

AQUA-TNET3

Promoting innovation and a European dimension through Lifelong learning in the field of Aquaculture, Fisheries and Aquatic Resource Management – Thematic Network

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PU Public	
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SUMMARY

Objectives:

Analysis of the results of the survey.

Rationale:

The analysis of the survey results will generate summaries of list of life-long skills, identification of resource limitations to the delivery of generic skills, generic skills to be developed, best training approaches and delivery methods.

Results:

Report in attachment.

Teams involved:

University of Aberdeen, UK.

Geographical areas covered:

All Europe

Report on Consultation exercise

1. Identification of interviewees

A total of 65 key-employers replied to the questionnaire. The highest proportion of repliers was from the UK.

Most respondents were employed by universities (41%) and research institutes (22%). The most important category of employees for these respondents are researchers (51%) and management (24%) (Table 1).

Table 1.
Characteristics of respondents

	%
Country	
UK	23%
Spain	8%
Greece	7%
Netherlands	7%
France	5%
Institution/company	
Industry	13%
University	41%
Research Institute	22%
Other	24%
Category of workers most important for your company	
Management	24%
Production	8%
Marketing/commercial	7%
Research	51%
Other	9%

2. Generic skills needs

In general all skills were regarded as important in order for a graduate to find employment, with the exception of knowledge of foreign languages (not English) (71% voted as less important) and poster presentation (48%) (Table 2).

The skills voted as more important were: office software (67%), crafting the message (synthesis, communication) (63%), knowledge of English (if not the first language) (60%), critical review (58%), project management (55%), time management (55%),

data management (53%), scientific writing (53%) and write applications/obtain funding (52%) (Figure 1, Table 2).

However, this doesn't mean that interviewees perceive that there is the need for training in all these skills. Below we describe which skills interviewees perceived to be more important for graduates to find employment and that they identified graduates are in need of training (Table 2):

- **Knowledge of English (if not the first language)**, with 60% identifying as more important and 24% perceiving graduates need training on this skill;
- **Oral presentations**, with 47% identifying as more important and 24% perceiving graduates need training on this skill;
- **Experimental design**, with 43% identifying as more important and 25% perceiving graduates need training on this skill;
- **Scientific writing** (papers, theses, abstracts, essays), with 53% identifying as more important and 28% perceiving graduates need training on this skill;
- **Project management**, with 55% identifying as more important and 35% perceiving graduates need training on this skill;
- **Write applications/obtain funding**, with 52% identifying as more important and 26% perceiving graduates need training on this skill.

Figure 1.
Importance of generic or vocational skills for a graduate to find employment (1 = Less important = red, 2 = Important = yellow, 3 = More important = green).

