



Analysis

Background:

The survey was commissioned by the Cork Regional branch to get a feel for the demographic and seek their views on potential topics for the 2014-2015 lecture season.

The survey was launched via direct email on Monday evening 9th June to 2,038 members who have subscribed to the Cork Region.

The survey remained open until close of business on Monday 23rd June and was completed by 226 individuals, giving a response rate of 11%. The profile of respondents is much in line with the overall profile of members in the Cork region which gives us confidence that the data received is a good core sample of opinion.

Notably, the majority of responses were received during the first few days of the launch.

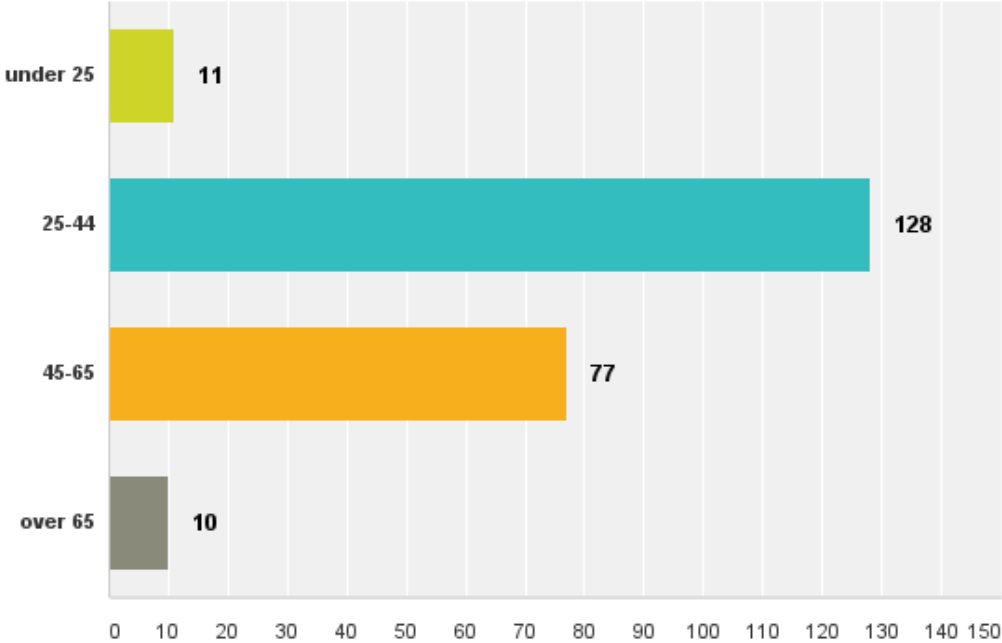
The findings of the survey are detailed in the following pages.

Máirín Ní Aonghusa
Customer Service Officer
Engineers Ireland

June 30th 2014

Q1 Please indicate which age category you fit into?

Answered: 226 Skipped: 0

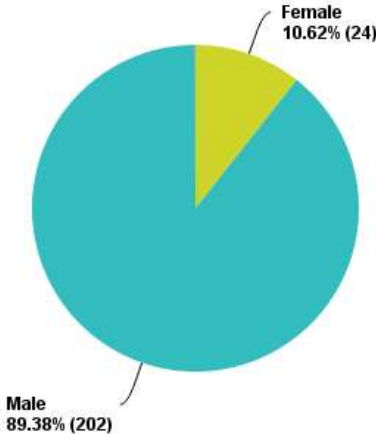


The majority of respondents (57%) fall into the 25-44 age category – overall, 51% of members in the Cork Region fall into this category. The response from the under 25s was just 5% while 18% of Cork Region members are aged 25 and under. This shows a lack of engagement from this age group. It should be noted however that the majority of these (74%) are student members and a high level of engagement in this type of survey would not be expected.

The gender of respondents again is reflective of the Cork Region membership where 10% are female.

