Integration of Institutional, Programme and Course Level Learning Outcomes

Michael Prosser

cetl
Centre for the Enhancement of Teaching and Learning

As part of the Curriculum Reform Process, the University of Hong Kong is adopting an Outcomes-based Approach to Student Learning (OBASL)

The particular approach adopted aims at enhancing the quality of student learning experiences and student leaning outcomes.

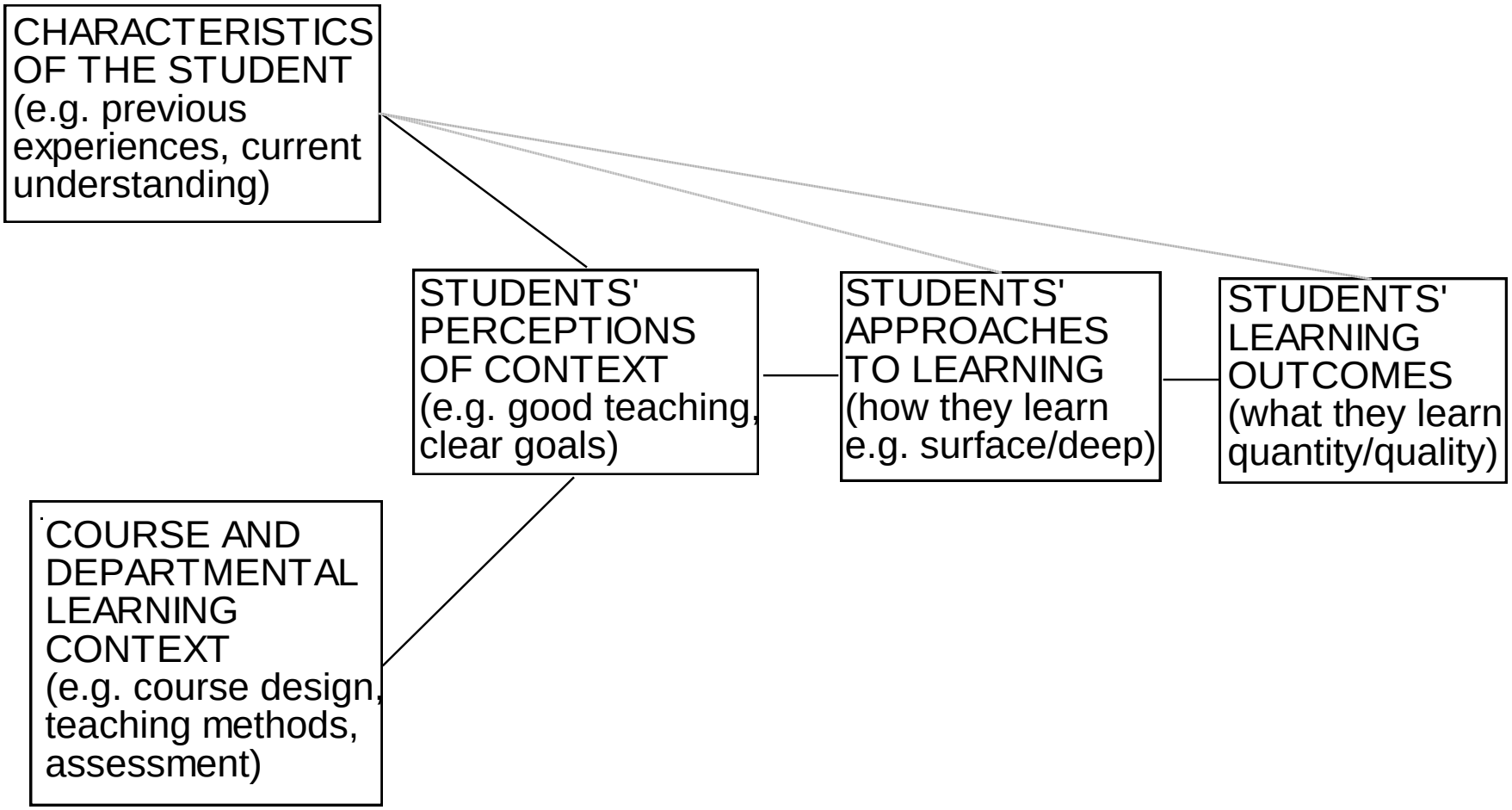
The approach is also designed to meet the University Grants Committee requirement that all degrees be outcomes-based by 2012.

