

## Future skill needs: Projections and employers' views— Support document

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# Appendix 1

## Inverted and scaled skill dimension scores

<b>Skill Dimensions</b>			
<b>Data (Cognitive Skills)</b>			
	<i>Original</i>	<i>Scaled</i>	<i>Inverted Score</i>
Synthesising	0	0.00	<b>10.00</b>
Coordinating	1	1.43	<b>8.57</b>
Analyzing	2	2.86	<b>7.14</b>
Compiling	3	4.29	<b>5.71</b>
Computing	4	5.71	<b>4.29</b>
Copying	5	7.14	<b>2.86</b>
Comparing	6	8.57	<b>1.43</b>
<b>People (Interactive Skills)</b>	<i>Original</i>	<i>Scaled</i>	<i>Inverted Score</i>
Mentoring	0	0.00	<b>10.00</b>
Negotiating	1	1.11	<b>8.89</b>
Instructing	2	2.22	<b>7.78</b>
Supervising	3	3.33	<b>6.67</b>
Diverting	4	4.44	<b>5.56</b>
Persuading	5	5.56	<b>4.44</b>
Speaking-Signalling	6	6.67	<b>3.33</b>
Serving	7	7.78	<b>2.22</b>
Taking Instructions/Helping	8	8.89	<b>1.11</b>
<b>Things (Motor Skills)</b>			
	<i>Original</i>	<i>Scaled</i>	<i>Inverted Score</i>
Setting up	0	0.00	<b>10.00</b>
Precision working	1	1.25	<b>8.75</b>
Operating-Controlling	2	2.50	<b>7.50</b>
Driving-Operating	3	3.75	<b>6.25</b>
Manilulating	4	5.00	<b>5.00</b>
Tending	5	6.25	<b>3.75</b>
Feeding-Off bearing	6	7.50	<b>2.50</b>
Handling	7	8.75	<b>1.25</b>

## Appendix 2

### Skill dimension scores and persons employed, actual and projected, for occupation used in the industry approach

				Numbers Employed 2005	Numbers Employed 2010
<b>PROPERTY AND BUSINESS SERVICES 1</b>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
Designers and Illustrators (3)	5.71	5.56	5.00	27,000	31,374
Bookkeepers (5)	5.71	3.33	1.25	28,800	33,466
Secretaries and Personal Assistants (5)	5.71	5.56	1.25	55,100	64,026
Receptionists (6)	2.86	3.33	3.75	24,700	28,701
Security Officers and Guards (6)	1.43	5.56	3.75	26,600	30,909
<b>WEIGHTED AVERAGE</b>	<b>4.57</b>	<b>4.82</b>	<b>2.66</b>	<b>162,200</b>	<b>188,476</b>
<b>PROPERTY AND BUSINESS SERVICES 2</b>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
Accountants (3)	7.14	7.78	5	71,600	83,199
Real Estate Agents (3)	5.71	8.89	1.25	63,900	74,252
<b>WEIGHTED AVERAGE</b>	<b>6.47</b>	<b>8.30</b>	<b>3.23</b>	<b>135,500</b>	<b>157,451</b>
<b>HEALTH AND COMMUNITY SERVICES 1</b>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
Nurses Aides and Personal Care Assistants (6)	2.86	2.22	1.25	66,100	77,205
Carers, Hostel and Refuge Workers (6)	2.86	2.22	1.25	64,700	75,570
Child Care Workers (6)	2.86	5.56	1.25	63,800	74,518
Receptionists (6)	2.86	3.33	3.75	59,800	69,846
<b>WEIGHTED AVERAGE</b>	<b>2.86</b>	<b>3.32</b>	<b>1.84</b>	<b>254,400</b>	<b>297,139</b>
<b>HEALTH AND COMMUNITY SERVICES 2</b>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
Welfare and Community Workers (3)	6.20	5.13	4.54	20,000	23,360
Enrolled Nurses (3)	5.71	4.44	3.75	25,500	29,784
<b>WEIGHTED AVERAGE</b>	<b>5.93</b>	<b>4.74</b>	<b>4.10</b>	<b>45,500</b>	<b>53,144</b>
<b>RETAIL TRADE 1</b>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
Sales Assistants (6)	1.43	4.44	1.25	488,900	544,635
Checkout Operators and Cashiers (6)	1.43	2.22	1.25	104,800	116,747
Storepersons	1.43	1.11	1.25	66,900	74,527
Kitchenhands	2.86	2.22	1.25	30,300	33,754
Retail and Checkout Supervisors (6)	2.86	6.67	1.25	22,200	24,731
Fast Food Cooks (4)	1.43	2.22	1.25	18,400	20,498
<b>WEIGHTED AVERAGE</b>	<b>1.53</b>	<b>3.74</b>	<b>1.22</b>	<b>731,500</b>	<b>814,891</b>

