

FILOSOFI PBL DAN STRATEGI PEMBELAJARAN



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References

- **Barrows, HS et al.** Problem-Based Learning: an approach to medical education, Springer Publishing Co
- **De Grave, WS et al.** Tutorials In Problem Based learning. A new direction in teaching the health profession
- **Schmidt, HG et al.** Tutorials In Problem Based learning. Van Gorcum, Assen / Maastricht.
- **Matiru, B et al.** Teach Your Best. A handbook for university lecturers. Institute for Socio-cultural Studies, University of Kassel, Germany.

References

- **Ellington, H.** Selecting Appropriate Teaching/Learning Methods. Robert Gordon University
- **Boud, D.** Developing Student Autonomy in Learning.
- **Burton, WH.** The Guidance of Learning Activities
- **Biggs, JB et al.** The Process of Learning

Sejarah PBL

Bukanlah merupakan hal yang baru

1. 1889, T.C. Chamberlin: 'The methode of multiple working hypotheses'
~ 'problem-solving'
2. 1916, Dewey: Perkenalkan mahasiswa dengan situasi kehidupan nyata (real-life) dan fasilitasi agar mendapatkan informasi untuk memecahkan masalah
3. 1930, Miller dan 1940, Katona: Ketidak efektifan metode pemberian solusi (ready-made solution) pada mahasiswa

Sejarah PBL

Di dunia kedokteran:

1. 1961, Case Western University, Cleveland, Ohio: hybrid PBL
2. 1966, Mc Master University Medical School, Canada: 'double track'
Mahasiswa PBL lebih baik:
 - motivasi
 - solving problems
 - self-study
3. 1973, University of Newcastle, Australia
1975, University of Limburg, Maastricht

→ PBL berkembang ke seluruh dunia (pendidikan kedokteran)

Apa itu PBL?

Suatu strategi pembelajaran:

menggunakan masalah sebagai stimulus untuk menemukan atau mendapatkan informasi yang diperlukan untuk memahami dan mencari solusinya

Karakteristik PBL

- Pembelajaran bersifat student-centered yang aktif;
- Pembelajaran dilaksanakan melalui diskusi kelompok kecil dan semua anggota kelompok memberikan kontribusinya secara aktif;
- Diskusi dipicu oleh masalah yang bersifat integrasi interdisiplin yang didasarkan pada pengalaman/kehidupan nyata;
- Diskusi secara aktif merangsang mahasiswa untuk menggunakan prior knowledgenya
- Mahasiswa terlatih untuk belajar mandiri dan diharapkan dapat menjadi dasar bagi pembelajaran seumur hidup;
- Pembelajaran berjalan secara efisien, karena informasi yang dikumpulkan melalui belajar mandiri sesuai dengan apa yang dibutuhkannya (need to know basis);
- Feedback dapat diberikan sewaktu tutorial, sehingga dapat memacu mahasiswa untuk meningkatkan usaha pembelajarannya;
- Latihan keterampilan diberikan secara paralel.

Tujuan PBL

Membangun dan mengembangkan pembelajaran mahasiswa yang memenuhi kriteria ketiga ranah pembelajaran (taxonomy of learning domains).

- Di bidang kognitif (knowledges): berupa ilmu dasar dan ilmu terapan secara terintegrasi;
- Di bidang psikomotor (skills): berupa scientific reasoning, critical appraisal, information literacy, self- directed learning, life-long learning;
- Di bidang affektif (attitudes): berupa value of framework, hubungan antar-manusia, yang berkaitan masalah psikososial (psychosocial issues)



Teori Konstruktivis

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METODE DAN STRATEGI PEMBELAJARAN

Tujuan Pembelajaran

Input



Process → Learning



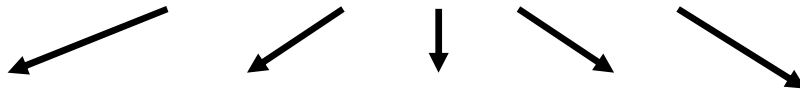
Output



Outcomes (Areas of competence)



Competencies



Knowledge, Skills, Attitudes

Metode Pembelajaran

1. Mass Instruction:

◆ Metode:

- Kuliah konvensional
- Presentasi film & video
- Siaran radio pendidikan
- Kerja studio & praktikum masal

◆ Peran dosen:

- Menerangkan secara tradisional
- Mengontrol semua aspek proses instruksi (cara, isi)

◆ Peran mahasiswa:

- Sangat pasif
- Tergantung pada apa yang diperoleh dari dosen, video, demonstrator, dll

