

GSE 828

Research Methods for Sustainable Development

S2 Evening 2014

Dept of Environment & Geography

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General Information

Unit convenor and teaching staff

Unit Convenor

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E8A 372

Open: By appointment

Lecturer

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Credit points

4

Prerequisites

Admission to MEnvEd or PGDipEnvEd or PGCertEnvEd or MEnvMgt or MEnvStud or PGDipEnvStud or MSusDev or PGDipSusDev or PGCertSusDev or MEnvPlan or MEnvSc or MEnv or PGDipEnv or PGCertEnv or MSc in Remote Sensing and GIS or PGDipSc in Remote Sensing and GIS or PGCertSc in Remote Sensing and GIS or MA in Human Geography or PGDipArts in Human Geography or PGCertArts in Human Geography or MSocEntre or PGCertSocEntre

Corequisites

Co-badged status

Unit description

This unit develops students' knowledge of the role of research in sustainable development and in research paradigms and methods. Students will have practical experience of processing and communicating quantitative and qualitative data to guide action. The unit will emphasise action research and associated research methodologies providing students with an opportunity to explore, at a practical level, how action research can be used as a tool to achieve the goals of sustainable development. Students will develop skills in research planning, literature review and writing a research funding proposal. Students will be introduced to the ethical considerations and processes of undertaking research. As such, the unit provides students with a broad understanding of the comparative usefulness of different research methods for sustainable development.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

Explain the role that research can play in the achievement of sustainable development Show a basic understanding of research paradigms, associated methodology and the purposes of research

Understand the importance of ethics in research

Explain the role of action research as a process of participatory change

Be able to articulate principles, strengths and limitations of a research strategy and in particular for action research

Demonstrate an effective grasp of the international literature relating to action research Critically review action research literature and practice

Apply principles of good practice in action research for sustainable development in the design and planning of an AR project

Be able to present and defend a research project

Prepare a funding proposal for research

Demonstrate skills to process data from research and make a report for a client

Assessment Tasks

Name	Weighting	Due
Assignment 2	15%	September 17 & 20
Assignment 1	20%	12 th September
Assignment 3	15%	November 12th
Assignment 4	50%	November 20 th

Assignment 2

Due: September 17 & 20

Weighting: 15%

This assignment requires the student to **present and defend** their research proposal as summarised in assignment 1.

- Presentation to explain your poster and talk the audience through your plan (5 mins)
- Interactive Session with the audience where you use the audience to workshop some ideas or help you solve a problem or simply invite structured questions about the proposal (5 mins)
- Question and Answer Session (5 mins)

On successful completion you will be able to:

- Show a basic understanding of research paradigms, associated methodology and the purposes of research
- · Understand the importance of ethics in research
- Be able to articulate principles, strengths and limitations of a research strategy and in particular for action research
- Apply principles of good practice in action research for sustainable development in the design and planning of an AR project
- · Be able to present and defend a research project
- · Prepare a funding proposal for research

Assignment 1

Due: 12 th September

Weighting: 20%

This assignment requires students to prepare a a) poster and b) a research plan that summarises a proposal for a research project for sustainable development.

The emphasis is on an **action research** approach. The action research component can be complemented by other research approaches.

a) Research Poster

You need to design a poster which summarises the essence and key components of your research project.

The poster will need to be in colour. All lettering must be readable from 1-2 metres away. Minimum font size is 18 point but 24 is recommended.

If you do not want to go through the expense of printing a poster it can be projected and produced in powerpoint or made as a collage on poster cardboard

b) Research plan

This document will present a summary of the research proposal and can use diagrams and figures. The research plan should specify:

- a. the **focus** of the research and how it is relevant to sustainable development;
- b. the **action research** component of the research
- c. **aims and objectives** of the research;
- d. the **different research stages**, including a discussion justifying the research approaches used
- e. the methodology and data collection/ analysis tools used;
- f. expected **outcomes** of the research;
- g. an issues management table

On successful completion you will be able to:

- Explain the role that research can play in the achievement of sustainable development
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- · Explain the role of action research as a process of participatory change
- Be able to articulate principles, strengths and limitations of a research strategy and in particular for action research
- Demonstrate an effective grasp of the international literature relating to action research
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Assignment 3

Due: November 12th

Weighting: 15%

This assignment provides practice in analysing data from a survey - both quantitative and qualitative - and presenting the results in a mini consultant report in a manner that is helpful to a client, and forming recommendations based on the findings.

Details of the data will be provided on ilearn and explained in the class session

On successful completion you will be able to:

• Demonstrate skills to process data from research and make a report for a client

Assignment 4

Due: November 20 th

Weighting: 50%

In this assignment you are expected to submit a complete proposal for an action research project for sustainable development in the format of a funding organisation and to provide a separate literature review to back up your research proposal.