<i>RETAIL TRADE 2</i>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
Motor Mechanics (4)	4.29	2.22	8.75	68,200	75,975
Motor Vehicle and Parts Salespersons (6)	2.86	2.22	3.75	18,400	20,498
<i>WEIGHTED AVERAGE</i>	<i>3.99</i>	<i>2.22</i>	<i>7.69</i>	<i>86,600</i>	<i>96,472</i>
<i>CONSTRUCTION 1</i>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
Carpenters and Joiners (4)	4.29	3.33	8.75	81,700	89,543
Electricians (4)	7.14	3.33	8.75	58,200	63,787
Plumbers (4)	4.29	2.22	8.75	52,000	56,992
Painters and Decorators (4)	4.29	2.22	8.75	40,200	44,059
Builders' and Plumbers' Assistants	1.43	1.11	5.00	34,200	37,483
Construction Plant Operators	1.43	1.11	6.25	33,400	36,606
Concreters (4)	1.43	1.11	8.75	32,300	35,401
Bricklayers (4)	1.43	1.11	8.75	26,600	29,154
<i>WEIGHTED AVERAGE</i>	<i>3.74</i>	<i>2.26</i>	<i>8.16</i>	<i>358,600</i>	<i>393,026</i>
					2,011
<i>ACCOMMODATION, CAFÉS AND RESTAURANTS 1</i>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
Waiters (6)	2.86	4.44	1.25	94,600	107,087
Bar Attendants (6)	1.43	2.22	3.75	55,300	62,600
Kitchenhands (6)	1.43	1.11	1.25	40,000	45,280
Cooks (4)	2.86	3.33	5.00	19,200	21,734
Sales Assistants (6)	2.86	4.44	1.25	17,600	19,923
Receptionists (6)	2.86	3.33	3.75	15,800	17,886
<i>WEIGHTED AVERAGE</i>	<i>2.30</i>	<i>3.22</i>	<i>2.28</i>	<i>242,500</i>	<i>274,510</i>
<i>ACCOMMODATION, CAFÉS AND RESTAURANTS 2</i>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
Chefs (3)	7.14	7.78	8.75	40,400	45,733
Restaurant and Catering Managers (3)	5.71	6.67	1.25	41,400	46,865
Hotel and Motel Managers (3)	5.71	6.67	1.25	23,400	26,489
<i>WEIGHTED AVERAGE</i>	<i>6.26</i>	<i>7.10</i>	<i>4.13</i>	<i>105,200</i>	<i>119,086</i>
<i>ALL INDUSTRIES ABOVE</i>	<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		-
<i>WEIGHTED AVERAGE 2005</i>	<i>3.13</i>	<i>3.88</i>	<i>3.30</i>	<i>1,763,400</i>	<i>2,394,196</i>
<i>WEIGHTED AVERAGE 2011</i>	<i>3.12</i>	<i>3.91</i>	<i>3.21</i>		

# Appendix 3

## Skill dimension scores and persons employed, actual and projected, for occupation used in the occupational approach

DEWR's employment projections are based on COPS data and augmented with the following data sources: actual employment growth in recent years; industry employment growth and prospects; vacancy trends; industry surveys; and qualitative information on occupational developments from employers, recruitment agencies, employer organisations, education and training bodies and labour market intermediaries.