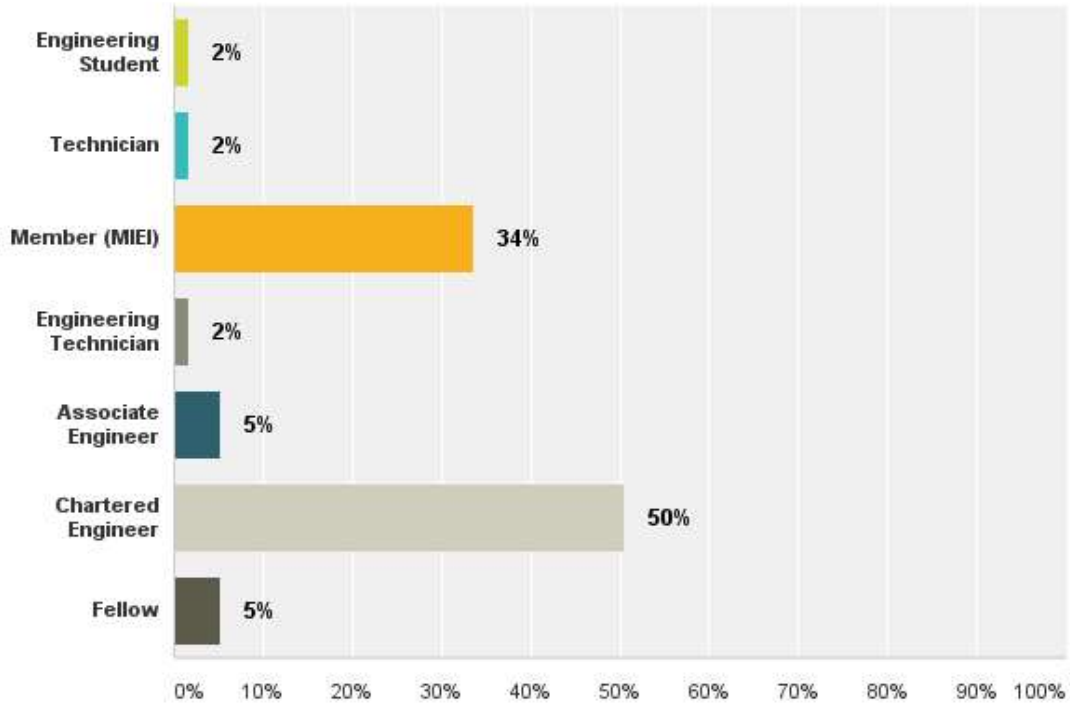
Q2 Please select

Answered: 226 Skipped: 0



Q3 Please indicate which membership grade / registered professional title you hold

Answered: 226 Skipped: 0

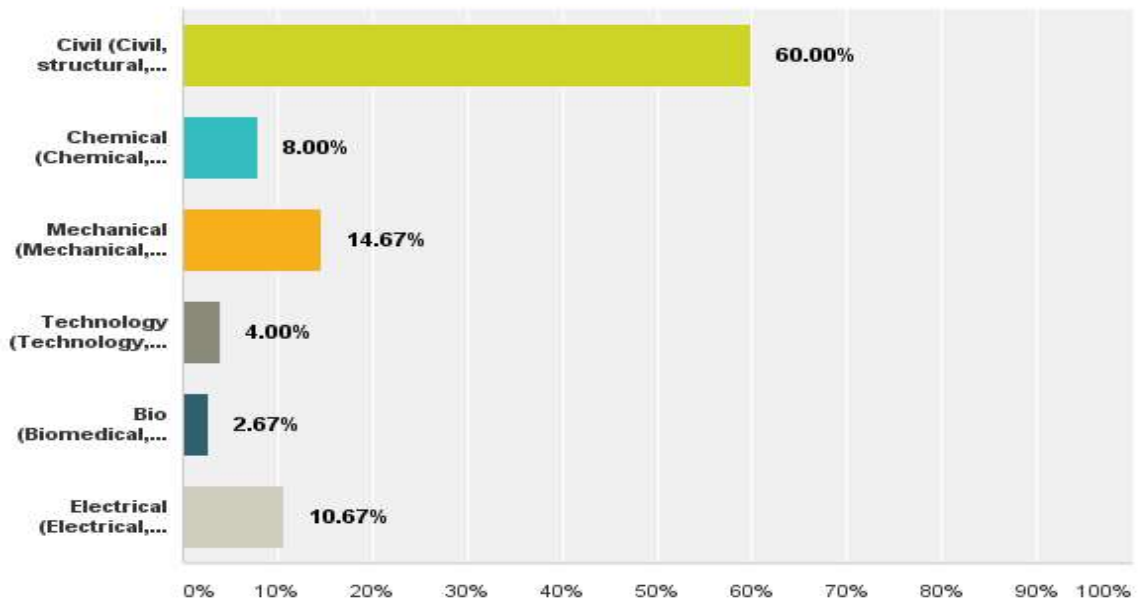


By way of comparison, the chart below gives the actual numbers and percentages in each grade/title for the Cork Region showing that while the largest group is the MIEI's who represent 46% of members in the Cork Region, Chartered Engineers account for 50% of responses to the survey.

