Introduction to PBL Case Practice

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Welcome DDS Class of 2023

PBL Orientation Sessions

- Introduction to PBL Case Practice
- Introduction to Library Resources
- Learning Needs Construction
- PBL Resource Selection
- Group Dynamics and Feedback
- Closing A Case
- Introduction to Assessments, Courses and Grades
- Triple Jump Orientation

Integrated Curriculum

1. Human Structure
2. Human Function
3. Human Behavior
4. Human Clinical Dentistry

What is a PBL case?

- The biomedical curriculum is delivered through PBL cases – each case is based on a virtual patient and is designed with specific learning objectives

- Biomedical Sciences, previously known as Basic Sciences, include: Anatomy, histology, physiology, biochemistry, cell, molecular and developmental biology, immunology, microbiology, virology, genetics, pharmacology and pathology.

- Every PBL case integrate the structural, functional, behavioral and clinical sciences

Why we need to learn Biomedical Sciences?

Because they provide the foundational knowledge to understand diseases.

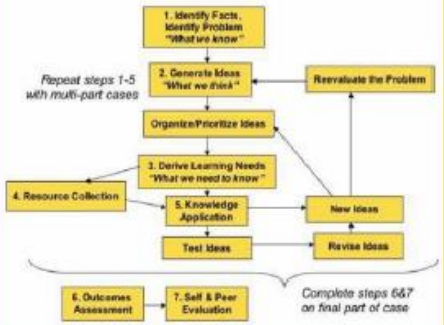
As Doctors in Dental Sciences, you will be treating patients, not only teeth, and some of those patients will have complicated systemic diseases.

How is PBL done at Herman Ostrow School of Dentistry of USC?

The PBL Process at Herman Ostrow School of Dentistry is comprised of 7 steps and include:

1. Fact Identification
2. Idea Generation
3. Learning Need Determination
4. Resource Collection
5. Application of Knowledge
6. Outcomes Assessment
7. Self and Peer Evaluation

These steps are modeled in large part on the Maastrict University PBL Seven Jump process, a process that is used widely in PBL health professions education (Reviewed in Wood, 2003, Barrows, 1998). In the Ostrow School, Steps 1 through 5 occur in chronological order and are repeated in PBL cases that have more than one part. Steps 6 and 7 are completed upon completion of the PBL case, as wrap-up and reflection activities. Each PBL case in the curriculum is examined using this process. Let's look at each of the steps of the PBL Process at Ostrow School with the aim of understanding how and why each step is done. The description for each step may often be accompanied by additional guidance documents.



Student Roles & Responsibilities in the PBL Group

Graduate students are expected to take on new roles and assume more responsibility as learners. Within PBL, students have specific roles to play and responsibilities to meet individually, to peers and to the program. These items, especially student responsibilities, will be expanded upon in the sections on program and group ground rules. But for now a brief listing of student roles and responsibilities in the PBL group include:

1. Serving in various group roles; reader, scribe and/or typing up session notes, and chair (if requested)
2. Participating actively and to the best of one's ability in all stages of the PBL Process, including self and peer assessment
3. Avoiding plagiarism (when assembling Learning Need Packets
4. Demonstrating positive behaviors outlined in the PBL Process Guidelines, to the best of one's ability (Self & Peer Evaluation)
5. Developing and maintaining good group dynamics, in part by developing group ground rules
6. Providing the facilitator with constructive feedback on his/her facilitation

Good Group Dynamics

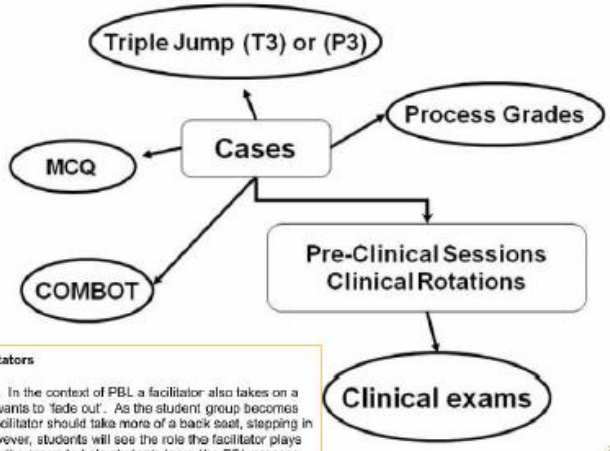
Establishing and maintaining good group dynamics takes work on the part of all grou members. The benefits of having good group dynamics are many. The learning exp more enjoyable, motivating and effective when the group functions well together. Ut teamwork skills developed should be useful to practicing dentists working either in a practice or leading a team in an independent practice.