ASCO Code	Title		Cognitive	Interactive	Motor	Numbers Employed 2006	Numbers Employed 2011
	All Occupations	2006	5.50	5.05	4.91	5399.3	
		2011	5.55	5.15	4.88		5672.9
<b>11</b>	<b>Generalist Managers</b>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
1111	Legislators and Government Appointed Officials		10.00	8.89	3.75	6.4	13.6
1112	General Managers		8.57	10.00	3.75	94.4	109.0
1191	Building and Construction Managers		8.57	6.67	8.75	52.0	52.8
1192	Importers, Exporters and Wholesalers		8.57	8.89	3.75	18.0	20.1
1193	Manufacturers		10.00	8.89	5.00	28.6	28.4
	<i>WEIGHTED AVERAGE</i>	<i>2006</i>	<i>8.82</i>	<i>8.84</i>	<i>5.23</i>	<i>199.5</i>	
		<i>2011</i>	<i>8.84</i>	<i>8.91</i>	<i>5.09</i>		<i>223.8</i>
<b>12</b>	<b>Specialist Managers</b>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
1211	Finance Managers		8.57	8.89	8.75	48.1	55.2
1212	Company Secretaries		8.57	8.89	8.75	0.3	0.3
1213	Human Resource Managers		8.57	8.89	3.75	36.8	43.1
1221	Engineering Managers		8.57	8.89	8.75	16.4	18.4
1222	Production Managers		8.57	8.89	8.75	45.5	51.3
1223	Supply and Distribution Managers		8.57	8.89	7.50	26.3	30.7
1224	Information Technology Managers		8.57	8.89	8.75	47.0	57.8
1231	Sales and Marketing Managers		8.57	8.89	5.00	129.2	151.3
1291	Policy and Planning Managers		8.57	8.89	8.75	18.2	19.3
1292	Health Services Managers		8.57	8.89	5.00	11.8	13.8
1293	Education Managers		8.57	8.89	5.00	28.0	30.2
1294	Commissioned Officers (Management)		8.57	8.89	5.00	1.0	0.9
1295	Child Care Coordinators		8.57	8.89	5.00	7.4	8.6
1296	Media Producers and Artistic Directors		8.57	8.89	5.00	5.7	5.7
1299	Other Specialist Managers		8.57	8.89	5.00	33.4	38.9
	<i>WEIGHTED AVERAGE</i>	<i>2006</i>	<i>8.57</i>	<i>8.89</i>	<i>6.49</i>	<i>455.3</i>	
		<i>2011</i>	<i>8.57</i>	<i>8.89</i>	<i>6.49</i>		<i>525.5</i>
<b>13</b>	<b>Farmers and Farm Managers</b>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
1311	Mixed Crop and Livestock Farmers		7.14	6.67	6.25	41.3	37.7