From HKU perspective, and outcomes-based approach is one which good teachers adopt implicitly, but often do not make explicit to their students

An outcomes based approach is designed to help students better understand what they are expected to achieved, how they should go about achieving and how that achievement will be assessed.

Overview of the student learning perspective

Figure 1: Model of Student Learning



Hong Kong University Student Learning Experience Questionnaire

Key Scales:

- Educational Aims
- Approaches to Study
  - Surface (short term reproduction)
  - Deep (longer term understanding)
- Student Learning Experiences
  - Good teaching
  - Clear Goals and Standards
  - Appropriate Workload
  - Appropriate Assessment
- Overall satisfaction

Factor Analysis of Experiences of T & L Context and Approach to Study

Scale	Factors	
	1	2
Perceptions of Context		
Good Teaching	.76	
Clear Goals and Standards	.67	
Appropriate Workload		-.54
Appropriate Assessment		-.62
Approach to Study		
Surface Approach		.73
Deep Approach	.53	
HKU Educational Aims	.86	
Overall satisfaction	*.77*	

Principal Components, Variamax Rotation

At HKU:

1. the achievement of the educational aims and overall satisfaction is associated with:
    - the adoption of deep approaches to study
    - perceptions that the teaching is good
    - perceptions that the goals (learning outcomes) are clear
    - perceptions that standards of assessment are clear

2. the adoption of a surface approach is associated with:
    - perceptions that the workload is too high to understand it all
    - perceptions that assessment tests short term reproduction rather than longer term understanding

At University Level:

Statement of Undergraduate Educational Aims, – University Learning Outcomes

At Programme Level:

Statement of contextualized Educational Aims – Programme Learning Outcomes

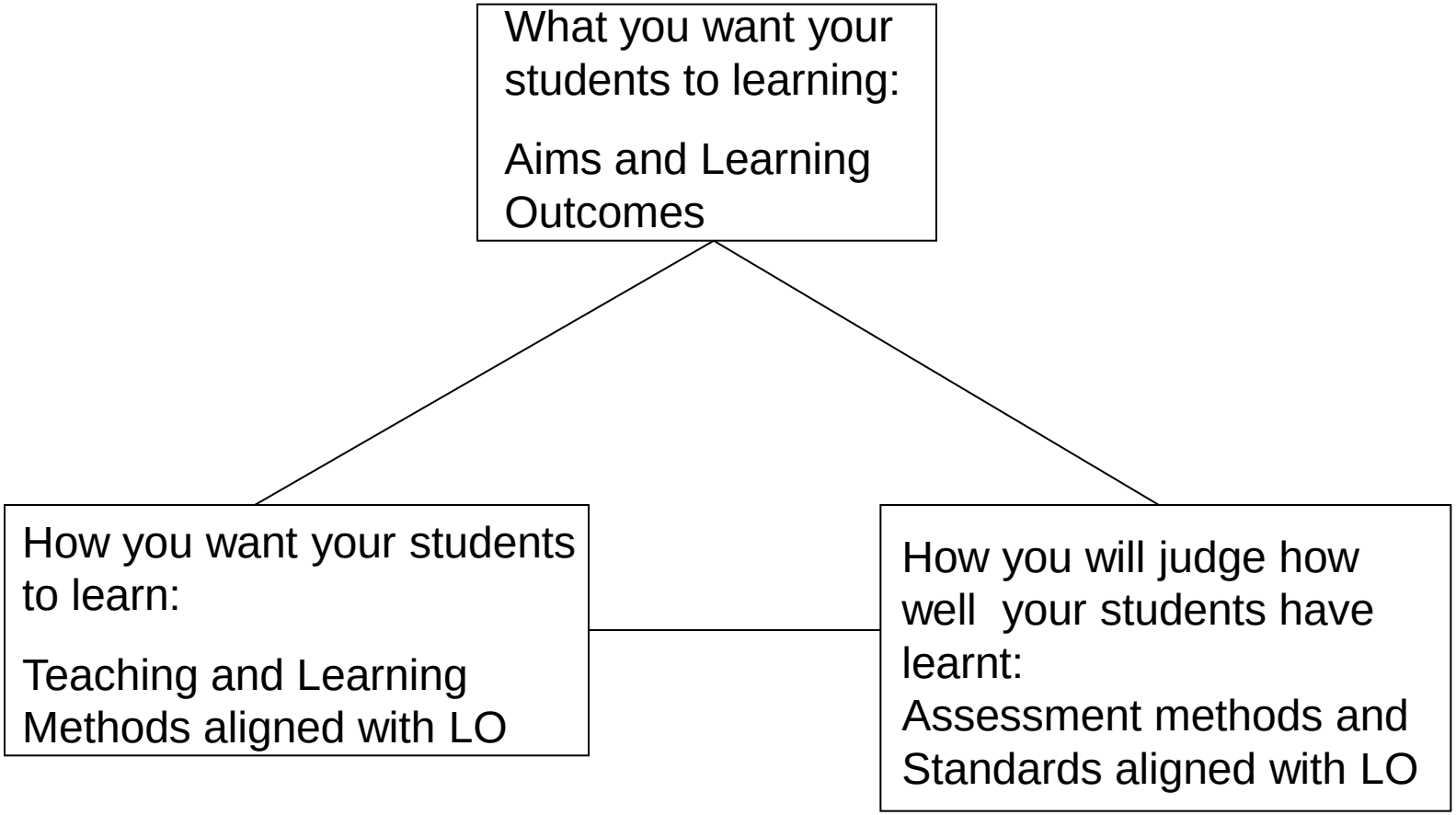
At Course Level:

