

SPCD INTERIM GRADUATE STUDENT SKILLS STATEMENT

This SPCD interim skills statement describes desired learning outcomes and skills that PhD and EdD students develop through their research and through additional taught modules/elements related to their programmes. SPCD recognizes that the opportunities for developing skills should reflect students' specific needs and the needs of their (inter-)disciplines, Education and Humanities. The skills as outlined below are intended as a guideline and as an invitation to the SPCD research community to continue to dialogue on values and aspirations in relation to its graduate skills. They are compatible with the European Universities Association's Salzburg principles, endorsed at a HEA forum in March 2006.¹ Their underlying principles recognise that advancement of knowledge through original research is the core component of doctoral education, but that PhD and EdD education can also create opportunities for additional skills development.²

Advancing PhD and EdD graduates who possess the skills necessary to develop and manage their careers across a broad range of employment sectors, including academia and the broader field of education, is an objective of the Irish government. It is outlined in its *Strategy for Science Technology and Innovation* and in the Irish Universities Quality Board *National guidelines of good practice in the organisation of PhD programmes in Irish universities*. The HEA has endorsed the objective.

In line with this policy, SPCD has embarked on a process of providing graduate students with increasingly fine-tuned, structured support, incorporating research and generic skills development opportunities into its programmes, and empowering students to make further significant impacts in their chosen careers. In these ways students may be facilitated in contributing to the continuing development of Ireland's Knowledge Society, and in the successful completion of their studies.

SPCD's graduate skills statement aims to:

1. Communicate to students, supervisors and employers the skills and attributes of PhD and EdD graduates.
2. Aid SPCD graduate students to identify their skills development needs, and enable its Graduate Programmes to respond to them
3. Inform the development of further skills development opportunities.

Characteristics of a PhD

The National Qualifications Authority of Ireland (NQAI), in its National Framework of Qualifications' description of a PhD takes account of the following characteristics, which may equally be applied to SPCD's EdD:

¹ HEA, *Graduate education forum-key guiding principles*, (2006), p. 4.

² European University Association, Report on the Bologna seminar: doctoral programmes for the European knowledge society, Salzburg, 3-5 February 2005, p. 2.
http://www.eua.be/fileadmin/user_upload/files/EUA1_documents/Salzburg_Report_final.1129817011146.pdf

A PhD is a multi-purpose type of award. The knowledge, skill and competence associated with it are relevant to personal development, participation in society and community, employment, and access to additional education and training.

It implies

- a systematic acquisition and understanding of a substantial body of knowledge that is at the forefront of a field of learning.
- The creation and interpretation of new knowledge, through original research, or other advanced scholarship, of a quality to satisfy review by peers.
- Demonstrating a significant range of the principal skills, techniques, tools, practices and/or materials associated with a field of learning; develop new skills, techniques, tools, practices and/or materials.
- A response to abstract problems so that existing procedural knowledge is expanded and redefined.
- The exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations and in professional or equivalent contexts.
- An ability to communicate results of research and innovation to peers, to engage in critical dialogue, and to lead and originate complex social processes.
- Competence in critiquing the broader implications of applying knowledge to particular contexts.
- An insight into, and a competence in scrutinising and reflecting on social norms and relationships, together with an ability to lead action to change them.

The skills relevant to PhD/EdD student education include the following, which is not an exhaustive list. Their relevance varies in relation to the experiential learning, disciplinary and professional development needs of students.

On the successful completion of a PhD/EdD, a graduate will be able to:

Research skills and awareness
<ul style="list-style-type: none">• exhibit knowledge of advances and developments in their field• demonstrate knowledge of research in related fields and disciplines• comprehend and effectively employ appropriate research methodologies• critically analyse and synthesise new and complex information from diverse sources• formulate and apply solutions to research problems and effectively interpret research results• exercise critical judgement and thinking to create new ways of understanding• formulate and apply solutions to research problems and effectively interpret research results• demonstrate, where appropriate, a knowledge of health and safety procedures and their application in the research environment• have a broad awareness and knowledge of key relevant funding sources and grant application procedures

- appreciate basic principles of project and time management

Ethics and social understanding

- understand, and apply in their research, principles of ethical conduct of research, including avoidance of plagiarism, allocation of credit and authorship and definitions of research misconduct
- understand the relevance of research in society and the potential impact of research on individuals, groups and society
- where applicable, understand and apply the relevant guidelines for the ethical conduct of research involving people, especially vulnerable participants in the research process
- demonstrate sensitivity to, understanding of and the implications of issues arising from research that relates to diversity and difference.

Communication skills

- demonstrate effective writing and publishing skills
- effectively use and decide on appropriate forms and levels of communication
- communicate and explain research to diverse audiences, including specialist and non-specialist
- teach and support the learning of undergraduate students when involved in teaching and demonstrating

Personal effectiveness/development

- operate in an independent and self-directed manner, showing initiative to accomplish clearly defined goals
- appreciate key rhetorical skills, including how to persuade others of a viewpoint's merits, demonstrating and communicating credible suggestions to achieve one's aims
- appreciate the importance of initiating new projects, proactively reacting to newly identified needs or aiming to resolve persistent problems
- ability to handle difficulties in research or other professional activities in an appropriate way
- critically reflect on experiences and act on such in a cycle of self-improvement

Team-working and leadership

- develop and maintain effective relationships with colleagues
- work in a collaborative environment
- awareness of their own working style, that of others, and how they interact

- understand how to acknowledge others' views, with a willingness to reflect on and critically appraise them
- understand leadership in team environments, recognising the strengths of team members and work effectively to achieve mutual goals

Career management

- demonstrate an awareness of transferable skills and their applicability to both academic and non-academic positions and how they are applied in different contexts
- take ownership of their own career management, forming credible career plans
- initiate and sustain networks and relationships that may encourage opportunities for employment
- present themselves and their skills, attributes, experiences and qualifications, through effective job applications, CVs and interviews
- understand the broadest possible range of their employment opportunities

Innovation and entrepreneurship

- understand the role of innovation and creativity in research
- demonstrate an awareness and understanding of intellectual property issues, appreciate and, where appropriate, contribute to knowledge exchange
- appreciate the skills required for the development of entrepreneurial enterprises in the public and private sectors
- understand different cultural environments, including the business world, and the contribution that knowledge transfer can make to society

Based on a document formulated by the Irish Universities Association Strategic Innovation Fund 4th Level Ireland project, 'Irish Universities' graduate student skills statement', <http://www.iaa.ie/iaa-activities/documents/SkillsStatementiteration28-05-2008.doc>