Study skills

Suport and guidance for students

Introduction

Many students find the transition from secondary to tertiary education difficult. This is often due to the different styles of teaching in the two environments with an emphasis on self-study in the latter and the consequent need for students to develop independent learning strategies.

Recognising this problem, many institutions, publishers and individuals have developed resources to help students overcome the major obstacles. A selection of these resources is presented here.

On-line resources

iLearn - the University of Liverpool skills website

<www.liv.ac.uk/ilearn/>

The iLearn web site is divided into several sections including: career management, exam techniques, listening skills, problem solving, time management and written communication.

Study Guides & Strategies

<www.studygs.net/>

Study Guides and Strategies is a US-based web site created and maintained by Joe Landsberger as an educational public service. There are over 100 individual guides (e.g. Managing stress, Taking notes in lectures, Overcoming test anxiety, Writing lab reports and scientific papers), organised into sections (e.g. Classroom participation, Test Preparation, Reading, Science and Technology).

Study Skills Self-help Information - Virginia Tech

<www.ucc.vt.edu/stdyhlp.html>

This site has a number of sections including, a Study Skill Checklist, Editing Lecture Notes, Strategies to Use with Difficult Questions , Remembering and also includes some online workshops to help develop skills.

Online study skills guide for Science and Engineering students

<www.heacademy.ac.uk/assets/ps/documents/learning_and_teaching_activities/ps0038_online_study_skills_guide_for_science_and_engineering_students.pdf>

This online guide is the product of teaching study skills modules to Foundations of Science students at Brunel University <www.brunel.ac.uk/~mastmmg/ssguide/sshome.htm>. The guide has 12 sections as follows:

1. Time management
2. Lectures
3. Reading
4. Set work
5. Experiments
6. Presentations
7. Revision
8. Exams
9. Getting a job
10. Getting help
11. Downloads
12. Postgraduate research

Study Skills at Hull University

<www2.hull.ac.uk/student/studyadvice.aspx>

This site provides advice, support and guidance for students at every level. As well as covering many topics such as Independent Learning, Literature Reviews, Note-taking and Reflective Learning there are many useful links to help students with grammar.

UK Physical Sciences Centre

The Higher Education Academy UK Physical Sciences Centre

The Study Skills Help Page - Strategies for Success

<frank.mtsu.edu/~studskl/> (scroll down to Strategies for Success)

The Study Skills Help page was created by Dr Carolyn Hopper, Learning Strategies Coordinator for the Developmental Studies Department at Middle Tennessee State University.

Strategies for Success is one section of this site and covers topics:

1. Ten Tips You Need to Survive College
2. Getting the Most from Taking Notes
3. Study Tips for Students
4. Getting the Most from Reading Your Textbook
5. How Successful Students Prepare for Tests
6. Strategies for Taking Any Tests
7. Checklist for Discussion or Essay Tests
8. Reasons to Examine a Returned Test
9. Memory Principles
10. Time Management
11. Setting Goals
12. Learning Styles - Hemispheric Dominance
13. Learning Styles - Sensory Modes
14. Vark (Sensory Modes Questionnaire)
15. Math Study Skills Inventory
16. Jensen's Equation for Optimal Learning

skills4study from Palgrave Macmillan Ltd

<www.skills4study.com>

This is a website full of practical advice to help students study more effectively at university. There are subject specific sections with Chemistry and Physics appearing in the Studying Science and Technology area. There are also sections on Personal Development Planning, Learning Strategies, Revision, Writing and Thinking.

Books

The Good Study Guide

Andy Northedge

Open University Worldwide <www.ouw.co.uk>

ISBN: 9780749259747 (2005)

<www.goodstudyguide.co.uk/>

This text addresses the challenges of studying in a rapidly changing world where computers and the internet have become basic study tools.

Topics include:

- motivating yourself and managing your time
- taking full advantage of your computer
- reading with concentration and understanding
- developing flexible note-taking strategies
- getting the most from seminars and workshops
- making presentations
- researching online
- handling numbers and charts with confidence
- writing clear, well argued assignments
- doing yourself justice in exams

The Sciences Good Study Guide

A Northedge, A Lane, A Peasgood, J Thomas

Open University Worldwide <www.ouw.co.uk>

1997 ISBN: 9780749234119

<www.ouw.co.uk/products/X0001-SGSG-PDF.shtm>

A guide for students studying science, technology, engineering or mathematics, this book offers practical advice on key study skills such as reading and note taking, as well as exercises and activities specifically based around scientific subjects.

