WEEK 8: EDUCATIONAL TESTING AND ASSESSMENT

Lecture Outline: Section 1: Role of testing and assessment in education

Section 2: Types of educational tests

Section 3: Psychoeducational test batteries

Section 4: Other tools of assessment

Section 1: Role of testing and assessment in education

NOTE: -Text refers to educational assessment and testing practices that are specific to USA

- -Educational testing is mandated by state or federal law in USA, but it is not in Australia.
- -Exception: National Assessment Program language and numeracy (NAPLAN)

The role of educational testing: -Is a child ready to begin primary school? (school readiness)

- -Has information taught in class been learned by the student?
- -Does a child have a learning difficulty?
- -How well will a secondary school student perform at university?
- >Testing and assessment in educational settings are focused on questions like these

Four basic categories of tests:

- -Assessments of how much learning has taken place and to what degree it has been mastered
- -Assessments of how knowledge acquired by a given student **compares to that acquired by various groups** of students
- -Whether a child is having **difficulties learning** material, and if so, why and what might be done to alleviate the difficulty
- -To what degree does a child have the **pre-requisites** for learning

Response to Intervention (RtI): -Background to educational testing

- -In the mid-1970's, US federal mandate to identify and assist children with learning problems defined *a learning disability* as a "severe discrepancy between achievement and intellectual ability."
- -While it is not mandated in Australia, there are federal and state based education policies on the identification and remediation of children with learning difficulties.

Specific Learning Disability (SLD): -Neurodevelopmental Disorder that impedes the ability to learn or use specific academic skills, which serve as the foundation for other academic learning.

- -A single, overall diagnosis, incorporating deficits that impact academic achievement
- -After a diagnosis, clinicians provide greater detail into the type of deficit using specifiers, in the domains of **reading**, **mathematics or written expression**
- -Can occur if they have above or low IQ
- -Impacts on one's ability to perceive and process accurately. Have low academic achievement despite intervention
- -Number of state and fed laws regarding SLD in childfree

DSM-5 Diagnosis: A. Difficulties learning and using academic skills (in one or more of reading, spelling, or mathematics) persisting for at least 6 months, despite the provision of interventions that target those difficulties

B. Academic skills must be substantially below those expected for the individual's chronological age (confirmed by standardized tests)

- C. Learning difficulties begin during school-age years but (^in others) may not fully manifest until the demands for those affected academic skills exceed the individual's limited capacities (e.g. in timed tests, writing a lengthy report for a deadline)
- D. Difficulties must not be better explained by developmental, psycho-social adversity, neurological, sensory (vision, hearing), or motor disorders
- -The four diagnostic criteria are to be met based on synthesis of individual's history (developmental, medical, educational, family history), psychoeducational testing and school reports/observations.

3 major specifiers:

- -Specific learning disorder with impairment in reading word reading accuracy, reading rate or fluency, reading comprehension
- >Alternate term 'dyslexia' to specify with reading impairment. Can dyslexia+be intelligent e.g Einstein
- -Specific learning disorder with impairment in written expression spelling accuracy, grammar and punctuation accuracy, clarity or organisation of written expression
- -Specific learning disorder with impairment in mathematics number sense, memorization of arithmetic facts, accurate or fluent calculation, accurate math reasoning
- >Alternate term 'dyscalculia' to specify with mathematics impairment

Response to intervention (RtI) model today: -A multilevel prevention framework applied in Model educational settings designed to maximize student achievement through the use of data that identifies students at risk for poor learning outcomes combined with evidence-based intervention and teaching

- -Teachers provide evidence-based instruction. Teacher aided model, teacher facilities and adjusts.
- -Regular evaluation of student learning
- -Intervention (if required) occurs in some form of appropriate adjustment in the instruction
- -Re-evaluation, intervention and re-assessment occur as necessary

Response to Intervention Tiers



Multimodel dynamic approach:

- -Tier 3: 3-6% of students will have difficulty on level 3 and will need special education. If they can't do this, then considered for a LD
- -Tier 2: Small group segregated for special teaching e.g small group work in class
- -Tier 1: Classroom environment: all students taught what teacher is teaching. 80-85% can do it
- **Dynamic Assessment:** -Departs from reliance on fixed (static) tests
- -Dynamic assessment is an approach to exploring learning potential that is based on a test-intervention-retest model
- -Vygotsky (1978) introduced concept of **zone of proximal development**; the gap between what learner can do without help and what they can do with help. Says children work better with guidance from adult.
- -Differs from traditional assessment in several ways:
- >Dynamic assessors do not remain neutral; instead, they may do everything in their power to help the child master the material in preparation for retesting
- >Variations (such as clues or prompts) may be introduced that help the child better understand, or to remediate, the obstacles to learning
- >Potential problems with validity of dynamic assessment

