

WRITING LEARNING OBJECTIVES – helpful verbs

KNOWLEDGE ie 'cognitive' domain:

Knowledge: define, describe, examine, extract, find, identify, label, list, name, order, organise, outline, present, recall, recognise, select, show, state, write.

Comprehension: clarify, compare, contrast, defend, demonstrate (an understanding), discuss, distinguish, estimate, explain, express, formulate, give examples of, illustrate, indicate, interpret, judge, justify, perform, predict, present, report, review, select, summarise.

Application: apply, assess, change, classify, construct, demonstrate, develop, examine, explain how, find, give examples of, illustrate, interpret, modify, organise, practice, predict, prepare, produce, relate, show, select, transfer, translate, use, verify.

Analysis: analyse, appraise, arrange, categorise, classify, compare, conclude, connect, criticise, debate, deduce, develop, diagnose, differentiate, discriminate, distinguish between, elucidate, evaluate, illustrate how, infer, justify, order, outline, point out, question, recognise, relate, resolve, select, test.

Synthesis: Account for, argue, categorise, combine, compile, compose, conclude, create, derive, design, develop, establish, explain, formulate, generate, generalise, integrate, manage, modify, organise, plan, present, prescribe, propose, put together, structure, suggest, rearrange, relate, reconstruct, reorganise, report, select, summarise, synthesise, teach, tell, write.

Evaluation: appraise, ascertain, assess, choose, compare, conclude, consider, contrast, criticise, critique, decide, defend, detect, describe how, determine, discriminate between, evaluate, grade, interpret, judge, justify, persuade, predict, question, recommend, resolve, select, standardise, summarise, support, validate, value, verify.

EXAMPLES

- Describe the components of the Mini Mental State Examination.
- Apply knowledge of infection control in the ward environment.
- Differentiate between acute and chronic renal failure.
- Explain the appropriate management of the acutely psychotic patient.
- Demonstrate an understanding of the impact of infant attachment on mental health in adolescence.
- Recognise when it is appropriate to raise child protection concerns.
- Justify the use of mental health legislation with respect to anorexia nervosa.
- Judge when information about a patient should be shared with a specific third party(ies).

SKILLS ie 'psychomotor' domain:

Adapt, adjust, administer, alter, arrange, assemble, balance, build, calibrate, combine, communicate, construct, copy, delegate, design, deliver, detect, demonstrate, differentiate (by touch), dismantle, display, dissect, drive, estimate, examine, execute, fix, grasp, grind, handle, heat, manipulate, identify, insert, measure, mend, mix, operate, organise, perform, present, record, refine, sketch, react, use.

EXAMPLES:

- Insert a naso-gastric tube under senior supervision.
- Plot measurements accurately on a paediatric growth chart.
- Deliver local anaesthesia in the mandible and maxilla.
- Elicit a competent history from a parent and a child or adolescent.
- Use a range of equipment to measure physiological function.
- Present the methodology and findings of a research paper in an oral report.
- Perform at least ten examinations of mental state in patients with depression.
- Record and document case histories and examinations accurately and in accordance with local protocols.

ATTITUDES: ie the 'affective' domain:

Act, adhere, appreciate, ask, accept, answer, assist, attempt, challenge, combine, complete, conform, co-operate, defend, demonstrate (a belief in), differentiate, discuss, display, dispute, embrace (a value / philosophy), follow, hold (a value / attitude), initiate, integrate, justify, listen, order, organise, participate, practice, join, share, judge, praise, question, relate, report, resolve, share, support, synthesise, value.

EXAMPLES:

- Accept the need for professional ethical standards.
- Acknowledge the importance and value of multidisciplinary working.
- Recognise the influence that our own, personal beliefs have on how we understand and manage patients who deliberately harm themselves.
- Demonstrate an appreciation of how effective communication impacts upon patients' experiences and their health outcomes.
- Demonstrate willingness to share learning with peers and colleagues.
- Resolve conflicting issues between personal beliefs and ethical considerations.
- Embrace a responsibility for the welfare of children taken into care.

Further reading about learning objectives and outcomes:

Bloom B S, Engelhart, M D, Furst E J, Hill W, Krathwohl D, (1956) *Taxonomy of Educational Objectives. Volume 1: The Cognitive Domain*. New York: McKay

Kennedy D, (2009) *Writing and Using Learning Outcomes: a practical guide*. Quality Promotion Unit, University College Cork

Krathwohl D, (2002) A Revision of Bloom's Taxonomy: An Overview. *Theory into Practice*, 41 (4): 212-218

McKimm J and Swanwick T (2009) Setting learning objectives. *British Journal of Hospital Medicine* 70 (7): 406-9