Good communication and interpersonal skills are paramount as is a good understanc a group member's roles and responsibilities are (Johnson, & Johnson, 1994). As me previously, some roles and responsibilities are defined by 'ground rules' set by the pr others can be negotiated by the group itself. In a sense, getting the group to work we student responsibility. The Ostrow Program ground rules, the PBL Process grading c the help of the facilitator also serve as means for encouraging and rewarding good g dynamics. Though these serve to assist the group process, they will not replace the the group to make itself work.

Assessments in the first year of dental school:

In the first year of dental school assessments will be comprised of the following: PBL Process Grades, Triple Jump Exercise, MCQ Examinations, COMBOT Examinations, Pre-Clinical/Clinical Examinations. Figure 1 illustrates how learning activities are linked to the various assessments. Many of these assessments will be accompanied by some form of feedback to help the student improve his/her performance. Of equal importance, the results of these assessments will feed into the four courses in which the student is enrolled, ultimately determining his/her course grades. The rationale, timing, associated learning activities, course links and further guidance for these assessments can be found in Table 2. Further guidance for the various assessments follows.

Figure 1: Diagram of learning activities and their respective assessments



Roles and Responsibilities of PBL Facilitators

To 'facilitate' means literally to make easier. In the context of PBL a facilitator also takes on a 'developmental' role in that he/she literally wants to 'fade out'. As the student group becomes more experienced and self-regulating the facilitator should take more of a back seat, stepping in only when necessary. At the beginning however, students will see the role the facilitator plays more clearly. He/she will likely intervene on the group to help students learn the PBL process, learn how to work well within the group and to give the group a jump start if it seems to be going off track or not sure where to go.

A PBL facilitator's broad responsibilities are to: (1) guide the PBL learning Process, (2) help maintain constructive group dynamics, and (3) facilitate and ensure the assessment and evaluation processes are conducted (e.g. self and peer assessment, facilitator assessment and feedback for the students). A facilitator will usually achieve these responsibilities by asking open-ended questions at key points during your sessions.

In keeping with the theoretical underpinnings of PBL that were described earlier, the facilitator's behavior should ideally reinforce the principles of constructivism, contextualization, cooperative learning, and self-directed learning (Azer, 2005, DeGrave, 1999, Dolmans, 2002, 2005, Maudsley, 1991, Schwarz, 2002). In practice these actions take a wide range of forms. One thing students need to become accustomed to is that the facilitator will not be giving lectures in their area of expertise during the PBL sessions. The facilitator may ask questions around these areas but the group members are responsible for engaging in discussions with each other and making decisions about what will be learned. The structure of the cases and the use of the structured PBL process serve as instructional aids.

Some of the desirable facilitator behaviors have been incorporated into the *Facilitator Performance Evaluation (FPE) form* that the students use to evaluate their facilitator. As the role of the facilitator is often a 'new' one to most teachers, faculty members also receive basic training on PBL and facilitation skills prior to commencing their duties.

How to give feedback to the facilitator

Your facilitator will have strengths and weaknesses with their facilitation skills just as a student might have with his/her PBL Process skills. The program is designed to provide all participants with feedback on their performance so that people may reflect and contemplate change in the future. As such all students have the responsibility to evaluate the facilitator after every case.

- PBL PROCESS
- STUDENT ROLES & RESPONSIBILITIES
- FACILITATOR ROLES & RESPONSIBILITIES
- HOW ARE STUDENTS ASSESSED

Go to Dental Intranet > Resources

PBL Case 2301 – Verna Williams

To get started:

- Log on to the Case Library

  https://dent-web10.use.edu/CaseLibrary

  User ID: your USC email address

  Password: your password or '12345' if this is your first time accessing the site

- You will only see Part 1 of these 5 parts case.

- We work in small groups. Everybody has been assigned to a group
- Each group has a facilitator
- Learner Centered Education – The group (based on facts, ideas/hypothesis and discussions) identifies what needs to be learned from each case to understand the patient problems.
- The facilitator will guide students in identifying the proper learning needs relevant to the case


Facts
Ideas/hypothesis
Learning Needs
Resource collection
Construct LN Package
Acquire and apply knowledge
Verna Williams Part 1

#2301: Verna Williams (5 parts), Weeks 2-4			
NBDE TOPIC	%	NBDE TOPIC	%
ANATOMIC SCIENCES	13	ORAL SURGERY/PAIN CONTROL	2
BIOCHEMISTRY/PHYSIOLOGY	_	ORAL DIAGNOSIS	12
MICROBIOLOGY/PATHOLOGY	3	ORTHODONTICS/PEDIATRICS	-
DENT ANATOMY/OCCLUSION	12	PATIENT MANAGEMENT	53
ENDODONTICS	-	PERIODONTICS	4
OPERATIVE DENTISTRY	-	PHARMACOLOGY	-
-	-	PROSTHODONTICS	-