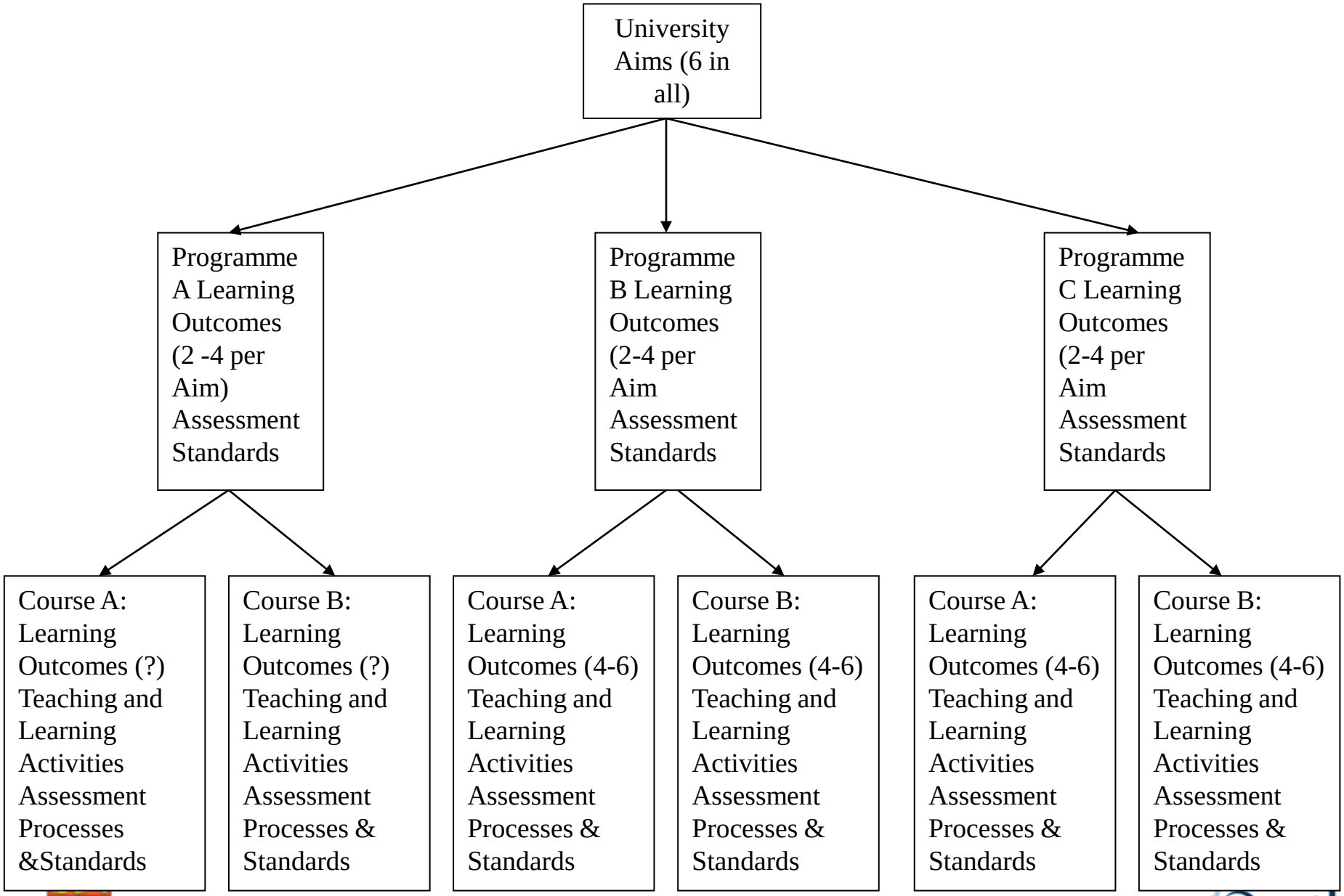
Statement of aims, learning outcomes, teaching and learning methods, assessment criteria and standards, clearly related to Programme Learning Outcomes

