# LEARNING AND TEACHING SUPPORT HANDBOOK

# Chapter 5 - Teaching and Research

#### 1. Introduction

- 1.1 The University firmly believes that research-inspired learning and teaching is central to the quality and enhancement of the learning opportunities offered at both undergraduate and postgraduate levels. This commitment is articulated in the University's Education Strategy, which advocates providing every student with opportunities to learn with world-leading researchers and to learn in innovative ways through their own research and inquiry.
- 1.2 Research-inspired learning and teaching benefits students in several ways by:
- Stimulating the spirit of inquiry that should be a feature of all student learning.
- Enabling teachers to pass on their experience of the application of research methodologies.
- Providing an opportunity, through project work, for students to be involved in leading edge activity.
- Developing students' professional transferable skills beyond the academic context.
- 1.3 The guidelines set out below are intended to assist Faculties in developing both their research strategies and their learning and teaching programmes.

#### 2. **Definition of research**

- 2.1 Research, in the context of the quality of learning opportunities, encompasses the following:
- Discovery, dissemination and interpretation of new knowledge.
- Reinterpretation of existing bodies of knowledge.
- The application of principles from existing bodies of knowledge to modelling and design.
- The invention and generation of ideas, images, performances and artefacts, including design, where these lead to new or substantially improved insights.
- The use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products or processes, including design and construction.
- Reflection on current practice by practitioners.

# **3**. Links between research and teaching

- 3.1 As part of the development of the new Education Strategy at Exeter, a refreshed and distinctive approach to research-led teaching was articulated as Research Inspired Inquiry Led Learning and Discovery (RIILLD). The Following five facets of RIILLD have been identified:
- Education at the Research Frontier
- Students as Research Apprentices
- Education as Investment in Research
- Research-Education Collaboration in the 4th Age of Research
- Education Practice Informed by Research.
- 3.2 The relationship between learning and teaching and research will take account of the following:
- The strength of the link between the quality of teaching and sound and relevant research will not be equal across all modules, but all undergraduate and postgraduate degree programmes will include advanced modules where the quality of teaching is dependent upon sound and relevant research.
- Not every aspect of the learning and teaching and learning process needs to be linked to research, for example, where teaching is of a largely technical nature, as with demonstrating or instruction in computer use.
- Where appropriate, learning and teaching themselves should be considered an area for research.
- All researchers should normally have some opportunity to teach, because of the intellectual value of having to explain research findings to a relatively uninitiated audience and place them in a context of existing knowledge.
- All teachers should normally engage in research because research is fundamental to their professional identity.

#### 4. Implications for teaching

- 4.1 Those engaged to teach at the University should normally be:
- Graduates or have equivalent experience.
- Engaged in one or more forms of research as defined above.

- Developing ways of incorporating their knowledge and awareness of and contribution to current publications and debate in their subject area, into the curriculum and their teaching.
- Familiar with research methodologies appropriate to the areas in which they teach.
- Engaged in continuing professional development in their teaching and research/ scholarship practice to ensure currency in approach.
- Critically reflecting and evaluating their teaching in order to share effective approached and to further develop practice.

## 5. Guidelines for development of programmes

- 5.1 The following guidelines identify factors that link research with improved teaching quality:
- It is important that research methodologies and the spirit of enquiry be incorporated into academic programmes.
- Academic programmes at the University of Exeter should be devised by individuals or teams that include members with practical experience of undertaking research in a relevant field or who have scholarly knowledge of the areas covered by the programme.
- Students will expect programmes of study to incorporate the findings of the latest research; this expectation should be met.
- Undergraduate degree programmes should incorporate some element of research methodology and some opportunity for students to undertake their own investigationbased project work.
- At postgraduate level, the majority of members of the teaching team should normally have research experience in a relevant field of study.
- At postgraduate level, programmes should contain instruction in research methodology and should involve a research or investigation-based dissertation or the equivalent. Furthermore, active researchers should be capable of providing informed guidance about postgraduate research to those on taught postgraduate programmes.

# 6. **General application**

6.1 University of Exeter teachers are encouraged to apply these principles when undertaking teaching and learning support activities external to the institution, for example when teaching at other institutions or when undertaking impact and outreach activities.