

Annual Event 2009

Sant Feliu de Guíxols (Spain)

5 - 7 October 2009



Education and Culture
Lifelong Learning Programme
ERASMUS

LLP - Erasmus - Academic Network

WP4: New Generic Skills and Competences approaches



Text Graham J. Pierce **Presented by** Jaime Fernandez-Borras

LLP - Erasmus - Academic Network

WP4 aims

- **Short Justification for WP:**
 - *In many postgraduate programmes generic skills training is a very important aspect.*
 - *There is a need to ensure that training meets needs of employers and fulfils aspirations of trainees.*
- **Aim:**
 - *To review content of generic skills modules within European postgraduate degree programmes,*
 - *promoting and sharing best practice,*
 - *identifying new requirements for those within the network domains*

WP4 Main objectives

- *Survey and synthesise views of stakeholders (industry and other employers) about generic skills necessary for success in industry*
- *Consult with academics, etc., who deliver generic skills teaching, about objectives, content, delivery; => identify best practice and gaps*
- *Consult with postgraduate students about requirements and experience of skills teaching*
- *Compile recommendations about best practice for generic skills modules, make results available to AQUA-TNET members*
- *Identify gaps + new requirements in postgrad generic skills training*

WP4 Main objectives (cont.)

- *Design course outlines to meet defined needs, help network partnerships to develop shared courses*
- *Identify best practice in implementing “problem solving” methodology across all aspects of programmes*
- *Identify best practice in Innovation Training methodology and make recommendation on how institutions can incorporate appropriate aspects into their current structures*

Activities to date

WP 4.1: Core Group Meeting Year 1

- The core group met to
 - *discuss current trends in topic areas covered by WP4*
 - *design questionnaire surveys (4.2 & 4.3)*
 - *define surveying methodology*
 - *plan for year 1 annual event*
 - *Minutes from meeting to be published on public section of network website.*
- **Progress:**
 - *Meeting held jointly with WP7, Aberdeen, March 2009*

Activities to date

WP 4.1: Core Group Meeting Year 1

- WP7:

- *Margaret Eleftheriou (AMC Ltd)*
- *Tasso Eleftheriou*
- *Elisabeth Grahl-Madsen (Bergen)*
- *William O'Connell (Dundee)*

- WP4:

- *Graham Pierce (Aberdeen)*
- *Ioannis Theodossiou (Aberdeen)*
- *Cristina Pita (PhD student, Aberdeen)*
- *Jaume Fernandez (Barcelona)*
- *Belgin Hossu (Ismir)*
- *Elena Mente (Thessaly)*
- *Catarina Martins (Wageningen)*
- *Sonia Seixas (Lisbon)*
- Written submission received from *Axel Miller (SAMS, Oban)*

Activities to date

WP 4.2: Design & plan survey - core skills teaching

- *Scope and definition of core skills teaching discussed and questionnaire-based surveys, to obtain views of industry stakeholders (employers), educators and students, designed and planned. List of target groups/organisations compiled, including key people to be interviewed.*
- **Progress**
 - *Questionnaire design completed March 2009*
 - *Formal list of target groups still needed (in progress)*

Activities to date

WP4.3: Consultation exercises & surveys

- *Questionnaire to be circulated to groups/people identified in 4.2*
- *Project partners carry out face-to-face interviews with selected key players*
- *Incoming data compiled in a database.*
- **Progress**
 - *Student questionnaire launched May 2009 (approx 90 returns); needs to be more widely distributed (in progress)*
 - *Other questionnaires to be launched October 2009*
 - *More effort needed to distribute questionnaires (all partners)*
 - *Translation of questionnaires into Survey Monkey format + transfer to web site is awaited (it would save us a lot of time transcribing results! Help needed now)*

Activities to date

WP 4.4: Core Group Meeting at Annual Event Year 1

- The core group will come together:
 - *Progress with survey will be reviewed*
 - *Preliminary analysis made of best practice and gaps*
- Progress
 - *Some preliminary analysis being completed...*
(next screens)
 - *WP4 leader is available via Skype if needed!*

WP4 student questionnaires

- **Questionnaires received**

- 89 (26 transcribed, 1 spoiled, 62 to check)
- Mainly Turkey + Spain, also UK, Belgium, Portugal, Netherlands, Czech Republic, Greece, Italy, Romania

- **Questionnaires transcribed**

- This would be a lot quicker with Survey Monkey!!
- 15 PhD, 7 MSc, 2 BSc, 1 “other”
- Subjects mainly in aquaculture and marine biology
- 14 female, 11 male, 1?

Q1. “This skill is important”:

Do you strongly agree (2), agree (1), neither agree nor disagree (0), disagree (-1) or strongly disagree (-2) ?