Statement on Assessment Criteria and Standards

At Faculty or Programme Level:

Matrices showing alignment of (1) University aims with Programme Learning Outcomes, (2) Programme Learning Outcomes with course Learning Outcomes


What you want your students to learning:
Aims and Learning Outcomes
How you want your students to learn:
Teaching and Learning Methods aligned with LO
How you will judge how well your students have learnt:
Assessment methods and Standards aligned with LO


University Aims (6 in all)
Programme A Learning Outcomes (2 -4 per Aim) Assessment Standards
Programme B Learning Outcomes (2-4 per Aim Assessment Standards
Programme C Learning Outcomes (2-4 per Aim Assessment Standards
Course A: Learning Outcomes (?) Teaching and Learning Activities Assessment Processes &Standards
Course B: Learning Outcomes (?) Teaching and Learning Activities Assessment Processes & Standards
Course A: Learning Outcomes (4-6) Teaching and Learning Activities Assessment Processes & Standards
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University Level Aims and Learning Outcomes

The University's Senate has endorsed the following set of University Aims and Learning Outcomes for all of its programmes of study

University Aims: Students Learning Outcomes

To enable our students to develop the capabilities in:

1. Pursuit of academic/professional excellence, critical intellectual inquiry creativity, and life-long learning

2. Tackling novel situations and ill-defined problems and creative thinking

3. Critical self-reflection and greater understanding of others, upholding personal and professional ethics

4. Intercultural understanding and global citizenship

5. Communication and collaboration

6. Leadership and advocacy for the improvement of the human condition

Aim 1: Pursuit of academic / professional excellence, critical intellectual enquiry and life-long learning

- Develop in-depth knowledge of specialist disciplines and professions
- Maintain highest standards of intellectual rigor and academic integrity
- Critique received knowledge from multiple perspectives
- Sustain intellectual curiosity and enthusiasm for learning

Aim 2: Tackling novel situations and ill-defined problems

- Respond positively to unanticipated situations and problems
- Identify and define problems in unfamiliar situations
- Generate and evaluate innovative solutions to problem

Aim 3: Critical self-reflection, greater understanding of others, and upholding personal and professional ethics

- Maintain highest standards of personal integrity and ethical practice in academic, social and professional settings
- Heighten awareness of personal strengths and weaknesses
- Respect individual differences and preferences

Aim 4: Intercultural understanding and global citizenship

- Heighten awareness of own culture and other cultures
- Develop cultural sensitivity and interpersonal skills for engagement with people of diverse cultures
- Perform social responsibilities as a member of the global community

Aim 5: Communication and collaboration

- Communicate effectively in academic, professional and social settings
- Work with others and make constructive contributions

Aim 6: Leadership and advocacy for the improvement of the human condition

- Play a leading role in improving the well-being of fellow citizens and humankind
- Uphold the core values of a democratic society: human rights, justice, equality and freedom of speech
- Participate actively in promoting the local and global social, economic and environmental sustainability