Part A - Literature review:

A research funding proposal usually has a literature review to show that the researcher is aware of what has been done before, and what then is the basis for the new research. It is also designed to have the researcher think about the theory and methodology, and the methods of the research based on past practice.

The literature review focuses on the field of research chosen for the student's project (that is it is not a general review of action research literature).

Twenty percent (20%) of the total marks will be allocated to this literature review. More details are provided through ilearn.

This is an extensive task and it is therefore important that you start reading and making notes in preparation for this Assignment, immediately after the first class.

Part B - Research Proposal:

The proposal must present a complete and improved version of the summary submitted as part of assignment 1.

The proposal must address the **funding agencies priorities** and needs as well as the unit requirements. These will be specified in ilearn. It is recommended that you study the assessment criteria before submitting this assignment.

There will be an opportunity in the first sessions to discuss the above further.

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- Demonstrate an effective grasp of the international literature relating to action research
- Critically review action research literature and practice
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design and planning of an AR project

- · Be able to present and defend a research project
- Prepare a funding proposal for research

Delivery and Resources

The unit is taught in in weekly evening sessions of three hours (Wednesday evening) and one day Saturday 20th September for presentations of posters.

The three hour sessions will consist of short presentations to introduce a theme or idea; discussion groups on short class assignments based on readings, or activities to develop skills, or understanding of the research design process.

The unit is oriented to assisting you to prepare and submit a **research** proposal, providing practice in designing research and in applying for funds

Students practice the following skills through the assignments and delivery:

- designing a research project.
- communicating their research project by making a poster and by presenting a 'pitch' for their research topic,
- · forming questions to seek professional input to the proposal,
- developing a funding proposal within the requirements of a donors format. The funding
 agency chosen could be an international aid agency such as AusAid, NORAD, DFID,
 DANIDA, SIDA or US USAID, a Foundation like the MacArthur Foundation (US) or a
 state agency (such as NSW Office of the Environment Environment Trust). The funding
 agency "chosen" for your application needs to be have a stated interest in your project
 theme.
- Students are also guided on data processing and presentation using excel and develop skills of writing a research findings report for a consultant.

.The unit requires the student to read widely to understand the research process, the role of research for sustainable development, the role of the researcher in the research process, the ethics of research, the ways research is designed, and how it will be evaluated.

Further instructions on assignments and reading are provided through ilearn.

Some key resources include:

Action Research Journal Sage

ALAR: Action Learning and Action Research Journal

Bradbury P & Reason H. 2007 The Sage Handbook of Action Research: Participative Inquiry and Practice

Greenwood D. & Levin M 1998 Introduction to action research: Social research for social change Sage

These authors take a pragmatic view of action research oriented to organisational change and consultancy in management

Kemmis S. McTaggart R Nixon R. 2014 *The Action Research Planner Doing Critical Participatory Action Research* Springer

This reference by Australian and Canadian researchers is oriented to action research in education with a particular focus on critical participatory action research. Practical structures are provided and questions to guide the researcher are included. There are several case studies from the education sector

Stringer E.T 1996 Action research: A handbook for practitioners Thousand Oaks Sage

This Australian author draws on experience in community action research and education

Wadsworth Y 2011 Do it yourself social research (3rd ed) Allen and Unwin

This reference provides a practical guide to planning and managing a community based action research project, written in an accessible form.

Wadsworth Y. 2010 Building in Research and Evaluation Human Inquiry for living systems Allen and Unwin

This reference builds on the above and provides a deeper theory of how we can inquire. A valuable series of research questions and case studies from the human health services field are included

Unit Schedule

Date	Topic	Background Reading
Session 1. Week 32 6 th August	Introduction Role of research in sustainable development Research paradigms Action research Brief on Assessment tasks	E7B 164 Tutorial Rm McLoughlin & Young The Role of Social Research in Effective Social Change Programs DECC Guide to using research in sustainability programs
Session 2 Week 33 13 th August	What is action research Practice in method - constant comparison	Ch 1 Reason and Bradbury Ch. 1 Kemmis McTaggart Nixon 2014 The Action Research Planner Doing Critical Participatory Action Research
Session 3 Week 34 20 th August	Why action research for sustainable development? What is and what is not action research?	Case studies to be advised Will Allen