1312	Livestock Farmers		7.14	6.67	6.25	85.2	81.8
1313	Crop Farmers		7.14	6.67	6.25	57.7	54.6
1314	Aquaculture Farmers		7.14	6.67	6.25	2.2	2.4
	<i>WEIGHTED AVERAGE</i>	2006	7.14	6.67	6.25	186.3	
		2011	7.14	6.67	6.25		176.5
31	<i>Science, Engineering and Related Associate Professionals</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
3111	Medical Technical Officers		7.14	8.89	8.75	20.7	24.1
3112	Science Technical Officers		7.14	8.89	8.75	20.6	19.4
3121	Building, Architectural and Surveying Associate Professionals		7.14	6.67	8.75	57.3	62.6
3122	Civil Engineering Associate Professionals		7.14	6.67	8.75	7.7	7.3
3123	Electrical Engineering Associate Professionals		7.14	6.67	8.75	8.4	8.3
3124	Electronic Engineering Associate Professionals		7.14	6.67	8.75	10.7	10.3
3125	Mechanical Engineering Associate Professionals		7.14	6.67	8.75	5.1	4.7
3129	Other Building and Engineering Associate Professionals		7.14	6.67	8.75	10.3	10.6
	<i>WEIGHTED AVERAGE</i>	2006	7.14	7.32	8.75	140.7	
		2011	7.14	7.33	8.75		147.3
32	<i>Business and Administration Associate Professionals</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
3211	Branch Accountants and Managers (Financial Institution)		7.14	7.78	5.00	15.8	14.2
3212	Financial Dealers and Brokers		8.57	7.78	5.00	65.9	78.7
3213	Financial Investment Advisers		8.57	7.78	5.00	29.0	34.1
3291	Office Managers		5.71	6.67	3.75	153.4	186.6
3292	Project and Program Administrators		8.75	6.67	3.75	87.9	106.9
3293	Real Estate Associate Professionals		5.71	8.89	1.25	65.5	73.0
3294	Computing Support Technicians		7.14	3.33	8.75	41.8	48.0
	<i>WEIGHTED AVERAGE</i>	2006	7.06	6.95	4.15	459.2	
		2011	7.07	6.93	4.15		541.4
33	<i>Managing Supervisors (Sales and Service)</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
3311	Shop Managers		4.29	7.78	3.75	186.2	182.5
3321	Restaurant and Catering Managers		5.71	6.67	3.75	50.7	58.0
3322	Chefs		7.14	7.78	8.75	53.9	63.1
3323	Hotel and Motel Managers		5.71	6.67	3.75	21.8	21.3
3324	Club Managers (Licensed Premises)		5.71	6.67	3.75	6.1	6.3
3325	Caravan Park and Camping Ground Managers		5.71	6.67	3.75	4.1	4.1
3329	Other Hospitality and Accommodation Managers		5.71	6.67	3.75	8.4	9.6
3391	Sport and Recreation Managers		5.71	6.67	3.75	9.0	9.4
3392	Customer Service Managers		5.71	6.67	3.75	39.5	49.2
3393	Transport Company Managers		5.71	6.67	3.75	17.4	18.5
3399	Other Managing Supervisors (Sales and Service)		5.71	6.67	3.75	45.4	45.9
	<i>WEIGHTED AVERAGE</i>	2006	5.29	7.27	4.36	442.6	
		2011	5.35	7.25	4.42		467.8

34	<i>Health and Welfare Associate Professionals</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
3411	Enrolled Nurses		5.71	4.44	3.75	33.5	33.2
3421	Welfare Associate Professionals		5.71	4.44	1.25	22.2	26.0
3491	Ambulance Officers and Paramedics		8.57	7.78	8.75	10.3	11.0
3492	Dental Associate Professionals		7.14	7.78	8.75	4.9	5.2
3493	Aboriginal and Torres Strait Islander Health Workers		8.57	8.89	3.75	1.1	1.2
3494	Massage Therapists		5.71	4.44	8.75	8.8	10.5
	<i>WEIGHTED AVERAGE</i>	2006	6.20	5.13	4.55	80.8	
		2011	6.20	5.12	4.54		87.0
39	<i>Other Associate Professionals</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
3911	Police Officers		7.14	8.89	7.50	50.4	54.6
3991	Primary Products Inspectors		7.14	7.78	8.75	5.4	5.7
3992	Safety Inspectors		7.14	7.78	6.25	4.7	5.0
3993	Sportspersons, Coaches and Related Support Workers		7.14	10.00	3.75	23.7	27.3
3994	Senior Non-Commissioned Defence Force Officers		5.71	6.67	6.25	0.1	0.1
3995	Senior Fire Fighters		7.14	6.67	8.75	0.7	0.7
3996	Retail Buyers		7.14	4.44	3.75	5.7	6.6
3997	Library Technicians		8.57	7.78	7.50	7.5	7.8
3999	Other Miscellaneous Associate Professionals		5.71	6.67	3.75	6.1	1.9
	<i>WEIGHTED AVERAGE</i>	2006	7.16	8.57	6.24	104.3	
		2011	7.22	8.66	6.29		109.6
41	<i>Mechanical and Fabrication Engineering Tradespersons</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
4111	General Mechanical Engineering Tradespersons		7.14	6.67	8.75	5.4	5.6
4112	Metal Fitters and Machinists		7.14	3.33	8.75	104.7	103.2
4113	Toolmakers		7.14	3.33	10.00	7.2	6.5
4114	Aircraft Maintenance Engineers		7.14	6.67	8.75	12.2	13.6
4115	Precision Metal Tradespersons		3.33	7.50	8.75	6.8	6.6
4121	General Fabrication Engineering Tradespersons		7.14	3.33	8.75	1.4	1.4
4122	Structural Steel and Welding Tradespersons		7.14	3.33	8.75	71.6	73.4
4123	Forging Tradespersons		4.29	3.33	8.75	1.6	1.4
4124	Sheetmetal Tradespersons		4.29	3.33	8.75	6.6	6.2
4125	Metal Casting Tradespersons		4.29	3.33	8.75	0.8	0.7
4126	Metal Finishing Tradespersons		4.29	3.33	8.75	1.4	1.3
	<i>WEIGHTED AVERAGE</i>	2006	6.89	3.73	8.79	219.8	
		2011	6.90	3.75	8.79		220.0
42	<i>Automotive Tradespersons</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
4211	Motor Mechanics		7.14	2.22	8.75	92.2	89.0
4212	Automotive Electricians		7.14	2.22	8.75	9.2	9.3
4213	Panel Beaters		4.29	2.22	8.75	16.5	15.5
4214	Vehicle Painters		2.86	2.22	8.75	12.1	12.3
4215	Vehicle Body Makers		4.29	2.22	8.75	3.3	3.1
4216	Vehicle Trimmers		4.29	2.22	8.75	2.2	2.3
	<i>WEIGHTED AVERAGE</i>	2006	6.30	2.22	8.75	135.5	
		2011	6.29	2.22	8.75		131.5



