



**QUESTIONNAIRE ON UNIVERSITY PROVISION  
OF GENERIC SKILLS TRAINING IN  
AQUACULTURE, FISHERIES & MARINE SCIENCES:  
EMPLOYERS**

**1. PURPOSE OF THIS SURVEY**

To evaluate the current provision of generic skills training at university level for students in aquaculture, fisheries and other marine sciences, in terms of its suitability for (a) the degree programme studied and (b) the workplace. In particular, to identify gaps in training provision and improve the skills base.

Under the general heading “generic skills” we consider a wide range of research, workplace and life skills that are not specific to any one discipline, including languages, communication, scientific methodology, IT and management.

Your answers to our questions will be of great value in evaluating and improving the provision of generic skills training in the aquaculture, fisheries, marine science and management sectors.

*Please complete this version of the questionnaire if you are an employer or line manager of one or more university graduates*

**2. DATA PROTECTION**

Please note that, in order for us to process any personal data that you submit, we need to ask you to complete and sign the declaration below.

All information received from you will be used for statistical purposes only and will be treated as completely confidential. No individual questionnaire will ever be identified in any material published from this survey nor will any of the data obtained be passed on to any other party.

“I hereby give my permission for the storage and use this information under the UK Data Protection Act 1998.”

|           |  |
|-----------|--|
| Name      |  |
| Signature |  |
| Date      |  |

Thank you very much for your assistance

## QUESTIONNAIRE ON GENERIC SKILLS TRAINING: EMPLOYERS

### 3. Personal data

Please complete all sections that are relevant to you

|   |                         |
|---|-------------------------|
| Sex   | Male / female           |
| Age   |                         |
| Nationality   |                         |
| Native language   |                         |
| Country where you currently work  |                         |
| Profession  |                         |
| Your job title  |                         |
| Employer name   |                         |
| Several questions below refer to skills levels in your company. Please indicate the <i>category</i> of employees to which your answers will refer |                         |
| If you teach generic skills, at what level (mainly)?  | BSc / MSc / PhD / other |
| Country where you did your degree (if more than one degree, the most recent one)  |                         |
| Name of the university where you studied this degree  |                         |
| Degree type   | BSc / MSc / PhD / other |
| Degree duration in years  |                         |
| Degree title or subject   |                         |
| Was it full-time or part-time?  |                         |
| Did your degree involve distance learning?  | Yes / no / in part      |
| What language(s) were used for teaching in degree?  |                         |
| Year of graduation  |                         |

## QUESTIONNAIRE ON GENERIC SKILLS TRAINING: EMPLOYERS

### 4. Questions about the suite of generic skills

Q1. "This skill is important". Do you strongly agree (SA), agree (A), neither agree nor disagree (N), disagree (D) or strongly disagree (SD)? *(Please tick one answer per skill)*

| GENERIC SKILLS   | SA | A | N | D | SD |
|--|----|---|---|---|----|
| <b>Numerical, computational, statistical skills</b>  |    |   |   |   |    |
| • Mathematics  |    |   |   |   |    |
| • Statistical methods  |    |   |   |   |    |
| • Statistical software   |    |   |   |   |    |
| • Models and simulations   |    |   |   |   |    |
| <b>IT skills</b>   |    |   |   |   |    |
| • Office software (word processing, e-mail, spreadsheet, presentation)   |    |   |   |   |    |
| • Web page design  |    |   |   |   |    |
| • Information literacy (Endnote, SCOPUS etc)   |    |   |   |   |    |
| • IT communication (Skype, web forums)   |    |   |   |   |    |
| <b>Scientific methods</b>  |    |   |   |   |    |
| • Philosophy of science (hypotheses, logic, induction, debating)   |    |   |   |   |    |
| • Experimental design  |    |   |   |   |    |
| • Data management  |    |   |   |   |    |
| • Research ethics  |    |   |   |   |    |
| • Critical review  |    |   |   |   |    |
| <b>Practical/management skills</b>   |    |   |   |   |    |
| • Project management   |    |   |   |   |    |
| • Time management  |    |   |   |   |    |
| • Team management  |    |   |   |   |    |
| • Budget management  |    |   |   |   |    |
| • Team working   |    |   |   |   |    |
| • Laboratory skills (best practice)  |    |   |   |   |    |
| • Risk assessment(safety in lab and fieldwork)   |    |   |   |   |    |
| • Awareness of legal and procedural issues (licensing of animal research, health and safety, data protection, anti-discrimination) |    |   |   |   |    |
| <b>Communication skills (scientific and general)</b>   |    |   |   |   |    |
| • Literacy in own language   |    |   |   |   |    |
| • Knowledge of English (if not first language)   |    |   |   |   |    |
| • Knowledge of other languages   |    |   |   |   |    |
| • Oral presentation  |    |   |   |   |    |
| • Thesis defence   |    |   |   |   |    |
| • Poster presentation  |    |   |   |   |    |
| • Networking   |    |   |   |   |    |
| • Effective behaviour in the workplace   |    |   |   |   |    |
| • Scientific writing (papers, theses, abstracts, essays)   |    |   |   |   |    |
| • Media communication  |    |   |   |   |    |
| <b>Career and life skills</b>  |    |   |   |   |    |
| • CVs, job applications, interviews  |    |   |   |   |    |
| • Grant applications, research funding   |    |   |   |   |    |
| • Career development planning  |    |   |   |   |    |
| <b>Science in society</b>  |    |   |   |   |    |
| • Interdisciplinary studies  |    |   |   |   |    |
| • Policy awareness   |    |   |   |   |    |
| • Entrepreneurship / business awareness / innovation   |    |   |   |   |    |
| <b>Practical skills</b>  |    |   |   |   |    |
| • Sector specific (Fish handling, survival at sea, boat handling, diving)  |    |   |   |   |    |
| • General (First aid, driving)   |    |   |   |   |    |

