall)

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

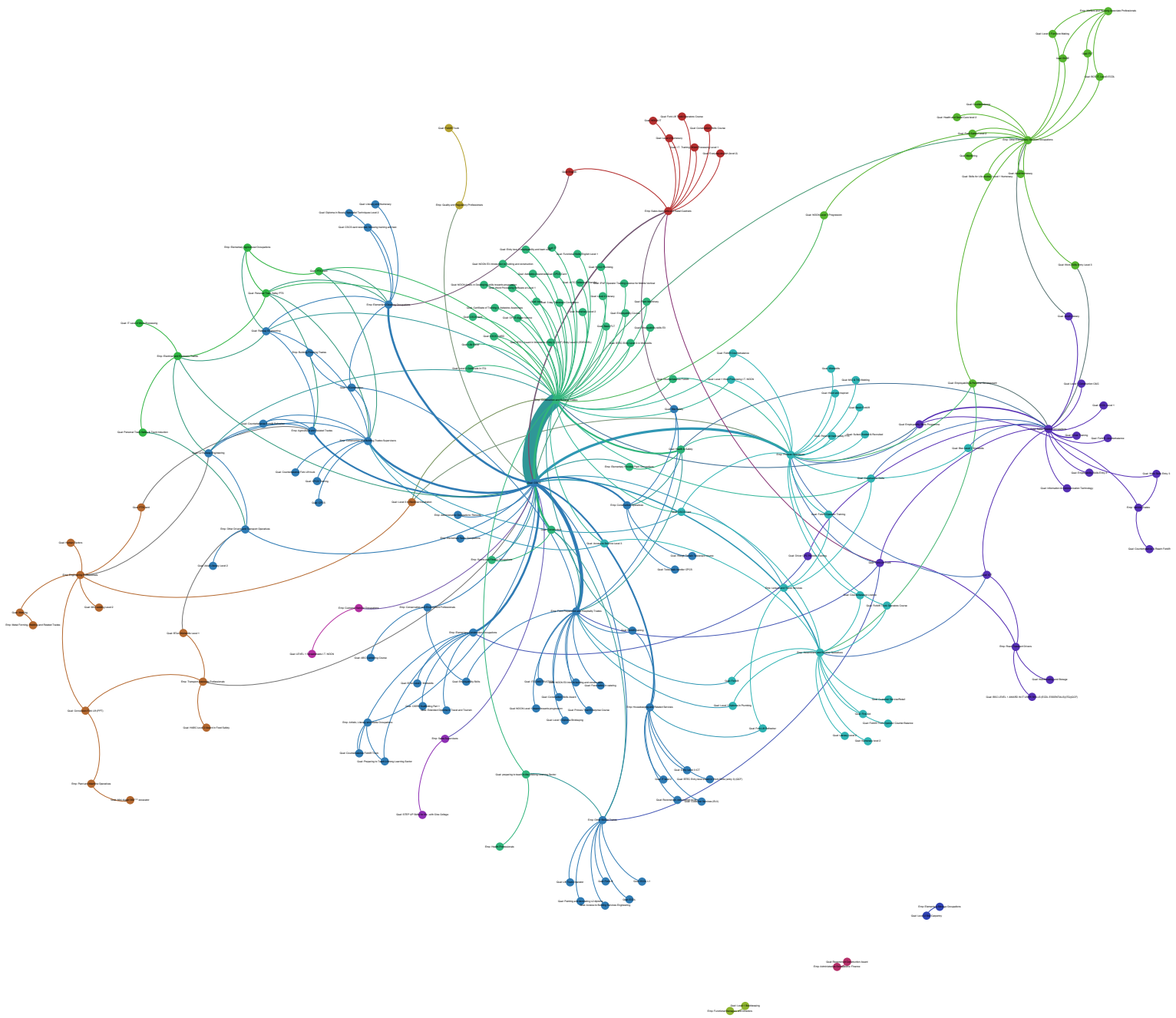
The aim of this report is to identify links between the subject nature of qualifications achieved and the occupations that have been entered. For example, we may expect that those who gained qualifications relating to health & safety to go into higher risk occupations such as construction. In contrast, 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 (CSCS Diverse) only two participants gained Adult Literacy/Numeracy. Although we can be confident that these individuals belong to this cluster in this instance, it should not be inferred that Adult Literacy/Numeracy 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: CSCS Diverse				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Food Preparation and Hospitality Trades	24	20%	CSCS	102	61%		
Construction and Building Trades	16	13%	Railway Engineering	12	7%		
Elementary Cleaning Occupations	13	11%	FLT	12	7%		
Elementary Construction Occupations	11	9%	Construction	8	5%		
Housekeeping and Related Services	11	9%	Workskills	4	2%		
Other Skilled Trades	11	9%	CPCS	4	2%		
Agricultural and Related Trades	9	8%	IT	4	2%		
Construction Operatives	8	7%	Site Safety	3	2%		
Other Drivers and Transport Operatives	6	5%	Employability Skills	2	1%		
Conservation and Environment	4	3%	Adult Literacy/Numeracy	2	1%		