<b>43</b>	<b><i>Electrical and Electronics Tradespersons</i></b>		<b><i>Cognitive</i></b>	<b><i>Interactive</i></b>	<b><i>Motor</i></b>		
4311	Electricians		7.14	3.33	8.75	104.8	112.3
4312	Refrigeration and Airconditioning Mechanics		4.29	2.22	8.75	18.5	20.2
4313	Electrical Distribution Tradespersons		3.33	2.22	8.75	6.3	6.1
4314	Electronic Instrument Tradespersons		7.14	2.22	8.75	2.2	2.2
4315	Electronic and Office Equipment Tradespersons		4.29	2.22	8.75	32.7	34.7
4316	Communications Tradespersons		3.33	2.22	8.75	25.0	22.8
	<b><i>WEIGHTED AVERAGE</i></b>		<b>2006</b>	<b>5.74</b>	<b>2.83</b>	<b>8.75</b>	<b>189.5</b>
			<b>2011</b>	<b>5.80</b>	<b>2.85</b>	<b>8.75</b>	<b>198.2</b>
<b>44</b>	<b><i>Construction Tradespersons</i></b>		<b><i>Cognitive</i></b>	<b><i>Interactive</i></b>	<b><i>Motor</i></b>		
4411	Carpentry and Joinery Tradespersons		4.29	3.33	8.75	114.4	120.9
4412	Fibrous Plasterers		4.29	2.22	5.00	22.5	23.5
4413	Roof Slaters and Tilers		4.29	2.22	8.75	9.1	9.8
4414	Bricklayers		1.43	1.11	8.75	27.4	28.3
4415	Solid Plasterers		4.29	2.22	8.75	8.2	8.9
4416	Wall and Floor Tilers and Stonemasons		4.29	2.22	8.75	23.2	5.0
4421	Painters and Decorators		4.29	2.22	8.75	46.7	49.8
4422	Signwriters		2.86	2.22	8.75	6.8	6.9
4423	Floor Finishers		1.43	2.22	6.25	9.9	10.8
4431	Plumbers		4.29	2.22	8.75	69.0	74.0
	<b><i>WEIGHTED AVERAGE</i></b>		<b>2006</b>	<b>3.94</b>	<b>2.51</b>	<b>8.43</b>	<b>337.2</b>
			<b>2011</b>	<b>3.93</b>	<b>2.52</b>	<b>8.41</b>	<b>338.0</b>
<b>45</b>	<b><i>Food Tradespersons</i></b>		<b><i>Cognitive</i></b>	<b><i>Interactive</i></b>	<b><i>Motor</i></b>		
4511	Meat Tradespersons		2.86	1.11	5.00	24.9	22.7
4512	Bakers and Pastrycooks		4.29	3.33	7.50	24.2	25.8
4513	Cooks		2.86	3.33	5.00	35.5	37.3
4519	Other Food Tradespersons		2.86	3.33	5.00	4.0	0.9
	<b><i>WEIGHTED AVERAGE</i></b>		<b>2006</b>	<b>3.25</b>	<b>2.71</b>	<b>5.68</b>	<b>88.5</b>
			<b>2011</b>	<b>3.29</b>	<b>2.75</b>	<b>5.74</b>	<b>86.8</b>
<b>46</b>	<b><i>Skilled Agricultural and Horticultural Workers</i></b>		<b><i>Cognitive</i></b>	<b><i>Interactive</i></b>	<b><i>Motor</i></b>		
4611	Farm Overseers		7.14	7.78	3.75	2.0	1.9
4612	Shearers		1.43	1.11	7.50	5.4	4.8
4613	Wool, Hide and Skin Classers		7.14	3.33	5.00	1.0	1.0
4614	Animal Trainers		7.14	4.44	3.75	3.8	3.7
4621	Nurserypersons		4.29	3.33	5.00	5.7	5.9
4622	Greenkeepers		4.29	2.22	6.25	15.9	16.6
4623	Gardeners		4.29	2.22	3.75	64.6	73.4
	<b><i>WEIGHTED AVERAGE</i></b>		<b>2006</b>	<b>4.33</b>	<b>2.43</b>	<b>4.45</b>	<b>98.4</b>
			<b>2011</b>	<b>4.34</b>	<b>2.42</b>	<b>4.39</b>	<b>107.4</b>
<b>49</b>	<b><i>Other Tradespersons and Related Workers</i></b>		<b><i>Cognitive</i></b>	<b><i>Interactive</i></b>	<b><i>Motor</i></b>		
4911	Graphic Pre-Press Tradespersons		4.29	1.11	8.75	2.2	2.0
4912	Printing Machinists and Small Offset Printers		4.29	1.11	8.75	12.9	11.9
4913	Binders and Finishers		4.29	1.11	7.50	3.5	3.5
4914	Screen Printers		4.29	1.11	6.25	2.3	2.2
4921	Wood Machinists and Turners		7.14	2.22	8.75	3.1	2.9