Programme Level Aims and their Alignment with the University Level Aims and Learning Outcomes

Draft Medical Programme Learning Outcomes

- Critical intellectual inquiry and life-long learning - Students should be able to:
  a. Critique the management of a clinical/healthcare issue in light of the best available evidence
  b. Generate enquiries about the manifestations of a health problem and derive an appropriate management plan
- Tackling novel situations and ill-defined problems – Students should be able to:
  c. Recognize the implication and potential of risk in any unprecedented or recurrent but unresolved problem
  d. Identify potential clinical or research approach or research which will lead to improvement in diagnosis or treatment
- Critical self-reflection and greater understanding of others – Students should be able to:
  e. Engage in realistic appraisal of one's own capabilities and limitations, and make appropriate decisions accordingly for the best of patient care
  f. Analyse a clinical scenario from multiple perspectives, including that of the patient, the patient's family, and colleagues in the professional team

- Intercultural communication, multi-cultural understanding and global citizenship – Students should be able to:

  g. Identify socio-cultural factors that contribute to variations in disease patterns and the acceptance of or conformity to treatment

  h. Recognize the diversity in health-care practice and standards, and the health economics of developed and less developed countries

- Collaboration and communication – Students should be able to:

  i. Demonstrate the ability to communicate effectively with patients and their families, staff members, peers and other health care professionals orally and in writing

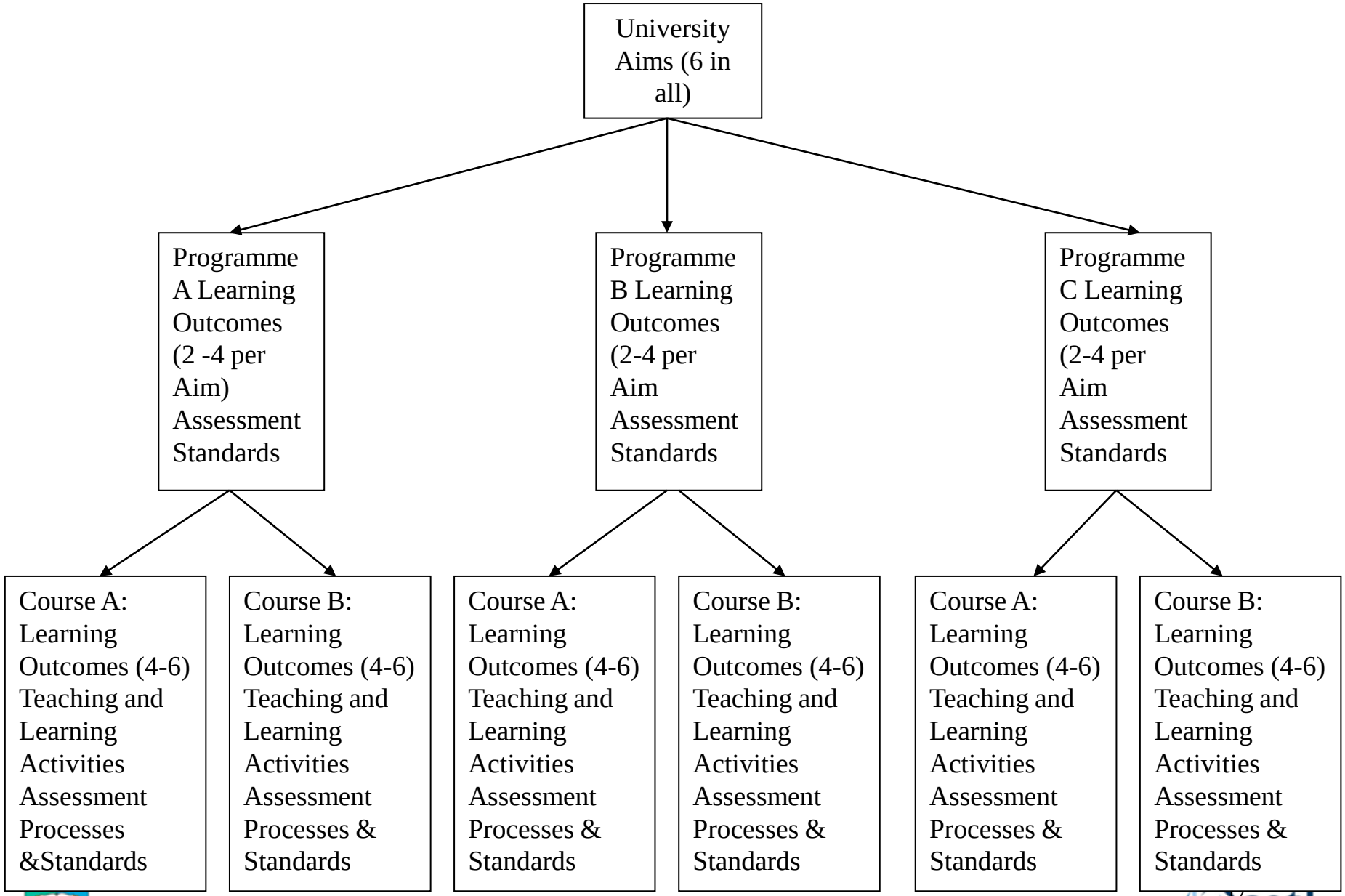
  j. Respect the roles and contributions of other members of the team

