Instructional Methods
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CASE-BASED DISCUSSION (CBD)

Features:

- Integrates basic science and clinical reasoning
- Uses patient cases—actual or theoretical
- Produces a solution or course of action

Faculty Role:

- Stimulate discussion
- Foster questioning
- Promote problem-solving

Student Role:

- Read cases
- Take on specific role i.e., physician
- Engage in practice-based learning and improvement
- Develop clinical decision-making skills

Includes

- Case Study
**CONCEPT MAPPING**

**Features:**

- Helps to retain vast amounts of information, integrate critical thinking skills and solve a range of complex clinical problems
- Visual of linkages between concepts
- Integrates information from traditional courses and text
- Shifts learning focus from rote to visualization

**Faculty Role:**

- Facilitate
- Ask questions about relationships
- Demonstrate
- Respond to student questions

**Learner Role:**

- Organize and represent specific knowledge as a connected network
- Explore linkages
- Question relationships
- Visualize solutions
- Evaluate peers
DEMOnstration

Features:
• Description, performance or explanation of a process
• Shows evidence of a process or procedure
• Allows for exhibiting of a device, machine, process or product

Faculty Role:
✓ Provide discipline-specific knowledge and coaching
✓ Prepare specific skill or procedure
✓ Perform skill or procedure
✓ Use examples, specimens, standardized patients

Learner Role:
✓ Participate
✓ Ask Questions
✓ Attempt skill or procedure
✓ Be open to feedback

Includes
• Autopsy
DISCUSSION

Features:
- Small group < 12
- Large group > 12
- Oral or written (chat function)
- Sharing opinions, observations or ideas
- Goal: analyze or clarify

Faculty Role:
- Facilitate
- Share opinions
- Invite experts

Learner Role:
- Participate individually and within team
- Generate Ideas
- Apply critical thinking skills
- Synthesize new information
INDEPENDENT LEARNING

Features:
• Occurs outside of formal settings
• Develops the ability for inquiry and critical evaluation
• Places responsibility on the learner
• Supplements classroom work

Faculty Role:
✓ Guide learning as mentor or instructor
✓ Create activities
✓ Use lab, classroom or clinic

Learner Role:
✓ Schedule dedicated time
✓ Prepare for case discussions, TBL, PBL, clinical activities or research projects

Includes
• Self-Study; Independent Self-Study
LABORATORY

Features:
• Direct application of learning
• Hands-on or simulated exercise (computer-based)
• Includes testing, experimentation or practice

Faculty Role:
✓ Design activities
✓ Answer questions
✓ Guide research
✓ Evaluate findings
✓ Facilitate learning

Learner Role:
✓ Collect data or use test
✓ Verify hypothesis
✓ Address questions about principles or phenomena

Includes
• Autopsy, Anatomy, Gross, Histology, Wet
LECTURE

Etymology: “action of reading, that which is read”; from the Latin *lectus* “to read.” Oral discourse on a given subject before an audience.

Features:
- Instruction that conveys history, background, theory and purpose
- At MCW, usually held in HRC, Kerrigan or Alumni Center

Faculty Role:
- Prepare and deliver presentation
- Share information
- Answer student questions

Student Role:
- Prepare prework assignments!
- Participate
- Take notes on electronic handouts using iPad app

Includes
- Didactic
PRECEPTORSHIP

Features:
• Involves practical experience
• Includes patient contact
• Supports individual learning needs
• Tests technical competence

Faculty Role:
✓ Mentor
✓ Supervise student work
✓ Plan activities aligned with classroom studies
✓ Provide feedback

Learner Role:
✓ Practice skills
✓ Apply knowledge
✓ Respond to feedback
✓ Receive individual attention
Features:

- Aligns with professional practice
- Asks question that require research, interviews or examination
- Results in treatment, diagnosis or management plan

Learner Role:

- Acquire critical knowledge and problems-solving proficiency
- Employ self-directed learning strategies
- Use team participation skills
- Evaluate outcomes

Faculty Role:

- Select patient cases
- Design problems for learners to investigate
- Assess outcomes
- Provide feedback
REFLECTION

Features:
- Uses past experiences in combination with objective information
- Promotes clinical decision-making
- Improves problem-solving
- Encourages continuous learning

Faculty Role:
- Design experience parameters
- Evaluate learner outcomes
- Provide situational context

Learner Role:
- Examines personal experience
- Applies cognitive, emotional and affective aspects
- Analyze and draw lessons from experiences

Includes
- Journaling, reflective practice
Features:
• Short-term or sustained
• Experimental protocol
• Methodology study
• Information and data Collection
• Investigation of subject or practice

Faculty Role:
✓ Design experiments
✓ Provide coaching
✓ Apply scientific parameters
✓ Assess methods and results

Learner Role:
✓ Participate in activities
✓ Apply basic science principles
✓ Investigate multiple sources
✓ Examine
✓ Reach new conclusions
✓ Interpret facts and theories
SELF-DIRECTED LEARNING

Features:

- Process controlled by individual learner
- Proceeds with or without assistance of others
- Learner selects their own destination

Learner Role:

- Take initiative for own learning
- Diagnose needs
- Formulate goals
- Identify resources
- Implement activities
- Evaluate outcomes

Faculty Role:

- Provide framework
- Supply feedback at the onset or requested
- Coach
Features:
- Method that replaces or amplifies real patient encounters
- Scenarios designed to model health care situations
- Mannequins, models, standardized patients and computers

Faculty Role:
- Provide context for scenarios
- Coach as needed
- Assess practices/skills
- Remediate

Learner Role:
- Demonstrate skills
- Refine practice
- Ask questions
- Respond to coaching
TEAM-BASED LEARNING (TBL)

Features:
- Collaborative learning
- Individual and group aspects
- Learning activities
- Independent work
- Scheduled in Discovery Classroom or Kerrigan

Faculty Role:
- Facilitate active learning
- Plan, deliver and score readiness assessments
- Respond to student questions
- Provide feedback

Student Role:
- Participate: ARS polling or cards
- Take individual assessment
- Work with team to answer group assessment questions
- Apply knowledge to exercise
- Evaluate peers
WORKSHOP

Features:
- Brief educational program/meeting
- Intensive curriculum
- Focus on techniques and skills
- Topic is specific
- Intensive group discussion

Faculty Role:
- Identify opportunities
- Establish objectives
- Lead discussion
- Assess learning

Learner Role:
- Exchange ideas
- Demonstrate skills
- Apply techniques

Includes
- Seminar
1. American Association for Higher Education & Accreditation
2. AAMC; https://www.aamc.org/initiatives/cir/
3. MedBiquitous Curriculum Inventory Standards – MedBiquitous Curriculum Inventory

**QUESTIONS**

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