## QUESTIONNAIRE ON GENERIC SKILLS TRAINING: EMPLOYERS

Q2. What level of degree do new employees normally have (in your company)? (BSc / MSc / PhD – please tick any of these that apply / don't know (DK). *Please answer in relation to the category of employee you are most familiar with*

| GENERIC SKILLS   | BSc | MSc | PhD | DK |
|--|-----|-----|-----|----|
| <b>Numerical, computational, statistical skills</b>  |     |     |     |    |
| • Mathematics  |     |     |     |    |
| • Statistical methods  |     |     |     |    |
| • Statistical software   |     |     |     |    |
| • Models and simulations   |     |     |     |    |
| <b>IT skills</b>   |     |     |     |    |
| • Office software (word processing, e-mail, spreadsheet, presentation)   |     |     |     |    |
| • Web page design  |     |     |     |    |
| • Information literacy (Endnote, SCOPUS etc)   |     |     |     |    |
| • IT communication (Skype, web forums)   |     |     |     |    |
| <b>Scientific methods</b>  |     |     |     |    |
| • Philosophy of science (hypotheses, logic, induction, debating)   |     |     |     |    |
| • Experimental design  |     |     |     |    |
| • Data management  |     |     |     |    |
| • Research ethics  |     |     |     |    |
| • Critical review  |     |     |     |    |
| <b>Practical/management skills</b>   |     |     |     |    |
| • Project management   |     |     |     |    |
| • Time management  |     |     |     |    |
| • Team management  |     |     |     |    |
| • Budget management  |     |     |     |    |
| • Team working   |     |     |     |    |
| • Laboratory skills (best practice)  |     |     |     |    |
| • Risk assessment(safety in lab and fieldwork)   |     |     |     |    |
| • Awareness of legal and procedural issues (licensing of animal research, health and safety, data protection, anti-discrimination) |     |     |     |    |
| <b>Communication skills (scientific and general)</b>   |     |     |     |    |
| • Literacy in own language   |     |     |     |    |
| • Knowledge of English (if not first language)   |     |     |     |    |
| • Knowledge of other languages   |     |     |     |    |
| • Oral presentation  |     |     |     |    |
| • Thesis defence   |     |     |     |    |
| • Poster presentation  |     |     |     |    |
| • Networking   |     |     |     |    |
| • Effective behaviour in the workplace   |     |     |     |    |
| • Scientific writing (papers, theses, abstracts, essays)   |     |     |     |    |
| • Media communication  |     |     |     |    |
| <b>Career and life skills</b>  |     |     |     |    |
| • CVs, job applications, interviews  |     |     |     |    |
| • Grant applications, research funding   |     |     |     |    |
| • Career development planning  |     |     |     |    |
| <b>Science in society</b>  |     |     |     |    |
| • Interdisciplinary studies  |     |     |     |    |
| • Policy awareness   |     |     |     |    |
| • Entrepreneurship / business awareness / innovation   |     |     |     |    |
| <b>Practical skills</b>  |     |     |     |    |
| • Sector specific (Fish handling, survival at sea, boat handling, diving)  |     |     |     |    |
| • General (First aid, driving)   |     |     |     |    |