Students Role and Responsibilities

- Create rules for the group
- Read through the first part of the "*Verna Williams*" Case
- Identify the significant *Facts*
- Based on these facts, generate mechanistic oriented *Ideas /Hypotheses*
- Based on the Ideas/Hypotheses formulate *Learning Needs*
- Assign each group member a *Learning Need*
- Set a specific deadline for submission of LN packets to the group and facilitator (email? Google doc? Dropbox? Etc.)

Deadline should provide enough time for all members of the group to read everybody's Learning Needs.


IT SEEMS THERE IS A DIFFERENCE BETWEEN A "HYPOTHESIS" AND A "GUESSTIMATE."
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Facilitators Role and Responsibilities

- Guide you throughout the case
- Help you understand the process of learning in Learner Centered environment/Pedagogy
- Answer questions pertaining the process
- Provide comprehensive feedback:
  - In identifying significant facts
  - In generating researchable ideas/hypotheses
  - In guiding you through learning need topics identification and specific gaps of knowledge
  - In selecting proper resources
  - In providing you feedback on your Learning Needs packets
  - In giving you feedback about your performance for the case

More information

- Cases last from 2-3 weeks (3 to 6 parts)
- New case = new facilitator
- Case sessions are scheduled Mondays and Fridays
- Each case starts with a Pre-session (8-9 AM or 1-2 PM) with no facilitator
- Pre-sessions are designed for the group to teach and learn from each other by asking and answering questions related to their LNs
- Sessions (9-12 PM or 2-5 PM), with the facilitator, are designed to apply the knowledge acquired demonstrating a deeper understanding of what is going on with the patient and continuing the process of identifying facts, ideas and LN for the new part of the case.

More information

- The first case, 2301 – Verna Williams, starting next Monday is a *PRACTICE* case:
  - Facilitators will participate more than in a typical case
  - Facilitators will give you a grade for the case
  - This grade *DOES NOT* contribute to your trimester grade
  - Knowledge acquired from this case will be part of the Midterm exams (MCQ and COMBOT)
- MCQ & COMBOT final exams are NOT accumulative

Resource Sessions

- After each case there is a lecture with an expert on the topic:
  - Verna Williams
  - Dr. Elham Radan
  - September 24, 2019
  - 10:30–11:45 AM
  - Century Club
- After each MCQ/COMBOT exam, there is an exam review session
  - MCQ/COMBOT Midterms
  - Dr. Zeichner-David
  - November 6, 2019
  - 9-10 AM
  - Century Club

What will happen on the first day?

You will meet with your group in your designated room:

Morning Groups:

Group	Facilitator	Room
A1	Dr. Schmid	DEN 160-A
A2	Dr. Dincer	WDL Study R2
A3	Dr. Tiber	DEN-219
B1	Dr. Ahsan	DEN 160-B
B2	Dr. Oldak	CCMB
B3	Dr. Cui	DEN B-49
C1	Dr. Yamazaki	DEN 315
C2	Dr. Snead	DEN 254
C3	Dr. Zeichner-David	DEN 219-A

What will happen on the first day

You will meet with your group in your designated room:

Afternoon Groups:

Group	Facilitator	Room
D1	Dr. Zeichner-David	DEN 160-A
D2	Dr. Dincer	WDL Study R2
D3	Dr. Lee	CCMB
E1	Dr. Ahsan	DEN 160-B
E2	Dr. Yamazaki	DEN 219
E3	Dr. Cui	DEN 219-A
F1	Dr. Bahari	DEN 315
F2	Dr. Snead	DEN 254
F3	Dr. Ravindranath	DEN B-49