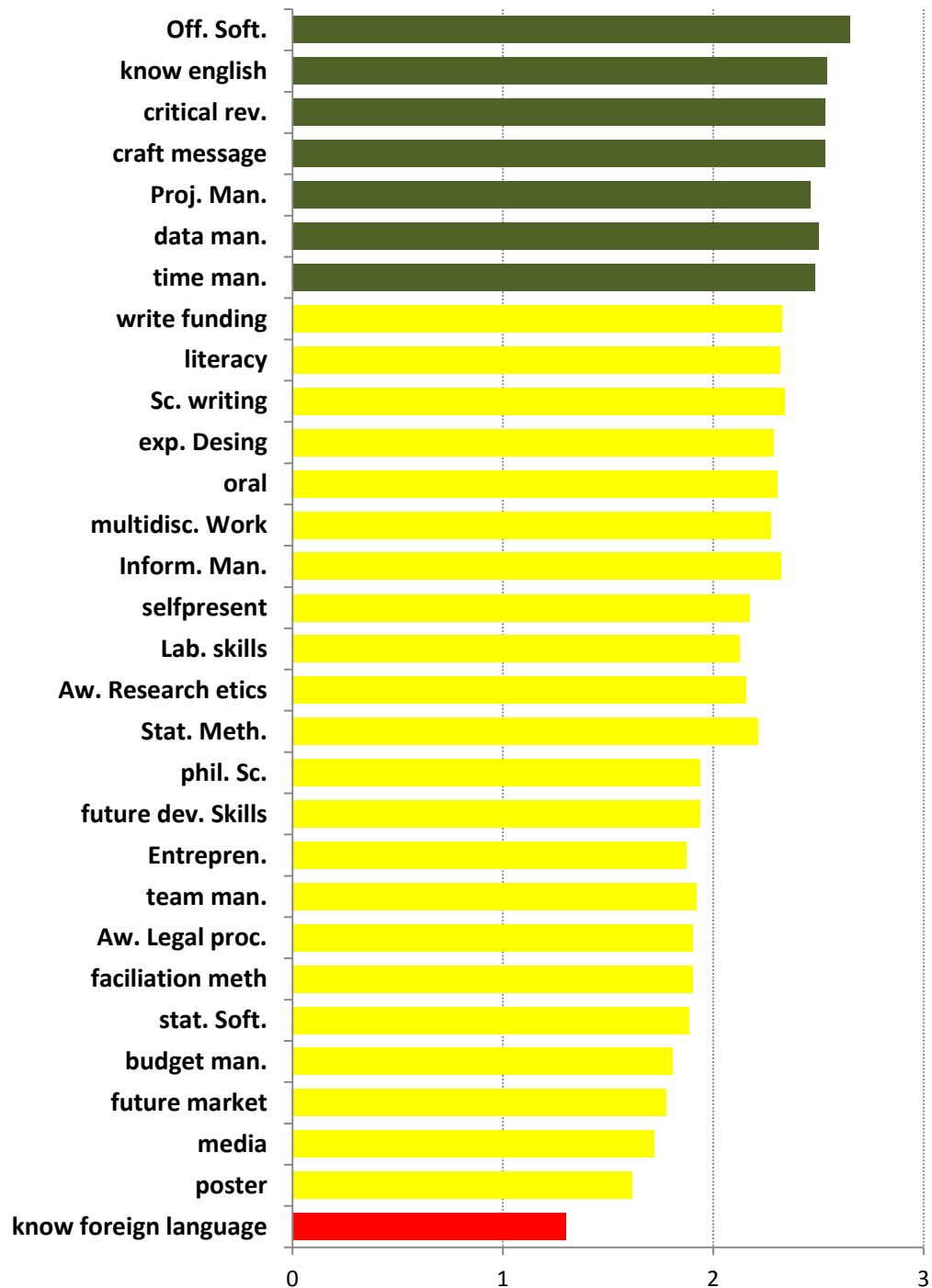


Table 2.
Importance of generic or vocational skills for a graduate to find employment and need for training in these skills.

	Importance (%)			In need of training
	<i>More important</i>	<i>Important</i>	<i>Less important</i>	
Communication skills				
Knowledge of English (if not first language)	60	33	7	24%
Knowledge of foreign languages (not English)	2	27	71	12%
Literacy in one's own language	46	40	14	6%
Poster presentations	10	42	48	11%
Oral presentations	47	37	16	24%
Self-presentation (Write CV, job applications)	35	48	17	12%
Crafting the message (synthesis, communication)	63	27	10	20%
Media interaction, press releases, communication to the public	11	50	39	17%
Facilitation methods (participatory methods)	18	55	27	24%
Science skills				
Data management	53	44	3	19%
Philosophy of science (hypotheses, logic, induction, debating)	27	40	33	12%
Experimental design	43	43	14	25%
Statistical methods	39	43	18	25%
Statistical software	26	37	37	19%
Critical review	58	37	5	15%
Scientific writing (papers, theses, abstracts, essays)	53	27	19	28%
Awareness of research ethics	30	56	14	17%
Practical / work place skills				
Office software (word processing, e-mail, spreadsheet, presentation)	67	32	2	8%