Metode Pembelajaran

2. Belajar individu/sendiri:

◆ Metode:

- Belajar sendiri dari buku teks / materi belajar dll
- Tugas, dll

◆ Peran dosen:

- Produser / manajer pembelajaran
- Memberikan support bila diperlukan

◆ Peran mahasiswa:

- Sangat bertanggung jawab terhadap pembelajarannya
- Mengontrol diri sendiri dalam hal: lama / frekwensi belajar, kedalaman belajar

Metode Pembelajaran

3. Belajar grup:

◆ Metode:

- Kelas diskusi / grup tutorial
- Seminar
- Game & simulasi

◆ Peran dosen:

- Organiser aktivitas grup
- Fasilitator
- Supportive

◆ Peran mahasiswa:

- Sangat bertanggung jawab terhadap pembelajarannya
- Sangat dependen pada preparasi dan interaksi sesama

Strategi Pembelajaran

Adalah cara pembelajaran yang digunakan:
termasuk:

1. Kurikulum

2. Konsep pembelajaran

Contoh:

- Problem-based learning
- Integrated curricula
- Community-oriented curricula
- Core and options / electives

Kurikulum

- What is a curriculum?
 - Genn, 1995:

Everything that happens in relation to the educational program
 - Stewart, 2000:

A planned educational approach to reaching identified professional outcomes

Kurikulum

- **Types of curriculum?**
 - **Formal:**

Everything the developers intend
 - **Informal:**

Essentially extra-curricular activities
 - **Hidden:**

Incidental, as opposed to intentional
 - **Null:**

Things intended not to be there

Konsep Pembelajaran

Dua kategori utama:

1. **Teacher-centered / konvensional**

fokus: transfer of knowledge

2. **Student-centered**

fokus: active learning

Shifting paradigm from teaching to learning

Teaching vs learning

- Teacher centered
- Knowledge transfer
- Reinforces passiveness
- Teachers provide answers
- Teachers direct students

- Student centered
- Knowledge acquisition
- Reinforces activeness
- Teachers ask questions
- Teachers guide students

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METODE DAN STRATEGI PEMBELAJARAN SISTEM PBL

Pembelajaran sistem PBL

- Student-centered instructional strategies
- Students have to identify, and search for, the knowledge that they need to deal with the problem
- Two objectives for the student:
 - learning related to the problem
 - solving the problem
- The knowledge arises from work on the problem

Pembelajaran sistem PBL

- “ The basic outline of the PBL process is:
- encountering the problem first,
 - problem-solving with clinical skills and identifying learning needs in an interactive process,
 - self-study,
 - applying newly gained knowledge to the problem,
 - summarizing what has been learned.”

(Barrows, 1985)

Landasan Pembelajaran sistem PBL

1. Adult Learning
2. Constructivism Theory

Adult learning Characteristics (Malcolm Knowles)



1. Adults are autonomous and self-directed

2. Adults have accumulated a foundation of life experiences and knowledge



3. Adults are practical

4. Adults are relevancy-oriented

Andragogy Characteristics (Malcolm Knowles)