4922	Cabinetmakers		7.14	3.33	8.75	30.2	31.3
4929	Other Wood Tradespersons		4.29	2.22	7.50	5.0	2.1
4931	Hairdressers		4.29	4.44	8.75	54.2	58.6
4941	Clothing Tradespersons		2.86	2.22	6.25	9.5	8.6
4942	Upholsterers and Bedding Tradespersons		4.29	2.22	8.75	3.9	4.0
4943	Footwear Tradespersons		4.29	2.22	8.75	1.4	1.2
4944	Leather Goods, Canvas Goods and Sail Makers		4.29	3.33	8.75	1.3	1.0
4981	Marine Construction Tradespersons		7.14	3.33	8.75	5.6	6.2
4982	Glass Tradespersons		4.29	3.33	8.75	8.3	8.6
4983	Jewellers and Related Tradespersons		7.14	3.33	8.75	3.5	3.3
4984	Florists		5.71	4.44	5.00	6.7	6.9
4985	Fire Fighters		7.14	7.78	7.50	9.7	9.9
4986	Drillers		4.29	1.11	7.50	6.6	6.7
4987	Chemical, Petroleum and Gas Plant Operators		4.29	3.33	7.50	4.8	4.3
4988	Power Generation Plant Operators		4.29	3.33	7.50	5.0	5.0
4991	Defence Force Members Not Elsewhere Included		4.29	3.33	6.25	0.1	0.1
4992	Performing Arts Support Workers		4.29	3.33	3.75	11.8	12.5
4999	Other Miscellaneous Tradespersons and Related Workers		4.29	2.22	7.50	11.1	2.6
	<i>WEIGHTED AVERAGE</i>	<i>2006</i>	<i>5.00</i>	<i>3.39</i>	<i>7.91</i>	<i>202.6</i>	
		<i>2011</i>	<i>5.06</i>	<i>3.51</i>	<i>7.94</i>		<i>195.6</i>
<i>51</i>	<i>Secretaries and Personal Assistants</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
5111	Secretaries and Personal Assistants		5.71	5.56	1.25	171.4	159.7
	<i>WEIGHTED AVERAGE</i>	<i>2006</i>	<i>5.71</i>	<i>5.56</i>	<i>1.25</i>	<i>171.4</i>	
		<i>2011</i>	<i>5.71</i>	<i>5.56</i>	<i>1.25</i>		<i>159.7</i>
<i>59</i>	<i>Other Advanced Clerical and Service Workers</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
5911	Bookkeepers		4.29	2.22	2.50	137.5	154.1
5912	Credit and Loans Officers		5.71	4.44	3.75	26.8	30.2
5991	Advanced Legal and Related Clerks		7.14	7.78	3.75	20.4	21.7
5992	Court and Hansard Reporters		5.71	3.33	7.50	1.3	1.2
5993	Insurance Agents		4.29	2.22	3.75	9.2	8.9
5994	Insurance Risk Surveyors, Investigators and Loss Adjusters		7.14	7.78	3.75	7.3	7.9
5995	Desktop Publishing Operators		5.71	2.22	6.25	1.1	1.0
5996	Travel Attendants		5.71	4.44	3.75	12.3	13.7
5999	Other Miscellaneous Advanced Clerical and Service Workers		5.71	4.44	3.75	10.0	6.2
	<i>WEIGHTED AVERAGE</i>	<i>2006</i>	<i>4.96</i>	<i>3.39</i>	<i>3.02</i>	<i>225.8</i>	
		<i>2011</i>	<i>4.94</i>	<i>3.35</i>	<i>2.99</i>		<i>245.0</i>
<i>61</i>	<i>Intermediate Clerical Workers</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
6111	General Clerks		2.86	3.33	1.25	120.1	134.5
6121	Keyboard Operators		2.86	2.22	6.25	93.5	81.1
6131	Receptionists		2.86	3.33	3.75	165.4	184.4
6141	Accounting Clerks		5.71	2.22	3.75	115.2	101.5
6142	Payroll Clerks		7.14	3.33	3.75	31.2	30.4
6143	Bank Workers		5.71	4.44	3.75	52.1	46.1
6144	Insurance Clerks		5.71	3.33	1.25	18.7	18.3