Grade / Title	Actual and percentage in Cork Region		Respondents to survey – actual and percentage	
Member (MIEI)	1,222	(46%)	76	(34%)
Chartered Engineer	710	(27%)	114	(50%)
Engineering Student	484	(18%)	4	(2%)
Associate Engineer	33	(1%)	12	(5%)
Technician	41	(2%)	4	(2%)
Engineering Technician	3	(.1%)	4	(2%)
Fellow	170	(6%)	12	(5%)

Q4 In broad terms, which of the following categories do you feel you fit into?

Answered: 225 Skipped: 1



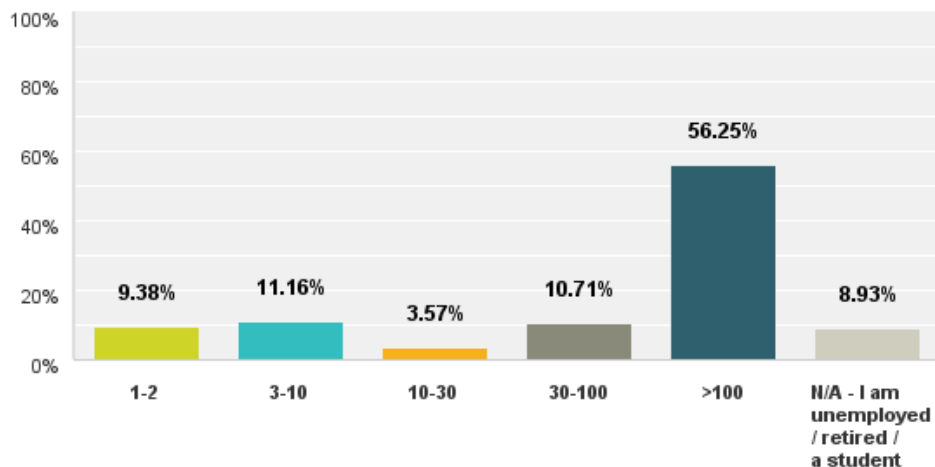
The categories are those used in EngineersJournal.ie to broadly cover all disciplines:

Civil (Civil, structural, environmental, building services, geotechnical)	60.00% (135)
Chemical (Chemical, pharmaceutical)	8.00% (18)
Mechanical (Mechanical, manufacturing, production, aeronautical, industrial)	14.67% (33)
Technology (Technology, communications, electronic, software)	4.00% (9)
Bio (Biomedical, marine, forestry, food, agriculture)	2.67% (6)
Electrical (Electrical, energy)	10.67% (24)

We cannot currently see how this compares to the overall numbers in the Cork Region as members can affiliate themselves to any number of engineering divisions. The system does not at present allow a search under engineering discipline but we can see from the chart above where respondents see themselves.

Q5 Please indicate the number of people employed in your organisation

Answered: 224 Skipped: 2



Q6 Main areas of activity

When asked to indicate their main areas of activity, respondents replied as follows:

Engineering consultancy	54.29% (114)
Construction	32.38% (68)
Manufacture	17.62% (37)
Public Sector (excluding education)	15.24% (32)
Education	7.14% (15)
Research and Development	5.24% (11)
Software development	3.33% (7)
Retired	3.33% (7)
Student	2.86% (6)
Unemployed	1.90% (4)

A further 28 selected “other”

- Automation
- Contract Electronics Manufacturing or (Electronics Manufacturing Services) of Medical Devices
- Electricity Generation
- Energy x 3
- Environmental
- Finance
- Geotechnical
- Hydraulics
- Insurance/litigation
- Management
- Marine Engineering / Defence
- Medical Sales
- Natural Gas Production x 2
- Port Authority
- Power generation x 2
- Project Management x 2
- Projects
- Regulation and enforcement
- Service industry
- Sustainable Energy Engineering
- Utility x 3

Q7 Members were asked to rank the following suggested topics (under consideration for the 2014-2015 programme) and to suggest up to three additional potential topics.