- Leadership and advocacy for the improvement of the human condition – Students should be able to:

  k. Recognize research as a valuable tool for the improvement of human condition

  l. Participate in the generation, interpretation, application and dissemination of significant advances in medical knowledge

  m. Initiate or participate in community projects for the betterment of health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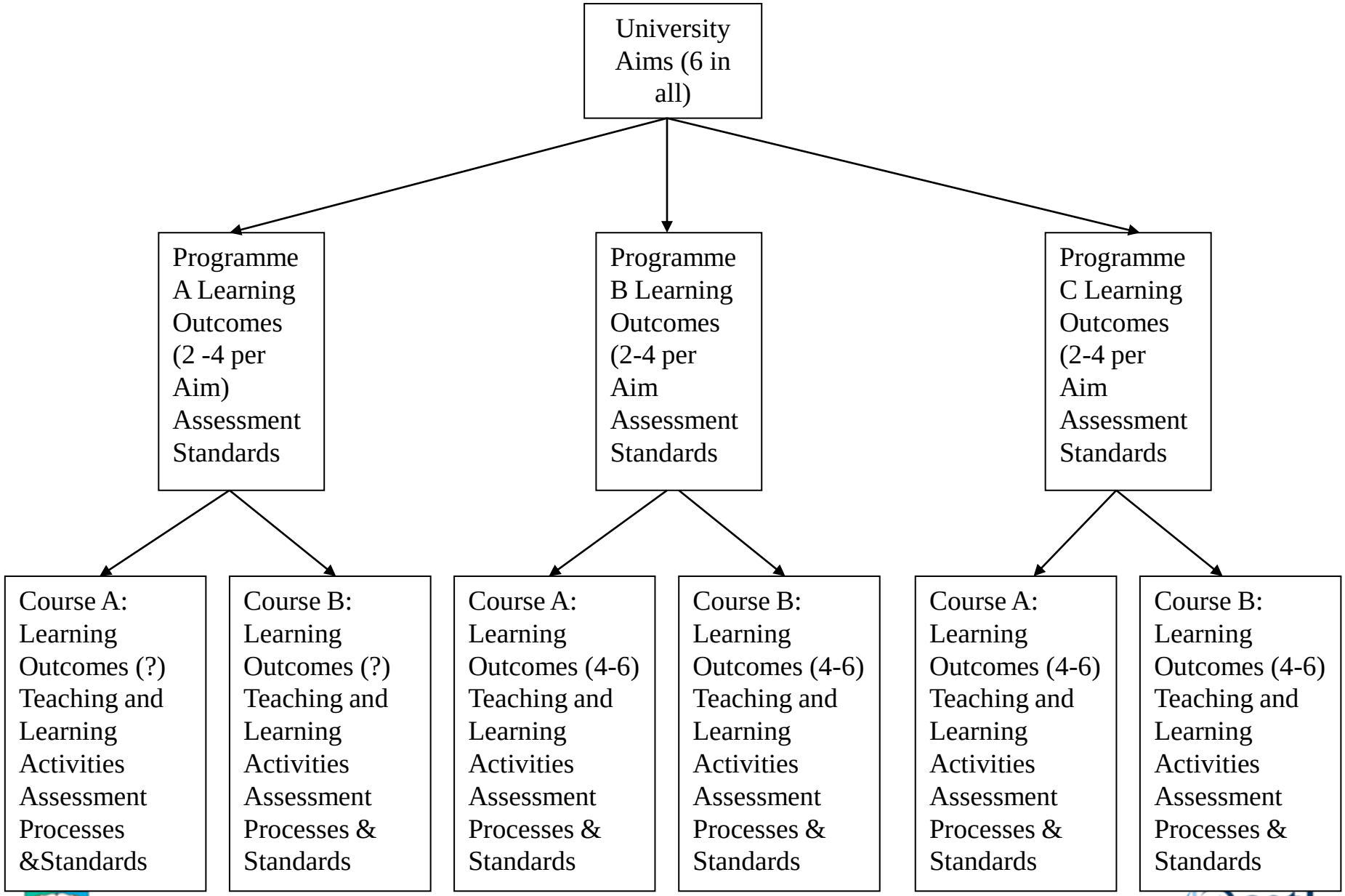
Mapping of University Aims against draft Medical Programme Learning Outcome