## QUESTIONNAIRE ON GENERIC SKILLS TRAINING: EMPLOYERS

Q3. Is the level of attainment in these skills in new employees normally adequate (yes / no)?  
Please answer in relation to the category of employee you are most familiar with

| GENERIC SKILLS   | yes | no |
|--|-----|----|
| <b>Numerical, computational, statistical skills</b>  |     |    |
| • Mathematics  |     |    |
| • Statistical methods  |     |    |
| • Statistical software   |     |    |
| • Models and simulations   |     |    |
| <b>IT skills</b>   |     |    |
| • Office software (word processing, e-mail, spreadsheet, presentation)   |     |    |
| • Web page design  |     |    |
| • Information literacy (Endnote, SCOPUS etc)   |     |    |
| • IT communication (Skype, web forums)   |     |    |
| <b>Scientific methods</b>  |     |    |
| • Philosophy of science (hypotheses, logic, induction, debating)   |     |    |
| • Experimental design  |     |    |
| • Data management  |     |    |
| • Research ethics  |     |    |
| • Critical review  |     |    |
| <b>Practical/management skills</b>   |     |    |
| • Project management   |     |    |
| • Time management  |     |    |
| • Team management  |     |    |
| • Budget management  |     |    |
| • Team working   |     |    |
| • Laboratory skills (best practice)  |     |    |
| • Risk assessment(safety in lab and fieldwork)   |     |    |
| • Awareness of legal and procedural issues (licensing of animal research, health and safety, data protection, anti-discrimination) |     |    |
| <b>Communication skills (scientific and general)</b>   |     |    |
| • Literacy in own language   |     |    |
| • Knowledge of English (if not first language)   |     |    |
| • Knowledge of other languages   |     |    |
| • Oral presentation  |     |    |
| • Thesis defence   |     |    |
| • Poster presentation  |     |    |
| • Networking   |     |    |
| • Effective behaviour in the workplace   |     |    |
| • Scientific writing (papers, theses, abstracts, essays)   |     |    |
| • Media communication  |     |    |
| <b>Career and life skills</b>  |     |    |
| • CVs, job applications, interviews  |     |    |
| • Grant applications, research funding   |     |    |
| • Career development planning  |     |    |
| <b>Science in society</b>  |     |    |
| • Interdisciplinary studies  |     |    |
| • Policy awareness   |     |    |
| • Entrepreneurship / business awareness / innovation   |     |    |
| <b>Practical skills</b>  |     |    |
| • Sector specific (Fish handling, survival at sea, boat handling, diving)  |     |    |
| • General (First aid, driving)   |     |    |

## QUESTIONNAIRE ON GENERIC SKILLS TRAINING: EMPLOYERS

Q4. Is your company involved in teaching these skills (a) to the employees (yes / no), (b) to university students (yes / no)?

| GENERIC SKILLS   | Employees |    | Students |    |
|--|-----------|----|----------|----|
|  | yes       | no | yes      | no |
| <b>Numerical, computational, statistical skills</b>  |           |    |          |    |
| • Mathematics  |           |    |          |    |
| • Statistical methods  |           |    |          |    |
| • Statistical software   |           |    |          |    |
| • Models and simulations   |           |    |          |    |
| <b>IT skills</b>   |           |    |          |    |
| • Office software (word processing, e-mail, spreadsheet, presentation)   |           |    |          |    |
| • Web page design  |           |    |          |    |
| • Information literacy (Endnote, SCOPUS etc)   |           |    |          |    |
| • IT communication (Skype, web forums)   |           |    |          |    |
| <b>Scientific methods</b>  |           |    |          |    |
| • Philosophy of science (hypotheses, logic, induction, debating)   |           |    |          |    |
| • Experimental design  |           |    |          |    |
| • Data management  |           |    |          |    |
| • Research ethics  |           |    |          |    |
| • Critical review  |           |    |          |    |
| <b>Practical/management skills</b>   |           |    |          |    |
| • Project management   |           |    |          |    |
| • Time management  |           |    |          |    |
| • Team management  |           |    |          |    |
| • Budget management  |           |    |          |    |
| • Team working   |           |    |          |    |
| • Laboratory skills (best practice)  |           |    |          |    |
| • Risk assessment(safety in lab and fieldwork)   |           |    |          |    |
| • Awareness of legal and procedural issues (licensing of animal research, health and safety, data protection, anti-discrimination) |           |    |          |    |
| <b>Communication skills (scientific and general)</b>   |           |    |          |    |
| • Literacy in own language   |           |    |          |    |
| • Knowledge of English (if not first language)   |           |    |          |    |
| • Knowledge of other languages   |           |    |          |    |
| • Oral presentation  |           |    |          |    |
| • Thesis defence   |           |    |          |    |
| • Poster presentation  |           |    |          |    |
| • Networking   |           |    |          |    |
| • Effective behaviour in the workplace   |           |    |          |    |
| • Scientific writing (papers, theses, abstracts, essays)   |           |    |          |    |
| • Media communication  |           |    |          |    |
| <b>Career and life skills</b>  |           |    |          |    |
| • CVs, job applications, interviews  |           |    |          |    |
| • Grant applications, research funding   |           |    |          |    |
| • Career development planning  |           |    |          |    |
| <b>Science in society</b>  |           |    |          |    |
| • Interdisciplinary studies  |           |    |          |    |
| • Policy awareness   |           |    |          |    |
| • Entrepreneurship / business awareness / innovation   |           |    |          |    |
| <b>Practical skills</b>  |           |    |          |    |
| • Sector specific (Fish handling, survival at sea, boat handling, diving)  |           |    |          |    |
| • General (First aid, driving)   |           |    |          |    |