Cluster Description:			B: CSCS Construction				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Construction and Building Trades	88	93%	CSCS	107	68%		
Elementary Process Plant Occupations	4	4%	Health & Safety	10	6%		
Sports and Fitness Occupations	2	2%	Construction	9	6%		
Health Professionals	1	1%	FLT	4	3%		
			Adult Literacy/Numeracy	4	3%		
			Preparing to Teach	3	2%		
			Work Skills	3	2%		
			Employability	3	2%		
			IT	3	2%		
			Telescopic Handling	2	1%		

Cluster Description:			C: Operatives		
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Occupations (Top 10)	No.	%
Process Operatives	28	58%
Assemblers and Routine Operatives	16	33%
Leisure and Travel Services	4	8%

Qualifications (Top 10)	No.	%
FLT	16	35%
CSCS	6	13%
Workskills	4	9%
Access to Science	3	7%
Construction	3	7%
Adult Literacy/Numeracy	3	7%
Plumbing	2	4%
Word Processing	2	4%
PTS	2	4%
Customer Service/Retail	1	2%

Cluster Description:			D: Sales		
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Occupations (Top 10)	No.	%
Sales Related Occupations	22	73%
Road Transport Drivers	5	17%
Vehicle Trades	3	10%

Qualifications (Top 10)	No.	%
FLT	9	25%
Employability Skills	8	22%
ICT	7	19%
Driver Training	5	14%
Adult Literacy	3	8%
Workskills	2	6%
Construction	1	3%
Warehousing & Storage	1	3%

Cluster Description:			E: Elementary Services		
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Occupations (Top 10)	No.	%
Elementary Services Occupations	16	80%
Welfare and Housing Assoc. Prof.	4	20%

Qualifications (Top 10)	No.	%
Employability	4	17%
Adult Numeracy	3	13%
FLT	3	13%
IT	2	9%
EASE	2	9%
Furniture Making	2	9%
Workskills	2	9%
Food Safety	1	4%
Health & Social Care	1	4%
Mentoring	1	4%

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	CSCS Diverse	CSCS Construction	Operatives	Sales	Elementary Services
Demo: % Aged 50 or over	8.2%	2.7%	3.4%	33.3%	2.3%
Demo: % Aged Under 21	11.8%	11.4%	2.3%	3.0%	0.0%
Demo: % BAME	16.8%	8.7%	19.3%	13.6%	11.6%
Demo: % Custody Starts	16.5%	4.7%	0.0%	15.2%	0.0%
Demo: % Female	2.9%	0.7%	6.8%	0.0%	7.0%
Assess: % Alcohol Need	32.3%	30.2%	58.0%	27.3%	83.7%
Assess: % Attitude & Life Skills Need	67.4%	65.8%	62.5%	97.0%	79.1%
Assess: % Drugs Need	44.4%	47.7%	47.7%	10.6%	39.5%
Assess: % Education Need	84.9%	92.6%	96.6%	98.5%	93.0%
Assess: % Financial Status Need	38.7%	34.2%	43.2%	27.3%	48.8%
Assess: % Health Need	13.3%	10.7%	28.4%	7.6%	48.8%
Assess: % Housing Need	34.4%	30.9%	40.9%	45.5%	30.2%
Assess: % Relationships Need	10.0%	14.8%	15.9%	36.4%	44.2%
Assess: % Low Motivation on Starting	36.2%	46.3%	53.4%	54.5%	62.8%
Total Participants in Cluster	279	149	88	66	43

Here we can see that the profile of the participants within each cluster varies somewhat. For example, those participants in the 'CSCS Diverse' cluster were generally younger (12% aged under 21), while the participants in the 'Elementary Services' cluster were more likely to start the project with low motivation when compared to the other clusters.