Mapping of BEd and BSc Programme Learning Outcomes (PLOs) with University Educational Aims (UEAs)

University Educational Aims	**BSc programme learning outcomes**	**BEd&BSc integrated programme learning outcomes**	**BEd-Science programme learning outcomes**
Benchmarked against the highest international standards, the 4-year undergraduate curriculum at HKU is designed to enable our students to develop their capabilities in: *1. Pursuit of academic / professional excellence, critical intellectual enquiry and life-long learning*	*Students completing the BSc programme should be able to:* (1) Explain the basic scientific principles and methods; (2) Comprehend fundamental concepts in mathematics and the physical, chemical, biological and earth sciences, and understand the interconnectivity among the sciences and other disciplines; (3) Apply scientific processes and knowledge in a wide variety of careers and professions; (6) Integrate acquired discipline-specific knowledge in a science for professional and further academic pursuit in that disciplines;	*Students completing the BEd&BSc programmes should be able to:* 1. Acquire the major concepts and skills in sciences and science education, and respond critically in teaching and continuing professional development;	*Students completing the BEd programme should be able to:* 1. Identify, appraise and critically evaluate the aims, framework and content of the relevant subject curriculum; 2. Plan and implement contextually responsive and innovative teaching to construct effective learning experiences; 3. Critically evaluate underlying theories and concepts of learning and whole- person development; 6. Reflect critically on personal strengths and weaknesses to develop knowledge, skills and strategies for continuing professional improvement;

2. *Tackling novel situations and ill-defined problems*	(2) