

OVERVIEW OF TRENDS IN MEDICAL EDUCATION: PBL, COMMUNITY BASED & CONTRACT LEARNING

1. Definition of trend

- Popular movement
- Paradigm shift brought about:
 - Concern about relevance
 - Search for evidence
 - Need for evidence based practice
- New horizon
 - Innovation
 - Creative

2. Forces behind educational trend

- Growth and changes of knowledge
 - Sub specialization
 - Pattern of morbidity & mortality
 - Curriculum overload
- Change in health care delivery
 - Group practice, team approach
 - Decentralized, community-based
 - Ambulatory, day care
- Changes in patients' expectation
 - Better informed about health & disease
 - Professionalism and standard
 - Active participation in decision
- Dissatisfaction with lack of essential skills
 - Learning skills
 - Communication skills
 - Scientific inquiry skills

- Problem solving skills
3. The response to the forces above?
- New curricular model
 - New educational strategies
 - New learning situation
 - New tools and aids
 - New methods of assessment
 - New requirement for teaching faculty
4. Overview of educational trends
- Outcome based
 - Development of learning resources
 - Exploratory mode vs. dispensing mode
 - Enquiry driven (active learning) vs. passive learning
 - Distributed learning vs. centralized learning
 - Flexible structure vs. rigid structure
5. Exploratory mode vs. dispensing mode
- Facilitator of learning
 - Experiential learning
 - You hear
 - You see
 - You do
 - Learned by self-discovery
 - Understand
 - Meaningful
6. Enquiry driven vs. passive learning
- Curiosity provoking
 - Ask questions – search for answer
 - Problem based learning
 - Project based learning

- Student work in teams to explore real-world problems and create presentations to share what they have learned

7. Distributes learning vs. centralized learning

- A variety of practice setting
- Use info and communication technology (ICT)
 - Community based
 - Ambulatory care

8. Student centred vs. teacher centred

- Student centred
 - Focus on student learning
 - Student learn proactively
 - Collaborative learning
 - Teaching is exploratory
 - Learned by understanding
- Teacher centred
 - Focus on teacher teaching
 - Student learn passively
 - Individualistic learning
 - Teaching is dispensing
 - Understand by learning

9. Flexible structure vs. rigid structure

- Tailored to students' interests and aspirations
 - Electives
 - Options
 - Credit earned and transfer

10. Contract learning

- What are learning contracts?
 - A learning contract is a working agreement between student and teacher concerning how that student will meet specific learning objectives.

- They can include such thing as:
 - What the student will learn
 - Time period for completion
 - What he/she will do to meet these objectives
 - How he/she will assess their own learning
 - How the teacher will assess their learning
- How to do it?
 - Starting point
 - Determine your learning objectives for the until or activity
 - What resources will you and the students use to meet these objectives?
 - How can you individualize student work to accommodate different level?
 - Are the concepts you want to have lesson on?
 - How do you want to write up the contract?
 - What are your expectations for all parties involved?
 - How will you assess and evaluate students and their work?
 - Organization tips
 - Allow room for changes on the contract, so once an agreement has been made by the student and teacher, these changes can be made on the contract.
 - Provide a place for assessment on the contract for both teacher and student
 - Allocate periods for all students to work on their contracts as this will give an opportunity to teach mini lessons
 - Use student teachers to assist other student who need help

- Words of wisdom
 - “What is desired is that the teacher cease being lecturer, satisfied with transmitting ready made solutions; his/her role should rather be that of a mentor, stimulating initiative and research.” – Jean Piaget.
- Teacher and student assessment
 - Teacher assessment
 - Before begin contract
 - Find out what students already know about the topics so they are not having to learn things they already know
 - A KWL (Know, Want, Learn) chart is a good to start
 - Pre-test in some subject may be good way to see what student already know and may help you begin to individualize contracts

KWL Chart

What I already know	What I want to know	What I learn about this topic

- During contract
 - Checklist/anecdotal records on student behavior and work habits during work periods are a way to assess responsibility and self-directed learning

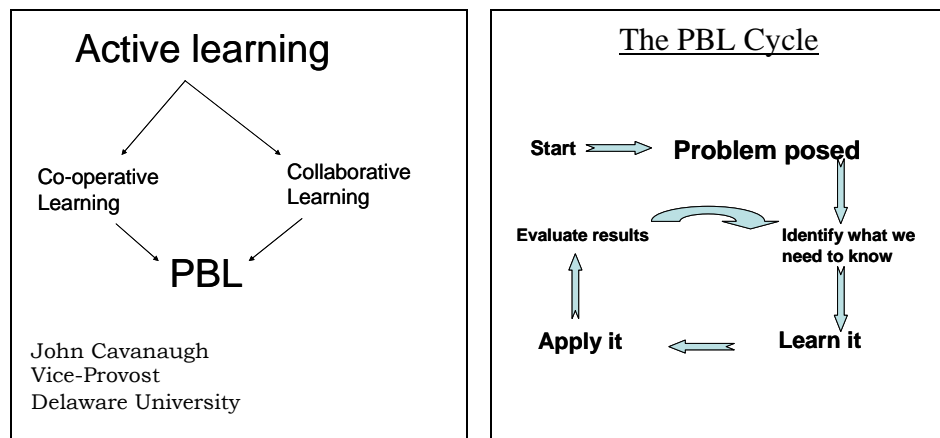
- Conferences with individual students or group are a good way to assess their progress and problems they may be having
- Evaluate the work they are doing with a grade or mark using homework checks
- Give a grade or mark for their group behavior or work habits for a particular day or period
- This is a good way to help students stay on task
- When contract is completed
 - Give a grade or mark for the completion of the contract as well as marks for the projects or assignments completed.
 - Give feedback to the student about their overall work habits and behavior through out the contract
 - This can be used when you start a new contract for the student to reflect back on so the can make improvement
- Student assessment
 - Before beginning contract
 - The KWL chart is a good way for student to begin to assess what they know already and what they want to learn
 - Pretest is some subjects can bring to the student attention what they need to learn
 - During contract
 - Self-evaluation on how well they have used their time will help them reflect and make changes as they work

- Use Hellison's levels of social responsibility and have students evaluate their behavior daily and what they can do to make changes for the next day.
- When contract is completed
 - Have students fill out a self-evaluation sheet as part of their mark on their contract.
 - Include a rubric of some sort and Hellison's levels
 - Have students evaluate their own work or their peers work using a rubric for the specific assignment or activity and include this in overall mark
- Make sure your objective are specific enough that you can assess and evaluate student learning, but broad enough that they can be adapted for each student's contract

11. Problem-based learning (PBL)

- What is PBL?
 - Problem presented first as trigger for learning
 - Inquiry-driven learning by provoking curiosity and desire to solve problem
 - Knowledge is constructed through discussion
- What is compelling about PBL?
 - It is as old as education
 - It seem the correct approach intuitively
 - Research shows it produces higher quality of learning
 - It is defensible in the age of knowledge explosion
 - It naturally avoids "lone ranger" teaching
- What are the merits of PBL?

- It promotes
 - Interest and motivation to learn
 - Self-directed learning skills
 - Problem solving skills
 - Cooperative learning (vs. competitive learning)
 - Collaboration learning (vs. individualistic learning)
 - Self-assessment and feedback on achievement
- Problems are learning opportunities in disguise (Pam Kuhna)

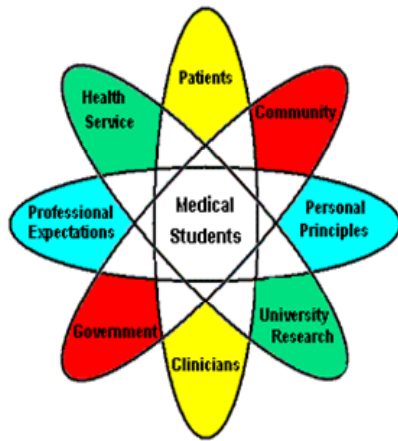


- What are the objectives of the PBL process?
 - To develop
 - Knowledge
 - Basic and clinical content in context
 - Skill
 - Scientific reasoning, critical appraisal, self directed, life-long learning
 - Attitude
 - Value of teamwork, interpersonal skills, the importance of psychosocial issues

12. Community-based learning

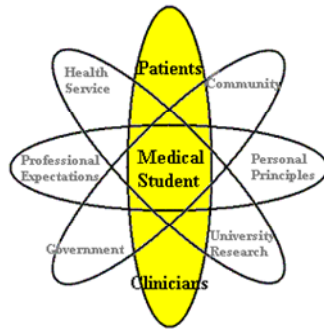
- What can students learn in a hospital?
 - Moderate to severe diseases and their complications

- Hospital organization and management
- Work process of various personnel categories
- Emergency patient management
- Hospital work culture
- What can student learn in the community?



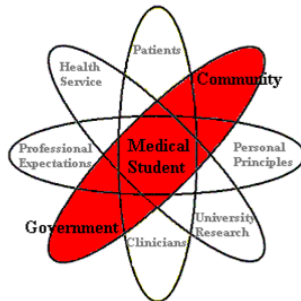
- The Clinical axis:**
Clinician - (Student) - Patient
- The Social axis:**
Community - (Student) – Government
- The Personal axis:**
Personal Principles - (Student) - Professional Practice
- The Institutional axis:**
Health Service - (Student) - University Research

- The clinical axis



- Opportunity to know patient closely
- Longitudinal dimension of diseases
- Increase clinical confidence
- Patients compliance and coping
- Learn from all health workers
- Disease ecology
- Disease prevention in action

- The social axis



- The relationship between government policy, law, funding constraints and initiatives on the one hand and the demographic, geographic, cultural and epidemiological needs and determinants of society on the other.

- The personal axis



- See medicine practiced in real life
- Learn to become patients' advocate
- Able to interact informally
- Build up communication skill
- Learn ethics, moral and social values
- Help to grow emotionally

- The institutional axis



- Provide appropriate case-mix
- Enhance the relationship between the university and community
- Application of research evidence based
- Application of basic sciences to clinical decision making

- Community-based learning in PPSP
 - Community and family case study
 - Community pediatric
 - Community obstetrics
 - District hospital attachment
 - Primary care practice attachment