6145	Money Market and Statistical Clerks		5.71	2.22	3.75	2.6	2.5
6151	Production Recording Clerks		5.71	2.22	3.75	3.7	3.4
6152	Transport and Despatching Clerks		5.71	2.22	3.75	27.0	28.7
6153	Stock and Purchasing Clerks		5.71	2.22	3.75	83.3	88.4
6191	Inquiry and Admissions Clerks		4.29	2.22	1.25	106.4	125.7
6192	Library Assistants		5.71	3.33	1.25	7.8	7.5
6193	Personnel Clerks		5.71	3.33	1.25	11.9	10.6
6194	Intermediate Inspectors and Examiners		5.71	3.33	1.25	25.7	29.2
6199	Other Intermediate Clerical Workers		4.29	2.22	1.25	25.0	2.6
	<i>WEIGHTED AVERAGE</i>	<i>2006</i>	<i>4.32</i>	<i>2.82</i>	<i>3.12</i>	<i>892.0</i>	
		<i>2011</i>	<i>4.28</i>	<i>2.85</i>	<i>3.06</i>		<i>895.1</i>
<b>62</b>	<i>Intermediate Sales and Related Workers</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
6211	Sales Representatives		2.86	4.44	1.25	113.0	117.6
6212	Motor Vehicle and Related Products Salespersons		2.86	4.44	1.25	31.4	34.0
6213	Retail and Checkout Supervisors		2.86	6.67	1.25	27.3	31.4
	<i>WEIGHTED AVERAGE</i>	<i>2006</i>	<i>2.86</i>	<i>4.79</i>	<i>1.25</i>	<i>171.7</i>	
		<i>2011</i>	<i>2.86</i>	<i>4.82</i>	<i>1.25</i>		<i>183.0</i>
<b>63</b>	<i>Intermediate Service Workers</i>		<i>Cognitive</i>	<i>Interactive</i>	<i>Motor</i>		
6311	Education Aides		2.86	3.33	1.25	60.0	67.6
6312	Children's Care Workers		2.86	6.67	1.25	91.1	105.6
6313	Special Care Workers		2.86	6.67	1.25	74.8	74.1
6314	Personal Care and Nursing Assistants		2.86	2.22	1.25	62.6	73.6
6321	Hotel Service Supervisors		2.86	6.67	1.25	4.1	3.8
6322	Bar Attendants		1.43	2.22	3.75	54.6	60.5
6323	Waiters		2.86	4.44	1.25	99.4	110.3
6324	Hospitality Trainees		2.86	2.22	1.25	0.4	0.2
6391	Dental Assistants		5.71	3.33	3.75	17.1	18.1
6392	Veterinary Nurses		5.71	3.33	3.75	7.7	8.0
6393	Prison Officers		2.86	4.44	1.25	11.2	12.3
6394	Gaming Workers		2.86	2.22	3.75	10.4	10.6
6395	Personal Care Consultants		4.29	4.44	3.75	23.6	21.5
6396	Fitness Instructors and Related Workers		5.71	7.78	3.75	29.3	35.1
6397	Travel and Tourism Agents		4.29	4.44	3.75	25.7	25.2
6399	Other Intermediate Service Workers		4.29	4.44	3.75	26.2	7.2
	<i>WEIGHTED AVERAGE</i>	<i>2006</i>	<i>3.17</i>	<i>4.61</i>	<i>2.06</i>	<i>598.1</i>	
		<i>2011</i>	<i>3.12</i>	<i>4.60</i>	<i>1.98</i>		<i>633.9</i>

