Psychology of Teaching

Brief description of course content (according to the programme's verification report)

Development of the teaching/learning process in school contexts. Learning and the school curriculum. Teaching and individual differences.

Teaching, learning and development. Oral language in the school (bilingualism). Reading and writing acquisition. Acquisition of mathematical understanding and calculation. Learning in the Experimental Sciences. Learning in the Social Sciences. Individual differences and school learning.

Learning outcomes

- To handle the main documentary sources in the Psychology of Teaching.
- To understand the basic principles of curriculum development and educational phenomena.
- To handle psychological resources to address learning difficulties in curriculum subjects and classroom control.
- To lead training initiatives for members of the educational community regarding curriculum acquisition.

To manage and administer psychological resources, programmes and systems in educational centres.

Planned learning activities
Theory Syllabus

Topic 1: Introduction to the Psychology of Teaching

1.1. Functional unity of human beings: education, learning and teaching

1.2. Educational Psychology: diachronic and synchronic development

1.3. Developmental Psychology: diachronic and synchronic development

1.4. Psychology of Teaching. Material object and form

1.5. Variables in the Cognitive Psychology of Teaching

1.6. Effective teaching

Topic 2: Teaching practice

2.1. Concept and characteristics of teaching practice

2.2. Beliefs and cognition: social cognitive learning theory, attribution theories, self-determination theory. 2.2. School contexts for cognitive growth

2.3. School contexts for cognitive growth: Rogoff and Schön.

2.4. Learning about reasoning, problem-solving and decision-making.

2.5. Teaching practice: Productive feedback, teaching by providing concreteness, activity and familiarity and teaching by guiding cognitive processes during learning.

2.6. Teaching models.

Topic 3: Reading and writing acquisition

3.1. Language as an evolutionary achievement.

3.2. Language dimensions

3.3. Learning to read: metalinguistic skills underlying initial reading.

3.4. Steps in the transition to reading: Frith and Bruning.

3.5. Theoretical positions in light of learning to read.

3.6. Methods to teach reading.

3.7. Comprehensive reading. Reading comprehension models: data-driven, concept-driven and interactive.

3.8. Difficulties in reading: dyslexia.

3.9. Learning to write: reproduction and production.

3.10. Productive writing models: Flower-Hayes and Hayes

3.11. Difficulties in writing: dysgraphia.

3.12. Encouraging reading and writing.

Topic 4: Learning mathematics

4.1. Is the human brain a mathematical brain?

4.2. Teaching mathematics: traditional approach and cognitive and socioconstructivist approach.

4.3. Methods to achieve mathematical knowledge: algorithmic and heuristic.

4.4. Polya's heuristic knowledge: the four step method.

4.5. Riley's model of mathematical knowledge.

4.6. Piagetian model of mathematical knowledge.

4.7. Wilkinson’s theory of partial knowledge.

4.8. Cognitive processes when solving mathematical problems according to Mayer.

4.9. Difficulties in learning mathematics: dyscalculia.

Topic 5: Learning in Natural and Social Sciences

5.1. Diachronic and synchronic study of the sciences.

5.2. Models of teaching the sciences.

5.3. Naive scientific conceptions.

5.4. Representation of the natural and social world in childhood.

5.5. Processes of changing naive beliefs: cognitive restructuring.

5.6. Models to modify naive beliefs.

5.7. The socialisation process of human beings: Durkheim, constructivist perspective and socio-evolutionary approach.

5.8. Teaching Social Sciences.

Practical Syllabus

This will be based on assessment and intervention processes in subjects with difficulties in reading and writing, mathematics and natural sciences.

- To carry out an assessment report on a child (in primary school) with difficulties reading and/or writing.
- To carry out an assessment report and intervention on a child (in primary school) with difficulties solving mathematical problems.
- To write a report on naive beliefs in the Natural Sciences and propose and intervention project.

Carry out tests of your own creation in reading, writing, mathematics, science, etc.