	Planning and development	Building Control Regulations 2014	Building Regulations / Construction Products Directive	Health and Safety	Litigation / Professional Witness	EU Directives	Global Warming	ICT, Data Analysis	Energy Renewables / Energy Directives	Building Information Modelling (BIM)	Project Management	Insurance / Liability for Engineers	Significant Projects	Novel Research
1	10% 21	16% 33	4% 9	6% 12	6% 13	2% 4	2% 5	5% 10	16% 33	5% 11	14% 30	1% 3	10% 22	3% 6
2	9% 20	9% 19	9% 19	12% 25	3% 6	7% 14	4% 8	4% 8	8% 18	4% 9	11% 24	3% 7	12% 26	4% 9
3	12% 26	7% 15	12% 26	8% 17	3% 7	3% 7	6% 13	5% 10	5% 10	6% 12	9% 20	4% 8	11% 23	8% 18
4	16% 34	6% 13	5% 11	10% 21	5% 10	6% 13	6% 12	3% 6	8% 16	5% 11	8% 18	6% 13	9% 19	7% 15
5	8% 17	9% 19	9% 19	13% 27	7% 15	10% 21	5% 10	2% 5	7% 15	3% 7	8% 16	8% 16	9% 19	3% 6
6	9% 19	10% 21	6% 12	11% 24	7% 15	11% 24	5% 10	2% 5	7% 15	5% 10	10% 22	5% 11	6% 12	6% 12
7	6% 13	6% 13	9% 20	10% 22	8% 16	12% 26	9% 19	3% 7	9% 19	7% 14	6% 12	5% 11	6% 12	4% 8
8	6% 13	8% 16	9% 20	8% 17	12% 26	8% 17	9% 20	8% 16	6% 12	5% 11	6% 13	8% 16	3% 7	4% 8
9	8% 17	5% 11	8% 17	7% 14	12% 26	12% 25	7% 15	9% 20	10% 21	8% 17	2% 5	6% 12	3% 7	2% 5
10	6% 12	7% 15	6% 12	3% 7	10% 21	12% 25	13% 28	9% 20	9% 19	8% 16	5% 11	5% 11	2% 5	5% 10
11	5% 10	6% 13	8% 16	5% 11	9% 19	8% 18	12% 26	15% 32	5% 10	11% 24	5% 10	3% 7	4% 8	4% 8
12	0% 1	2% 5	7% 15	5% 10	10% 21	4% 9	9% 20	17% 35	6% 13	11% 24	7% 15	11% 24	5% 10	5% 10
13	2% 5	3% 7	5% 10	1% 2	5% 11	3% 7	7% 15	9% 20	4% 9	15% 31	6% 13	15% 31	18% 39	6% 12
14	2% 4	6% 12	3% 6	1% 3	3% 6	1% 2	5% 11	8% 18	1% 2	7% 15	1% 3	20% 42	1% 3	40% 85

From the above, we can see that the most popular topics of those suggested are:

1. Building Control Regulations 2014 Energy Renewables / Energy Directives which got equal 1st preference votes.
2. Health and Safety and Significant Projects got equal 2nd preference votes.

3. Planning and development and Building Regulations / Construction Products Directive got equal 3rd preference votes.
4. Planning and development also got most 4th preference votes.
5. Health and Safety got most 5th preference votes.
6. Health and Safety and EU Directives got most 6th preference votes.
7. EU Directives got most 7th preference votes.
8. Litigation / Professional Witness got most 8th preference votes.
9. EU Directives and Litigation / Professional Witness got equal 9th preference votes.
10. Global Warming got most 10th preference votes
11. ICT, Data Analysis got most 11th and 12th preference votes.
12. Building Information Modelling (BIM) got most 13th preference votes.
13. Novel Research got most 14th preference votes.