	Medical Program Learning Outcomes												
University Aims	a	b	c	d	e	f	g	h	i	j	k	l	m
Critical intellectual inquiry and life-long learning;	x	x	x	x	x								
Tackling novel situations and ill-defined problems;						x	x						
Critical self-reflection and greater understanding of others;								x	x				
Communication and collaboration;										x	x		
Intercultural communication, multicultural understanding and global citizenship;						x			x			x	
Leadership and advocacy for the improvement of the human condition.						x							x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For each Course

Course Learning Outcome	Teaching and Learning Activities	Assessment	Programme Level Outcomes (a to l)
1.			
2.			
3.			
4.			
5.			
6.			

Course Learning Outcomes and their alignment with Institutional Learning Outcomes

Stating Learning Outcomes

1. Do not restate content using language of learning outcomes

   - Exchange rates and trade - content
   - To know about about exchange rates and trade - restate content
   - To explain the meaning and function of flexible and fixed exchange rates in relation to the concept of equilibrium – clearer outcome

2. Do not use vague, general, content free statements

   To become more critical of established theory

   To become an independent learner

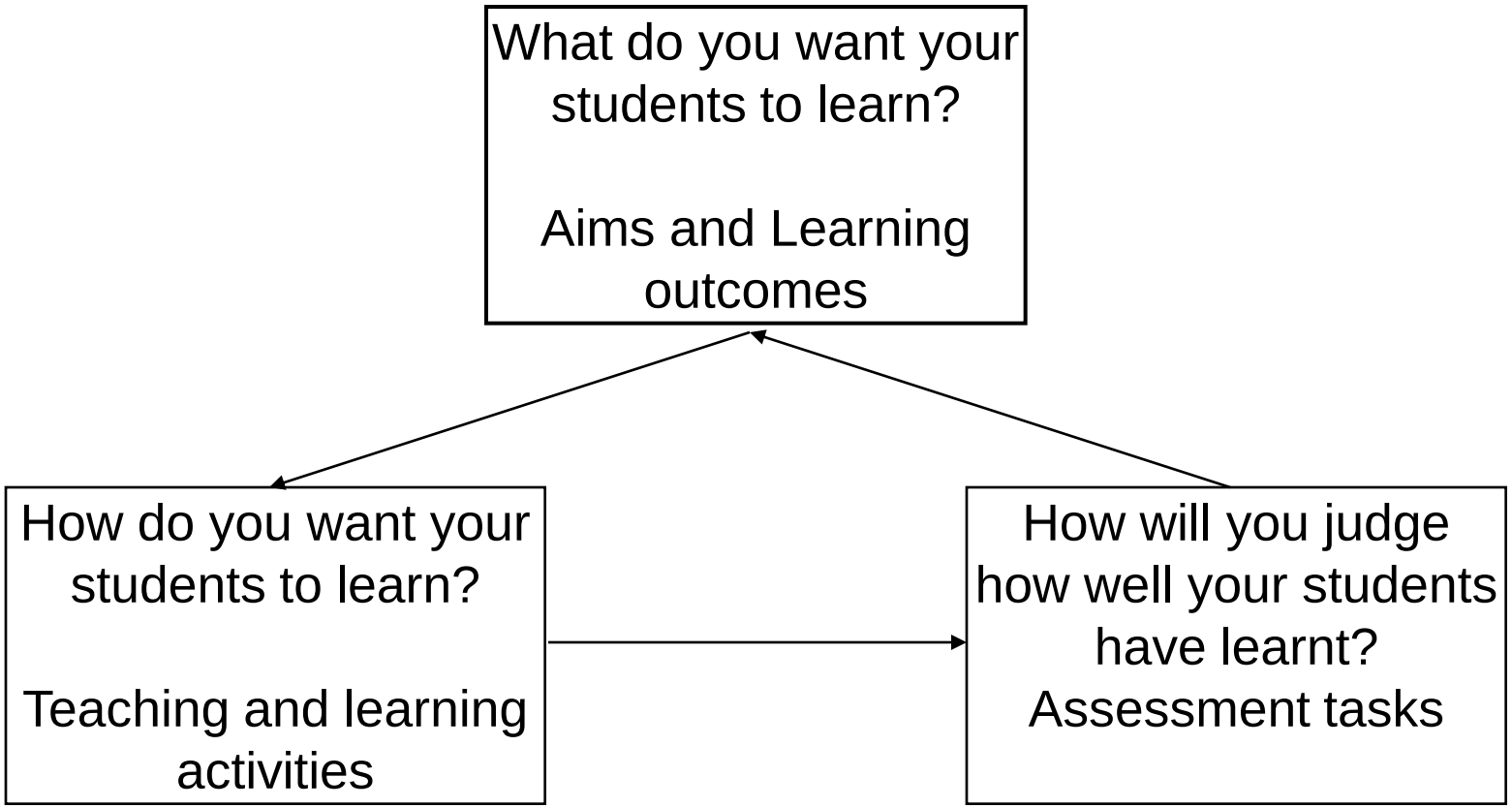
3. Do not describe too many disconnected learning outcomes (4-5 broad statements per course is sufficient)

In describing learning outcomes focus on concepts and relations between them, not just procedures and facts

Aligning Course Level Learning Outcomes with Institutional Learning Outcomes

Course Learning Outcomes Be able to:	Institutional Learning Outcomes
1. comprehend important applications of mathematics in our everyday life	1.2 develop in-depth knowledge 1.4: intellectual curiosity
2. apply mathematical ideas and methods on their decision making on everyday issues	2.1: unanticipated situations and problems 2.3: generate and evaluation innovative solutions