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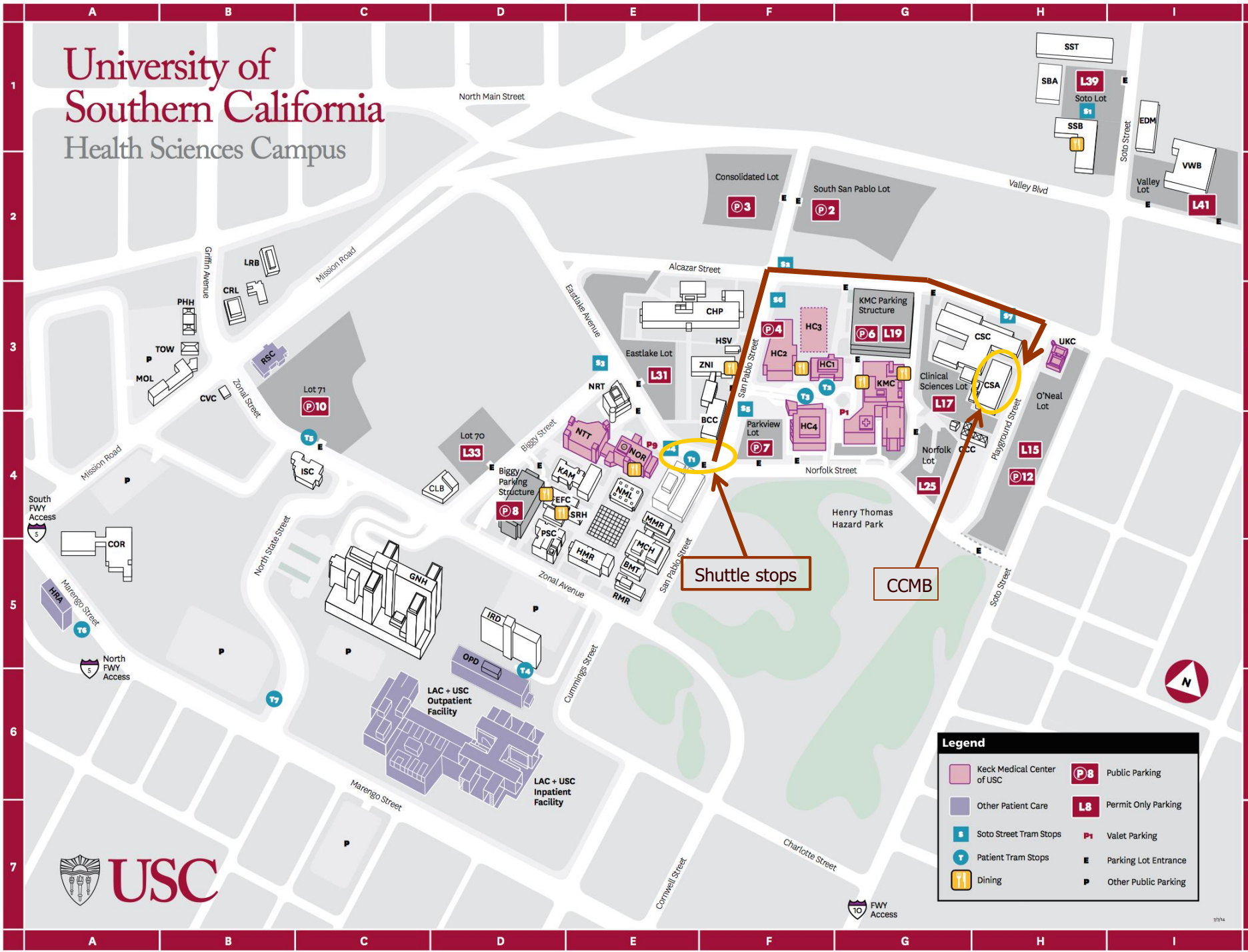
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Mission Road
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Zonal Street
Eastlake Avenue
Alcazar Street
San Pablo Street
Biggy Street
Norfolk Street
Playground Street
Soto Street
Valley Blvd
Zonal Avenue
North State Street
Marengo Street
Cummings Street
Cornwell Street
Charlotte Street
South FWY Access
North FWY Access
FWY Access
Consolidated Lot
South San Pablo Lot
Soto Lot
Valley Lot
Eastlake Lot
Lot 71
Lot 70
Biggy Parking Structure
KMC Parking Structure
Parkview Lot
Clinical Sciences Lot
O'Neal Lot
Norfolk Lot
Henry Thomas Hazard Park
LAC + USC Outpatient Facility
LAC + USC Inpatient Facility
Shuttle stops
CCMB
Legend
Keck Medical Center of USC
Other Patient Care
Soto Street Tram Stops
Patient Tram Stops
Dining
Public Parking
Permit Only Parking
Valet Parking
Parking Lot Entrance
Other Public Parking
USC

TRAM Services Available to Students:

Intercampus Shuttles

- Students are encouraged to use the USC Intercampus Shuttles (ICS) made available for traveling between both campuses (UPC & HSC).
- Tram service is available all day with multiple travel times and is always free of charge.

For more detail visit:
http://transnet.usc.edu/index.php/bus-map-schedules/

Always check your USC e-mail

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