Session 4 Week 35 27 th August	Action Research for sustainable development Case study AR Role and approaches Role of literature review	E7B 164 Tutorial Rm
Session 5 Week 36 3 rd September	Defining the elements of an action research project Models of action research	E7B 164 Tutorial Rm
Session 6 Week 37 10 th September	Designing action research Ethics and Issues management	E7B 164 Tutorial Rm
Session 7 Week 38 17 th September	Action Research presentations - Presentations of posters and defence of research proposals (Assignment 2)	E7B 164 Tutorial Rm
SATURDAY 20 th November 10.00- 4.00	Action Research presentations - Presentations of posters and defence of research proposals (Assignment 2)	EMC G240
Week 39-Week 40	BREAK	
Week 41 8 th October	Research Paradigms and methods Data collection and analysis	E7B 164 Tutorial Rm
Week 42 15 th October	Research Design and Strategy Research design Project proposal Research methods Designing measures for AR project outcomes Evaluating action research Discussion of project concepts	E7B 164 Tutorial Rm

Week 43 22 nd October	Research Design and Strategy Communicating research Project proposals Literature review Proposal development	E7B 164 Tutorial Rm
Week 44 29 th October	Social research, managing data and reporting – practical skills Introduction to a case study Group analysis of a survey questionnaire Writing Survey Questionnaires	Richard Horsfield EMC-G220 Faculty PC Lab
Week 45 5 th November	Social research, managing data and reporting – practical skills Working with quantitative and qualitative data sets Interpreting data Presenting and communicating findings	Richard Horsfield EMC-G220 Faculty PC Lab
Week 46 12 th November	Home study – preparing project proposals	Final assignment due Nov 20?

Policies and Procedures

Macquarie University policies and procedures are accessible from <u>Policy Central</u>. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.ht ml

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.

In addition, a number of other policies can be found in the <u>Learning and Teaching Category</u> of Policy Central.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student_conduct/

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

Student Services and Support

Students with a disability are encouraged to contact the <u>Disability Service</u> who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

IT Help

For help with University computer systems and technology, visit http://informatics.mq.edu.au/hel

When using the University's IT, you must adhere to the <u>Acceptable Use Policy</u>. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

- Explain the role that research can play in the achievement of sustainable development
- Show a basic understanding of research paradigms, associated methodology and the purposes of research
- Understand the importance of ethics in research
- · Explain the role of action research as a process of participatory change
- Be able to articulate principles, strengths and limitations of a research strategy and in particular for action research
- Demonstrate an effective grasp of the international literature relating to action research
- · Critically review action research literature and practice
- Apply principles of good practice in action research for sustainable development in the design and planning of an AR project
- · Prepare a funding proposal for research
- · Demonstrate skills to process data from research and make a report for a client

Assessment tasks

- Assignment 1
- Assignment 4

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

Learning outcomes

- Show a basic understanding of research paradigms, associated methodology and the purposes of research
- · Demonstrate an effective grasp of the international literature relating to action research
- Critically review action research literature and practice
- Apply principles of good practice in action research for sustainable development in the design and planning of an AR project
- Demonstrate skills to process data from research and make a report for a client

Assessment tasks

· Assignment 3

· Assignment 4

PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

Learning outcomes

- Explain the role that research can play in the achievement of sustainable development
- Show a basic understanding of research paradigms, associated methodology and the purposes of research
- · Explain the role of action research as a process of participatory change
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- · Demonstrate skills to process data from research and make a report for a client

Assessment tasks

- Assignment 1
- Assignment 3
- · Assignment 4

PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

Learning outcomes

- Critically review action research literature and practice
- Apply principles of good practice in action research for sustainable development in the design and planning of an AR project

- · Be able to present and defend a research project
- · Prepare a funding proposal for research
- Demonstrate skills to process data from research and make a report for a client

Assessment tasks

- · Assignment 2
- · Assignment 1
- · Assignment 3
- · Assignment 4

PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

Learning outcomes

- · Understand the importance of ethics in research
- Explain the role of action research as a process of participatory change
- Be able to articulate principles, strengths and limitations of a research strategy and in particular for action research
- Apply principles of good practice in action research for sustainable development in the design and planning of an AR project

Assessment task

Assignment 2

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

Learning outcomes

- Understand the importance of ethics in research
- Explain the role of action research as a process of participatory change
- Be able to articulate principles, strengths and limitations of a research strategy and in

particular for action research

- Apply principles of good practice in action research for sustainable development in the design and planning of an AR project
- · Be able to present and defend a research project
- · Prepare a funding proposal for research
- · Demonstrate skills to process data from research and make a report for a client

Assessment tasks

- · Assignment 3
- · Assignment 4

Changes from Previous Offering

This unit is being taught in three hour evening sessions over semester 2, 2014 rather than in block mode as it was in 2013