

Education Research III: ITC Tools in the Research Process

Code: 43200
ECTS Credits: 6

Degree	Type	Year	Semester
4313815 Research in Education	OB	0	1

Contact

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Use of Languages

Principal working language: spanish (spa)

Teachers

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Prerequisites

No

Objectives and Contextualisation

This unit focuses on the possibilities and limitations of ICT (Information and Communications Technology) in the service of educational research.

Competences

- Analyse data according to its nature and present results in accordance with the research proposals.
- Communicate and justify conclusions clearly and unambiguously to both specialist and non-specialist audiences.
- Communicate the research results, knowledge acquired and the implications for practice, and adapt the register to the public and formal protocols.
- Continue the learning process, to a large extent autonomously.
- Recognise and evaluate the potential and limitations of the instruments and strategies.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Use ICT in the research process, information search and management, data analysis and the dissemination and communication of results.
- Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.
- Work in teams and with teams in the same or interdisciplinary fields.

Learning Outcomes

1. Communicate and justify conclusions clearly and unambiguously to both specialist and non-specialist audiences.
2. Continue the learning process, to a large extent autonomously.
3. Defend the research carried out orally, using the appropriate technology.
4. Efficiently manage statistical packages and interpret the results obtained.
5. Evaluate the potential and limitations of different types of analysis and the computer programs that allow it to be carried out.
6. Evaluate the potential and limitations of the different instruments and strategies for data collection.
7. Identify the appropriate forums for disseminating research results in education.
8. Recognise applied research in education as a tool of continual innovation and educational and social improvement.
9. Recognise responsibility to society of professional education researchers.
10. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
11. Understand the possibilities and limitations of information and communication technology for educational research.
12. Use ICT in the research process, information search and management, data analysis and the dissemination and communication of results.
13. Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.
14. Work in teams and with teams in the same or interdisciplinary fields.
15. Write scientific summaries to be presented to different audiences.

Content

- Information management and literacy: databases, search engines, bibliographic managers, etc.
- Data analysis: textual, visual, quantitative, qualitative, mixed methods (SPSS, Nvivo, Atlas-Ti, MaxQDA ...).
- Dissemination and popularization of science: research portals, digital magazines.
- Research Report and communication of research results.
- Writing scientific papers.
- Communication of research results and implications for practice. Hearings and protocols.

Methodology

TEACHING METHODOLOGY AND TRAINING ACTIVITIES:

- Lectures by the teacher.
- Reading articles and documentaries.
- Analysis and discussion of articles and documentary sources.
- Classroom practice: solving problems/cases/exercises.
- Oral presentation of work.
- Tutorials.

Guided activities

- Lectures by the teacher.
- Classroom practice: solving problems/cases/exercises.

Supervised activities

- Tutorials.
- Analysis and discussion of articles and documentary sources.

Individual activities

- Reading articles and documentaries, case studies and information literacy.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Classroom practice: solving problems/cases/exercises.	30	1.2	5, 3, 4, 12, 15, 14
Lectures by the teacher	20	0.8	11, 7, 8, 9
Type: Supervised			
Analysis and discussion of articles and documentary sources	40	1.6	5, 11, 3, 4, 12, 15, 14
Tutorials	30	1.2	5, 11, 7, 8, 9
Type: Autonomous			
Reading articles and documentaries, case studies and information literacy	30	1.2	5, 11, 7, 12, 8, 9, 15

Assessment

ASSESSMENT

- Attendance and participation in all sessions
- Activities during the development of the module
- Report/individual work of the module

Assessment will be done through these activities.

The final grade is the weighted average of the planned activities. In order to apply this criterion, you must obtain at least the grade of 4, out of 10, on all the activities, performed during the development of the report. Class attendance is absolutely mandatory. To obtain a positive final evaluation, you must have attended a minimum of 80% of the classes.

The review of the tests will be performed individually.

Assessment activities

- Class attendance and participation in discussions.
- Report/individual work module.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Activities during the development of the module	30%	0	0	6, 5, 3, 7, 12, 2, 8, 9, 15, 14

Attendance and participation in all sessions	20%	0	0	11, 3, 4, 7, 8, 9, 15, 14
Report/individual work of the module	50%	0	0	6, 5, 11, 3, 4, 12, 10, 1, 2, 15, 13

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Software

Qualitative data analysis: Nvivo

Quantitative data analysis: Jasp; Jamovi