Laboratory skills (best practice)	41	31	28	17%
Project management	55	35	10	35%
Time management	55	39	6	19%
Information/knowledge management (tools, organization of information, information sharing)	41	51	8	19%
Team management	19	53	27	14%
Budget management	16	49	35	22%
Awareness of legal and procedural issues (e.g. licensing of animal research, health and safety, data protection, etc.)	19	52	29	12%
Write applications/ obtain funding	52	30	18	26%
Entrepreneurship/business awareness / innovation	17	53	30	12%
Future market opportunity evaluation skills	19	40	41	11%
Future strategy development skills	24	45	31	12%
Multi-disciplinary work	40	47	13	6%

3. Attributes employers look for in graduate employees

Interviewees were also asked to identify the top 10 attributes employers look for in graduate employees. The attributes identified as most important were (Figure 2, Table 3):

- Motivation,
- Capacity to solve problems,
- Responsibility,
- Creativity,
- Ability to work as part of a team,
- Efficiency,
- Intellectual curiosity,
- Reliability,
- Openness to new activities and ideas,

- Honesty.

Figure 2.
Attributes employers look for in graduate employees
(marked red the top10 most important attributes)

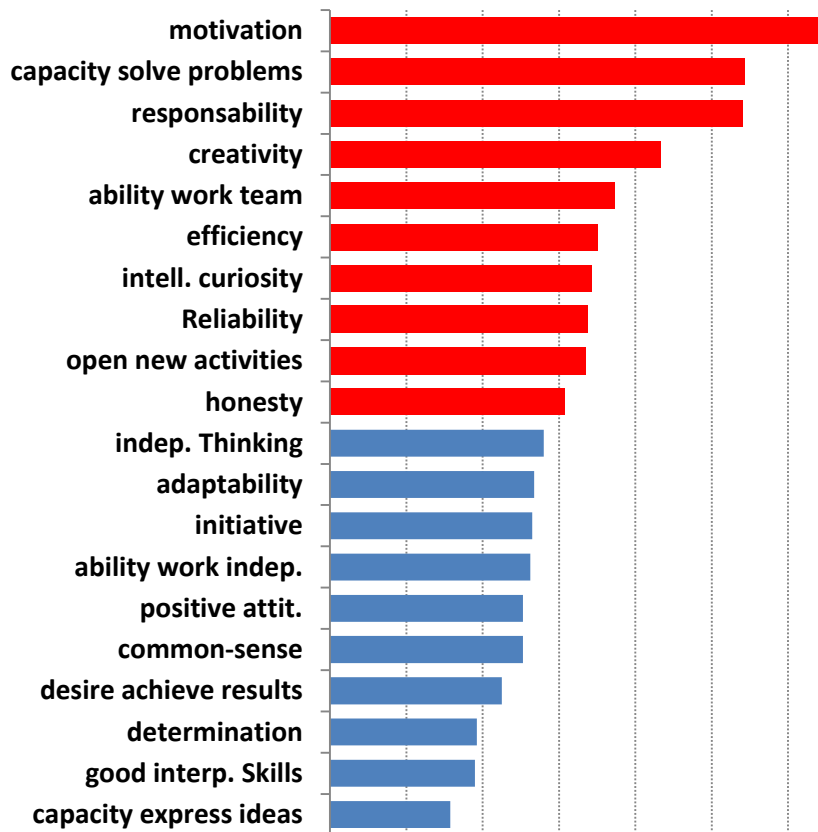


Table 3.
Attributes employers look for in graduate employees

Attributes	%	Attributes	%
Loyalty	23	Capacity to solve problems	65
Reliability	46	Desire to achieve results	32
Responsibility	62	Environmental awareness	15
Common-sense	34	Animal welfare awareness	6
Resilience	9	Culture adaptability/awareness	12
Honesty	32	Openness to learn another language	6
Motivation	63	Openness to new activities and ideas	46
Efficiency	43	Capacity to express new ideas/message	34
Determination	22	Readiness to take part	15
Discretion	11	Ability to work independently	43
Initiative	40	Ability to work as part of a team	59
Self-starting	14	Co-operation	17
Independent thinking	40	Team spirit	17
Adaptability	39	Good interpersonal skills	32
Creativity	54	Respecting others	22
A positive attitude	35	Networking capacity	20
Appropriate assertiveness	3	Other	2
Intellectual curiosity	35		

4. Efficiency of teaching methods

Interviewees were asked to identify the efficiency of a list of teaching methods. From a list of eleven teaching methods only three were identified as very effective. The rest were identified as effective and none was identified as not effective (Figure 3, Table 4).