TOP-RATED SKILLS	MEAN
Statistical methods	1.7
Knowledge of English (if not first language)	1.6
Scientific writing (papers, theses, abstracts, essays)	1.5
Office software (word processing, e-mail, spreadsheet, presentation)	1.4
Experimental design	1.4
Oral presentation	1.4
Critical review	1.4
Team working	1.4
Statistical software	1.3
Thesis defence	1.3
Data management	1.3
Poster presentation	1.3
Effective behaviour in the workplace	1.3

Q1. “This skill is important”:

Do you strongly agree (2), agree (1), neither agree nor disagree (0), disagree (-1) or strongly disagree (-2) ?

LOWEST-RATED SKILLS (cont.)	MEAN
Policy awareness	0.8
Philosophy of science (hypotheses, logic, induction, debating)	0.8
Awareness of legal and procedural issues (licensing of animal research, health and safety, data protection, anti-discrimination)	0.7
Models and simulations	0.7
Budget management	0.7
General (First aid, driving)	0.6
Entrepreneurship / business awareness / innovation	0.6
Media communication	0.5
IT communication (Skype, web forums)	0.5
Knowledge of other languages	0.2
Web page design	-0.4

Q2. Are you or have you been taught these skills as part of your current degree?
(YES=1, NO=0)

MOST FREQUENTLY TAUGHT SKILLS	MEAN
Scientific writing (papers, theses, abstracts, essays)	0.85
Oral presentation	0.81
Statistical methods	0.77
Data management	0.65
Laboratory skills (best practice)	0.65
Knowledge of English (if not first language)	0.64
Philosophy of science (hypotheses, logic, induction, debating)	0.62
Experimental design	0.62
Team working	0.62
Poster presentation	0.62

Q2. Are you or have you been taught these skills as part of your current degree?
(YES=1, NO=0)

LEAST FREQUENTLY TAUGHT SKILLS	MEAN
Awareness of legal and procedural issues (licensing of animal research, health and safety, data protection, anti-discrimination)	0.31
Knowledge of other languages	0.31
Career development planning	0.31
Policy awareness	0.31
Team management	0.27
IT communication (Skype, web forums)	0.23
Media communication	0.19
General (First aid, driving)	0.19
Budget management	0.15
Entrepreneurship / business awareness / innovation	0.15
Web page design	0.04

LEAST TAUGHT = LEAST VALUED !

Q5. For these skills, do you think your level of achievement was satisfactory when you arrived
(1=yes, 0=no)?
Is your current level satisfactory (1=yes, 0=no)?

LEAST IMPROVED GENERIC SKILLS	BEFORE	NOW	DIFF
Team working	0.74	0.91	0.17
Budget management	0.17	0.33	0.17
Office software (word processing, e-mail, spreadsheet, presentation)	0.85	1.00	0.15
Media communication	0.14	0.27	0.14
Sector specific (Fish handling, survival at sea, boat handling, diving)	0.46	0.57	0.11
Career development planning	0.21	0.30	0.10
Mathematics	0.54	0.62	0.08
Literacy in own language	0.96	1.00	0.04
Knowledge of other languages	0.44	0.48	0.04
General (First aid, driving)	0.52	0.50	-0.02
Web page design	0.21	0.17	-0.04

Are there any important skills missing
from the list in section 4 above?

Ability to reflect on your own work and behaviour

Proficiency and sometimes practical job knowledge taught

Physics

Which one thing would you propose to improve generic skills training?

Effective behaviour in the workplace and sector specific
Experience is everything. People should spend time on it. For example in my interest of study; spending time in laboratory leads advances in knowledge and helps development of my “generic skills”.
Generic skills training funding
It has already been done: the implementation of PhD programs with lectures
Make it compulsory and give it the importance it has.
Make some courses obligatory
More offers in terms of <u>training</u> programs
More <u>practical</u> courses, less lectures. Learn while doing
More <u>practical</u> exercises
More <u>practice</u> , and less lectures
<u>Practical</u> exercises
<u>Practice</u>
Scientific writing (papers, theses, abstracts, essays)
There’s nothing to improve, except administrative problems, i.e. make money designated for my generic skills training available for me
To improve seminars and inter-cultural exchanges
To improve teaching and inter-cultural exchanges
Work with (fake) budgets to make projects more realistic, leading also to increased Business awareness

WP4 questionnaires: logistics

- Early progress is encouraging *but* an order of magnitude increase in returns is needed
- However, processing questionnaires is very time-consuming!:
 - *Hard copy, pdf or jpg needs transcription by hand and should be discouraged*
 - *Word format relatively quick to transcribe (except when format has been altered)*
 - *We need a web-based system in place immediately!*

Activities to date

WP 4.5: Core Group Meeting Year 2

- *Conclusions from survey will be reviewed, best practice and gaps discussed and preliminary recommendations drafted for filling training gaps.*

- **Planning:**

- *Aim to meet around Easter 2010*
- *This means that the surveys should be completed no later than 28 February 2010*