3. investigate the mathematical foundation of topics that are related to everyday life	1.1: in depth knowledge 1.2: intellectual rigor and academic integrity
4. communicate daily life problems and solutions using appropriate mathematical terminology and good English	5.1: communicate effectively
5. solve real-life problems using mathematics and present the solution using appropriate software	Integrate Aim 2 and Aim 5 2.1, 2.2,5.1

Outcomes-Based Approach to Student Learning



Mapping of Courses against draft Programme Learning Outcome

	Program Learning Outcomes											
Course	a	b	c	d	e	f	g	h	i	j	k	l
Course A	x			x			x		x			x
Course B		x	x				x				x	
Course C		x		x	x			x			x	
Course D	x					x				x		x
Course E												
Design courses (?)												

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1. Development of Institutional Aims and Learning Outcomes
2. Contextualisation of these in programme level learning outcomes
3. Development of course level learning outcomes and alignment with programme level learning outcomes
4. Assessment of learning outcomes:
    1. Student, graduate and employer surveys at institutional level with scales designed to provide indicators perceptions of achievement of Learning Outcomes
    2. Alignment of course level assessment strategies with course level LOs, alignment to course level LOs with programme level LOs and the alignment o programme LOs with University aims and LOs.
    3. Focus group discussion with students about their experience of how they develop the institutional LOs

Issues and Discussion

1. Reductive nature of OBASL
2. Aims further down the list are more likely to be developed in students extra-curricular activities rather than in their programmes of study
3. Documentation of students experience and outcomes in extra curricular activities
4. Professional accreditation
5. Standards of assessment of learning outcomes