5. Adults are goal-oriented

6. Adults need to be shown respect



Adult learning theory

Tasks should be relevant for the learner, motivation

Learner is involved in setting educational goals

Practice of all the skills

Learning is within capacity of the learner

Regular feedback is provided

The learner can reflect on experiences



Laidley & Braddock, 2000

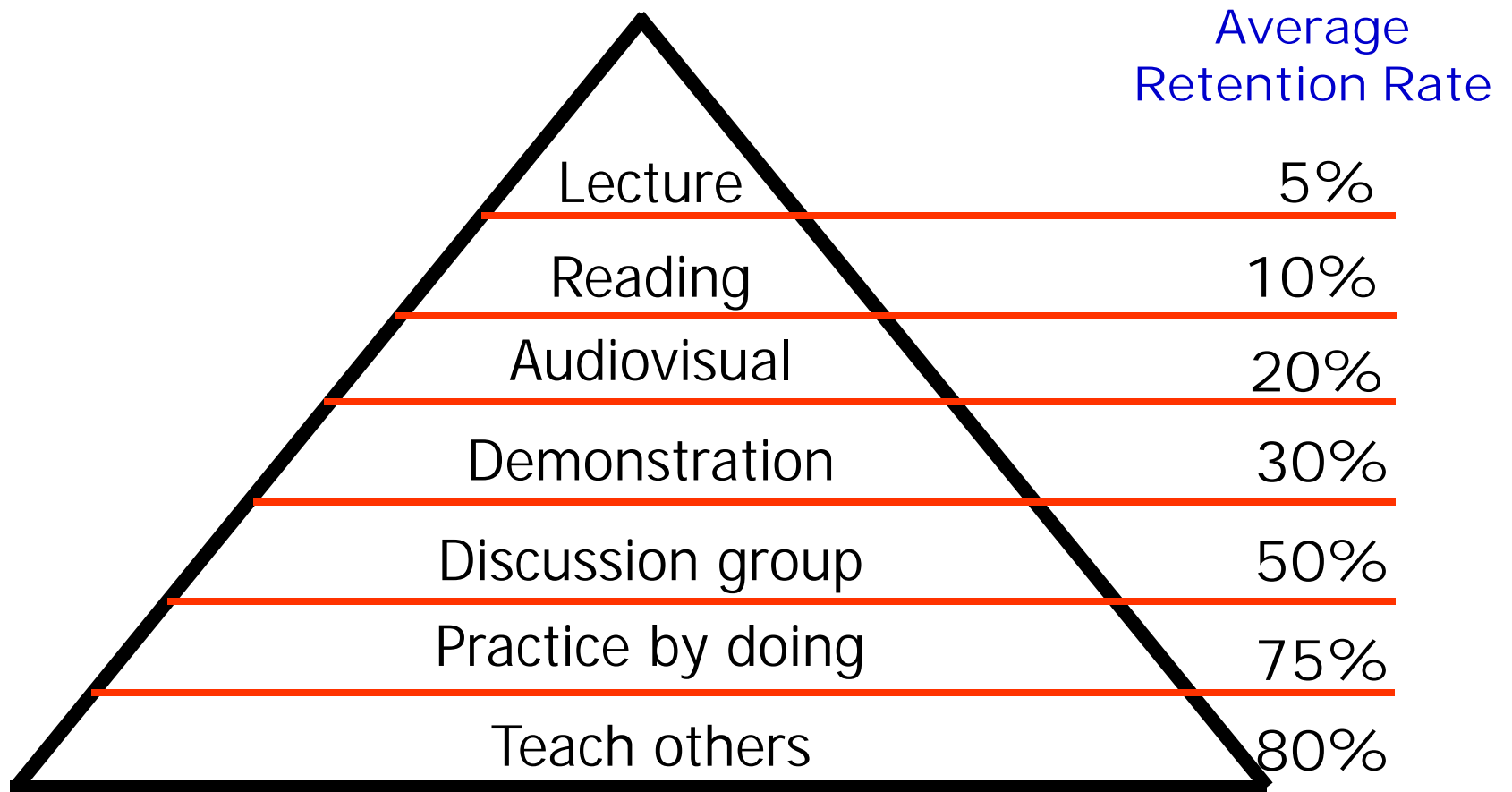
Constructivism of learning

- Knowledge is **constructed from experience**
- Learning is a **personal interpretation** of the world
- Learning is an **active process** in which meaning is developed on the **basis of experience**
- Conceptual growths comes from the **negotiation of meaning**, the **sharing of multiple perspectives** and the **changing of our internal representations** through **collaborative learning**
- Learning should be situated in **realistic settings**; **testing should be integrated with the task** and not a separate activity