Interviewees reported to be familiar with most teaching methods. The teaching methods they were most familiar with were: lectures (89%), practical exercises (88%), tutorials (79%), work experience (75%), self-learning (75%) and case study simulations (62%). The teaching methods interviewees were least familiar with were: online collaboration tools (40%) and online discussion forums/blogs (43%) (Table 4).

The teaching method identified as very effective were (Figure 3, Table 4):

- **Practical exercises** (laboratory/fieldwork),
- **Work experience**,
- **Tutorials** (small group discussions).

Figure 3.
Efficiency of teaching methods (1 = not very effective, 2 = quite effective = yellow, 3 = very effective = green)

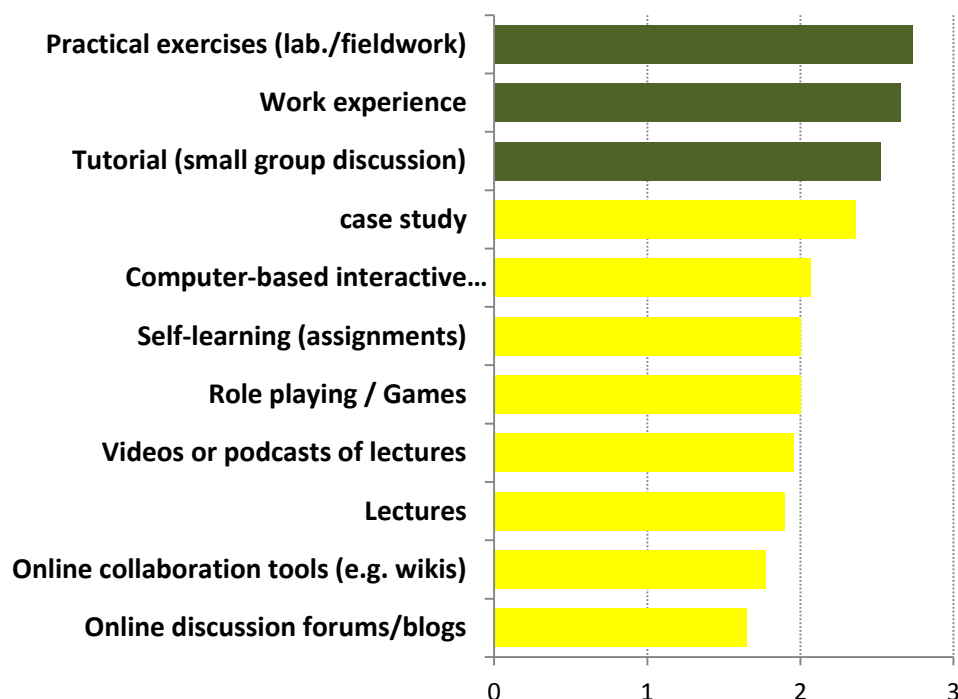


Table 4.
Efficiency of teaching methods and familiarity with them.

	Efficiency			Familiar with teaching method
	<i>Not very effective</i>	<i>Quite effective</i>	<i>Very effective</i>	
Lectures	23	63	14	89%
Tutorial (small group discussion)	4	40	56	79%
Practical exercises (lab./fieldwork)	2	23	75	88%
Work experience	5	24	71	75%
Role playing / Games	34	32	34	49%
Case study simulations	6	52	42	62%
Self-learning (assignments)	20	60	20	75%
Online discussion forums/blogs	46	42	12	43%
Online collaboration tools (e.g. Wikis & shared documents)	33	57	10	40%
Computer-based interactive learning materials	7	80	13	54%
Videos or podcasts of lectures	22	60	18	49%