Other topics proposed, roughly categorised and in alphabetical order:

Biomedical

Healthcare Innovation
 Latest developments for the electronics/medical industry
 Mechanics of modern Sport
 Medical Device News
 Medical Device Technology
 Population Health Crises points and Solutions

Career development

Career development
 Education
 Engineering Management
 Entrepreneurship - opening your own company /practice
 Entrepreneurship in Engineering
 Fee Structures
 Financial overview
 General review of computer software to assist engineers
 International Experiences
 Options for members considering leaving engineering
 Overseas Development Aid
 Routes to Chartered Engineer (Engineers Ireland ICE IStructE) & new requirements
 Starting your Consultancy
 Value for money / value engineering

Civil / Structural topics

Architecture (purely for interest) perhaps on some world / famous projects
 Asbestos awareness
 Assigned Certifier - Will it work in practise?
 Conciliation / Arbitration
 EU Directives - new EIA Directive very important
 Developments in Bridge Engineering
 EU structural design codes of practise
 Eurocodes
 Fire safety aspects of building regulations
 Fire Safety Engineering
 Foundations / soil analysis
 Further modules on design to Eurocodes
 GCCC Form of Contract
 Geotechnical Topics
 Hydraulic/air Control systems

- Lean Six Sigma in Construction
- Maritime infrastructure
- Partnership in Construction
- Procurement / construction contracts
- Project Supervisor Construction Stage
- Public Works Contracts
- Structural Design
- Surveying topics
- Unfinished Housing Estates
- Various Types of Government Contracts

Energy

- Biomass energy
- Electricity transport
- Energy efficiency advances
- Energy storage
- Oil and gas
- Tidal/wave energy
- Waste to energy

Manufacturing / production

- Asset Management
- Automation
- Batch Processing
- Control Systems
- Design of glass
- Facility Management
- Instrumentation
- Latest developments in manufacturing / high speed automation from the food industry
- Latest developments in metallurgy (& properties of other materials e.g. Polymers, etc.) for the Agriculture / Automation industry
- Manufacturing in Ireland
- Manufacturing processes
- Mechanical innovations
- New Manufacturing Technologies
- Noise/environmental control and advances
- Open Source Hardware (Arduino)
- Operational Excellence case studies including, Lean, Six Sigma, Simulation
- Process Engineering
- Process validation
- Reliability / Maintenance best practice
- Robotics
- Sensor Technology

Pharmaceutical / Chemical

- Biochemical Engineering
- Biopharma basics
- Biotech
- Chemicals
- Introduction to Biotech
- Pharmaceutical Engineering
- Pharmaceutical Plant operations
- Pharmaceutical utilities

Roads / Transportation

- EU electric vehicle regulation
- EU whole vehicle type approval

Innovations in the motor industry, and how that trickles down to what we drive
Road design
Road Maintenance
Roads and transport
Traffic Management
Traffic Modelling

Site visits

Eirgrid control Centre
More site visits
Water treatment plant

Soft Skills

Business Management
Commercial Competencies for Engineers
Engineering Education - increasing interest in Eng
How to lead multi-disciplinary teams
People Management
Time management

Water / wastewater

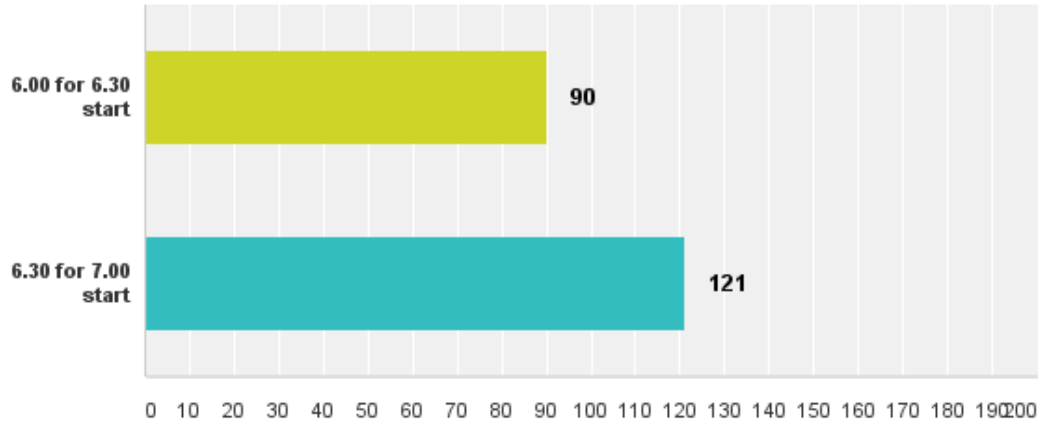
Coastal defences
Environmental Waste Water Disposal
Flood relief schemes
Flood risk management
International water treatment - Malta
Irish water - opportunities for engineers
Private Wells
Septic Tank Systems