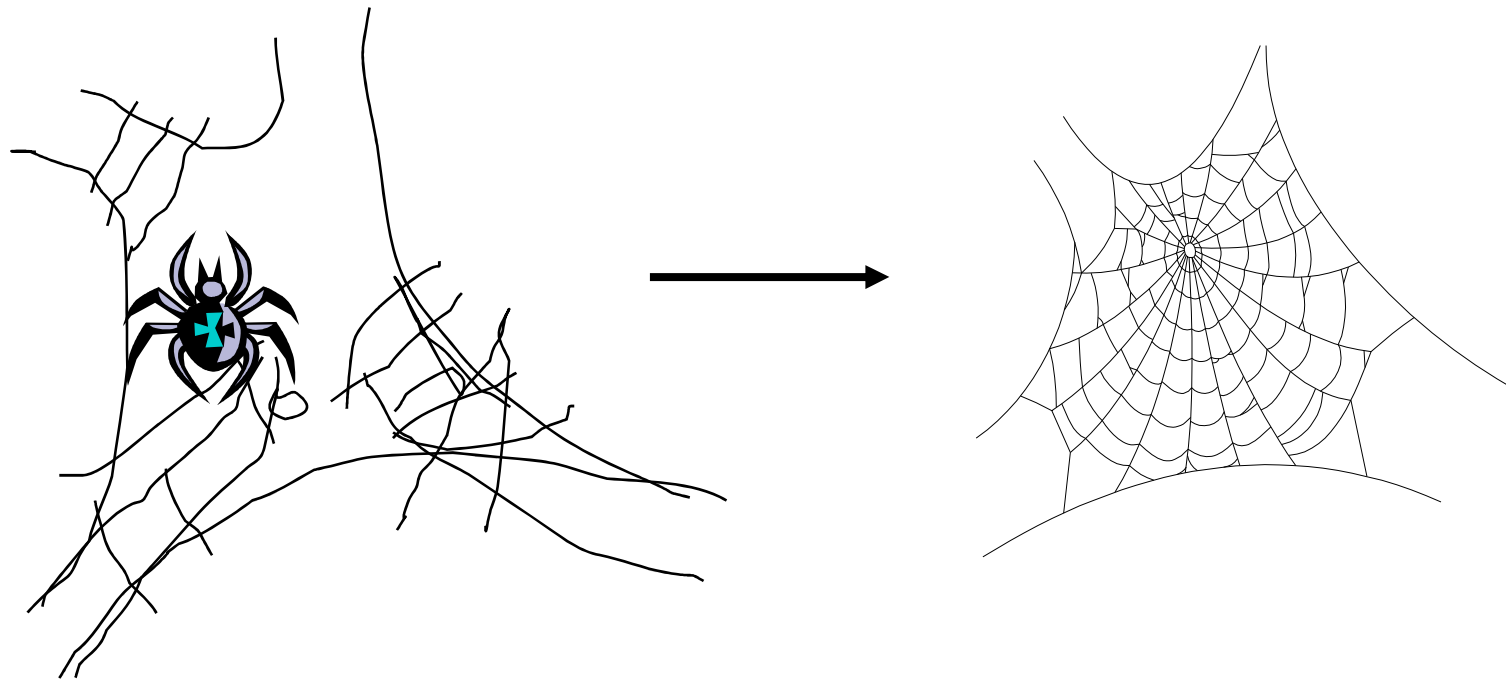
Strategi Pembelajaran PBL

- Student-centered
- Problem-based
- Integrated teaching
- Community-oriented/-based
- Elective / Early clinical exposure
- Systematic / Self-directed learning

The Learning Pyramid



Expertise research



- Problem solving: - General skill
- Content specific



METODE DAN STRATEGI
PEMBELAJARAN
SISTEM PBL

di

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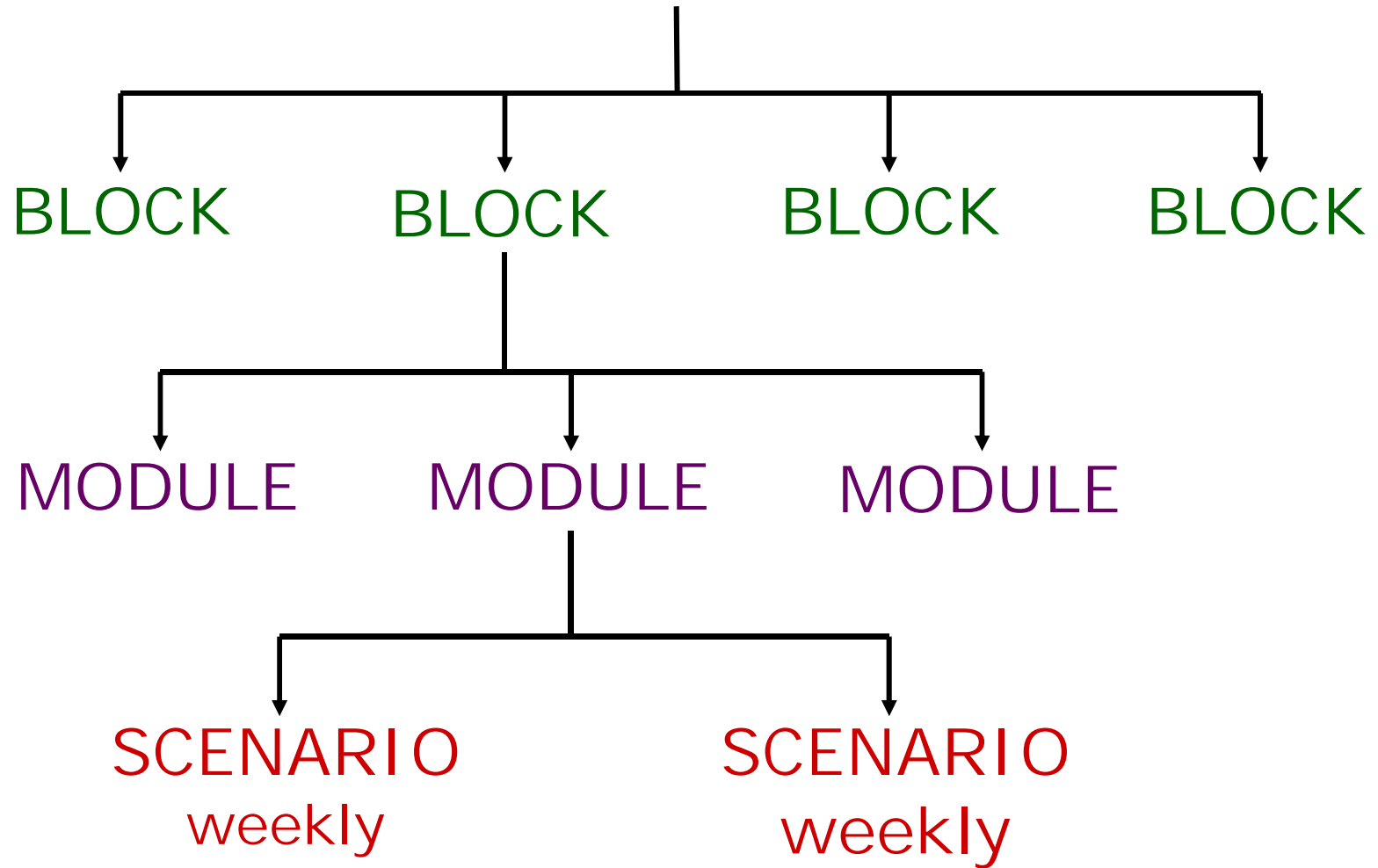
Faculty Curriculum