## QUESTIONNAIRE ON GENERIC SKILLS TRAINING: EMPLOYERS

Q5. Are you involved in teaching these skills (a) to the employees (yes / no), (b) to university students (yes / no)?

| GENERIC SKILLS   | Employees |    | Students |    |
|--|-----------|----|----------|----|
|  | yes       | no | yes      | NO |
| <b>Numerical, computational, statistical skills</b>  |           |    |          |    |
| • Mathematics  |           |    |          |    |
| • Statistical methods  |           |    |          |    |
| • Statistical software   |           |    |          |    |
| • Models and simulations   |           |    |          |    |
| <b>IT skills</b>   |           |    |          |    |
| • Office software (word processing, e-mail, spreadsheet, presentation)   |           |    |          |    |
| • Web page design  |           |    |          |    |
| • Information literacy (Endnote, SCOPUS etc)   |           |    |          |    |
| • IT communication (Skype, web forums)   |           |    |          |    |
| <b>Scientific methods</b>  |           |    |          |    |
| • Philosophy of science (hypotheses, logic, induction, debating)   |           |    |          |    |
| • Experimental design  |           |    |          |    |
| • Data management  |           |    |          |    |
| • Research ethics  |           |    |          |    |
| • Critical review  |           |    |          |    |
| <b>Practical/management skills</b>   |           |    |          |    |
| • Project management   |           |    |          |    |
| • Time management  |           |    |          |    |
| • Team management  |           |    |          |    |
| • Budget management  |           |    |          |    |
| • Team working   |           |    |          |    |
| • Laboratory skills (best practice)  |           |    |          |    |
| • Risk assessment(safety in lab and fieldwork)   |           |    |          |    |
| • Awareness of legal and procedural issues (licensing of animal research, health and safety, data protection, anti-discrimination) |           |    |          |    |
| <b>Communication skills (scientific and general)</b>   |           |    |          |    |
| • Literacy in own language   |           |    |          |    |
| • Knowledge of English (if not first language)   |           |    |          |    |
| • Knowledge of other languages   |           |    |          |    |
| • Oral presentation  |           |    |          |    |
| • Thesis defence   |           |    |          |    |
| • Poster presentation  |           |    |          |    |
| • Networking   |           |    |          |    |
| • Effective behaviour in the workplace   |           |    |          |    |
| • Scientific writing (papers, theses, abstracts, essays)   |           |    |          |    |
| • Media communication  |           |    |          |    |
| <b>Career and life skills</b>  |           |    |          |    |
| • CVs, job applications, interviews  |           |    |          |    |
| • Grant applications, research funding   |           |    |          |    |
| • Career development planning  |           |    |          |    |
| <b>Science in society</b>  |           |    |          |    |
| • Interdisciplinary studies  |           |    |          |    |
| • Policy awareness   |           |    |          |    |
| • Entrepreneurship / business awareness / innovation   |           |    |          |    |
| <b>Practical skills</b>  |           |    |          |    |
| • Sector specific (Fish handling, survival at sea, boat handling, diving)  |           |    |          |    |
| • General (First aid, driving)   |           |    |          |    |

**QUESTIONNAIRE ON GENERIC SKILLS TRAINING: EMPLOYERS**

**5. General questions about generic skills**

|   |                                  |
|---|----------------------------------|
| Are there any important skills missing from the list in section 4 above?  | Yes / no                         |
| If yes, please list them  |                                  |
| What % of their study time at university do you think students should spend on generic skills training?   |                                  |
| <p>“These teaching methods are effective”.</p> <p>Do you: strongly agree (SA), agree (A), neither agree nor disagree (N), disagree (d), strongly disagree (SD) or don't know?</p> |                                  |
| Lecture   | SA / A / N / D / SD / don't know |
| Tutorial (small group discussion)   | SA / A / N / D / SD / don't know |
| Practical exercises (computer-based/laboratory/fieldwork)   | SA / A / N / D / SD / don't know |
| Work experience   | SA / A / N / D / SD / don't know |
| Role playing / Games  | SA / A / N / D / SD / don't know |
| Self-learning   | SA / A / N / D / SD / don't know |
| Is there monitoring of the quality of generic skills training that is provided in your workplace?   | Yes / no                         |
| How is quality monitored?   |                                  |
| Which <u>one</u> thing would you propose to improve generic skills training?  |                                  |

Thank you! We greatly appreciate your assistance in this research.