Unique to this study guide is the special Maths Help section offering quick reference on essential mathematics techniques.

Other topics include:

- Using a PC to help studying, including conferencing and the Internet
- Working with numbers and symbols
- Observing and experimenting
- Working with diagrams
- Writing in a scientific mode including using scientific vocabulary
- Preparing for examinations

Successful Study for Degrees

Rob Barnes

Routledge <www.routledgefalmer.com>

2004 3rd Edition ISBN: 978-0-415-32799-2

This book is a practical guide to studying more effectively at degree level. Drawing on examples from interviews with students and lecturers, the author offers guidance on everything from basic essay writing to good questioning techniques.

Studying Physics

David Sands, Physics Department at the University of Hull

Palgrave Macmillan <www.palgrave.com/home>

2003 ISBN: 9781403903280

Drawing on physics education research and the author's own extensive experience in teaching, this book addresses the skills needed by the undergraduate to become a physicist. As well as chapters on the design of experiments, mathematical modelling, written reports and oral presentations, the book gives clear and practical advice on studying physics.

The Chemistry Style Manual

This guide has been produced by Kieran Lim in the School of Biological and Chemical Sciences at Deakin University, Geelong, Victoria 3217, Australia.

<www.heacademy.ac.uk/assets/ps/documents/practice_guides/practice_guides/ps0068_chemistry_style_manual_dec_2004.pdf>

This Practice Guide covers communication techniques in chemistry (but applicable more widely). The Manual provides advice on referencing, producing graphs, written and oral presentations and much more.

Revision and Examinations - guidance notes for students

Roy Johnson

Clifton Press <www.mantex.co.uk/books/exams.htm>

1993 ISBN 0-9519844-2-X

This book shows how to prepare for exams, and how to pass them successfully. It helps improve self-confidence and overcome any nerves and anxiety, and it shows how to guarantee the best performance in examinations. Revision and Examinations includes specimen exam papers, and hints from tutors on improving grades. Clear advice, sample papers, and tips from tutors are all included. These guidance notes are suitable for students at all levels in further and higher education. They answer all the most frequently asked questions on successful revision and examination techniques.

Study Skills - guidance notes for students

Roy Johnson

Clifton Press <www.mantex.co.uk/books/skills.htm>

1996 2nd edition ISBN 0-9519844-3-8

This text covers reading and writing skills, time management, and work planning. It also includes organising and writing essays, research skills, and an introduction to the use of computer technology. All details of academic conventions are covered. The guidance notes in Study Skills may be used as a study programme or as a handy source of reference. Easy-access notes and clear presentation are suitable for students at all levels of study. Study Skills is written to help students grasp the essentials of commonly-used techniques in academic study.

Study Skills for Science, Engineering and Technology Students

Pat Maier, Anna Barney and Geraldine Price

Pearson Education <www.pearsoned.co.uk>

2009 1st edition ISBN 9780273720737

Study Skills for Science, Engineering & Technology Students has been developed specifically to provide tried & tested guidance on the most important academic and study skills that students require throughout their time at university and beyond. Presented in a practical and easy-to-use style it demonstrates the immediate benefits to be gained by developing and improving these skills during each stage of their course.

Software

Study Skills 1.1 - guidance program for students

ISBN 0-9531145-2-X (version 2.0 issued October 2008)

This is a software program (requires Windows, Mac or Linux) which covers the same materials as the book above and more. There are sample pages and a demo version to download at:

Clifton Press <www.mantex.co.uk/software/study.htm>

This computer-based learning program covers many aspects of study skills - reading, writing, research, revision, exams, and even presentations. It can be used for self-instruction, for reference, or as a HELP program whilst using a word-processor. It provides access to guidance notes with extensive hypertext links.

RecallPlus

Evolution Code <www.recallplus.com/index.asp>

RecallPlus is a program written specifically to get students learning faster by automatically getting them to use optimal learning and study methods in their actual day to day study time. Techniques employed include mind-mapping, visual learning and use of sound. The program also covers testing and revision strategies. There is a 14-day evaluation version which can be downloaded from the above web address.

Phone: 01486 465418
Fax: 01486 465418
E-mail: psc@hull.ac.uk
www.heacademy.ac.uk/physsci

UK Physical Sciences Centre
Department of Chemistry
University of Hull
Hull HU6 7RX

Original Author: Roger Gladwin
Edited: June 2010