- ❑ Core curriculum : 80 %
Local studies : 20 %
 - Vision and Mission / Renstra of University
 - Prominent Health Problem in West Sumatra
 - Electives

- ❑ Conducted in 10 semesters
 - 1st semester : General education
 - 2nd – 7th semester : Integrated medical education
 - 8th – 10th semester: Clinical experiences (clerkship)

- ❑ Strategy of learning: PBL

FACULTY CURRICULUM



SCHEME OF BLOCKS



INTERNSHIP



CLERKSHIP



19	20	21	CLERKSHIP
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13	14	15	16	17	18
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7	8	9	10	11	12
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1	2	3	4	5	6
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Learning Strategy of PBL

1. Tutorial (small group discussion)
2. Mini lecture
3. Private study (self-learning)
4. Basic medical practice
5. Skills lab :
 - laboratory
 - procedural
 - clinical
6. Plenary discussion
7. Clerkship



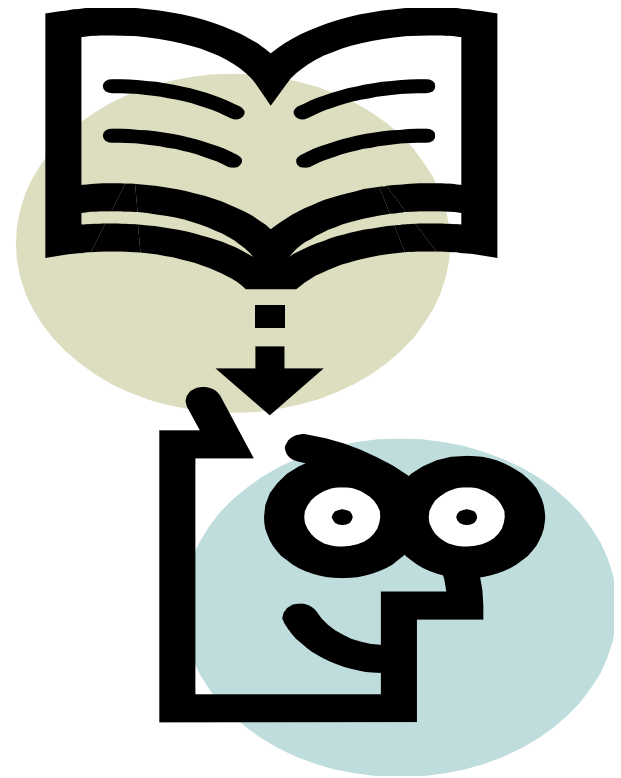
Enjoyable

Promotes Learning
By Curiosity





Allows Self-study & Reflection



Self (Directed) Learning



Cultivate culture of
Life-Long Learning



Encourage Teamwork



Feedback

Terima Kasih