# Appendix 4

In order to check the validity of the skill scores allocated in this study, a sample of occupations were selected and were checked against the scores contained in the Dictionary of Occupational Titles (DOT). Occupations classified in DOT are listed and described in more detail than the occupational titles used in this study (which are based on ASCO and DEWR sources). For example, we include the simple occupational title ‘plumber’ in our study, yet the DOT contains six categories of plumber, with a range of skill scores for each category. In the tables below we present a comparison of the range of DOT skill scores with the scores allocated in this study. In all cases but two in the sample of occupations selected, the tables reveal that our allocated scores were in the range of scores allocated by the DOT.

		DOT score/range	Current study (original score)	Current study (scaled inverted)
Chef	Cognitive	1 3	2	7.14
	Interactive	3 6	2*	7.78
	Motor	1	1	8.75

		DOT score/range	Current study (original score)	Current study (scaled inverted)
Electrician	Cognitive	1 3	2	7.14
	Interactive	6 8	6	3.33
	Motor	0 2	1	8.75

		DOT score/range	Current study (original score)	Current study (scaled inverted)
Plumber	Cognitive	1 6	4	4.29
	Interactive	3 8	7	2.22
	Motor	1	1	8.75

		DOT score/range	Current study (original score)	Current study (scaled inverted)
Bricklayer	Cognitive	1 6	6	1.43
	Interactive	3 8	8	1.11
	Motor	1	1	8.75

		DOT score/range	Current study (original score)	Current study (scaled inverted)
Secretary	Cognitive	1 3	3	5.71
	Interactive	6	6	5.56
	Motor	2	5	1.25

		DOT score/range	Current study (original score)	Current study (scaled inverted)
Motor Mechanic	Cognitive	2 6	4	4.29
	Interactive	6 8	7	2.22
	Motor	1	1	8.75