Others

Electrical Engineering Topics
MES
NPI trends
Software Development
Technology roadmapping

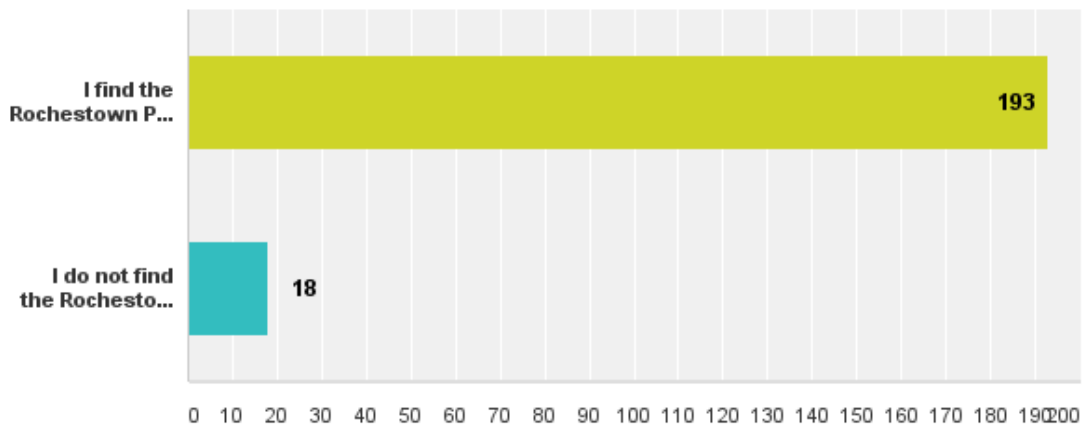
Q9 The venue for Cork Region evening lectures is generally the Rochestown Park Hotel with tea/coffee provided beforehand. Please indicate your preferred start time

Answered: 211 Skipped: 15



Q10 How suitable for you is the venue?

Answered: 211 Skipped: 15



In relation to the venue for evening lectures, 91% of respondents were happy with the Rochestown Park Hotel as a venue.

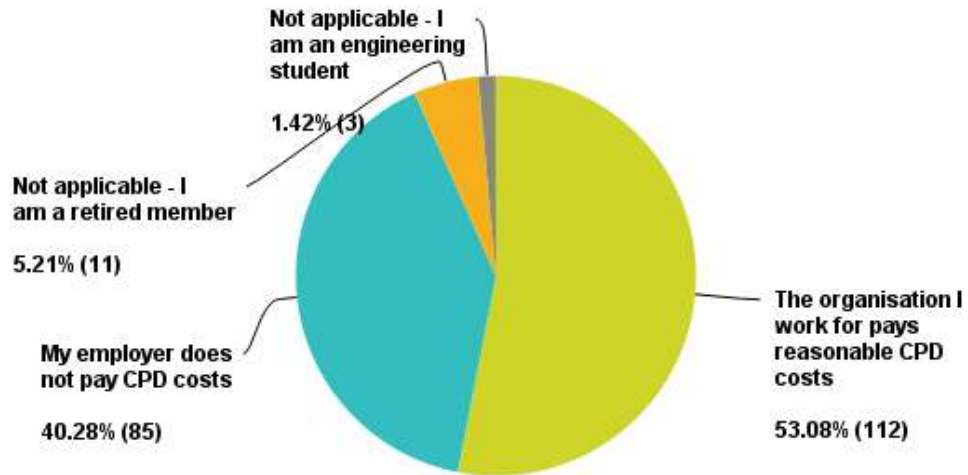
In relation to the start time for events, 57% of those who expressed a preference favoured 6.30 for 7.00pm with 43% favouring a 6.00 for 6.30 start time.

91% of respondents find the Rochestown Park Hotel a suitable venue for evening lectures with just 18 expressing a preference for change.

Other venues/locations proposed include City Centre hotels with parking, UCC, CIT, North Cork City location, City Hall, Fermoy, Mallow and on-line.

Q12 The Cork Region hopes to deliver CPD / evening lectures free to its members where possible and at a minimal charge where necessary. Please indicate below whether your organisation funds continual professional development costs for its employees.

Answered: 211 Skipped: 15



Taking those who are in the workforce and for which this question is applicable, just 57% of employers fund CPD costs.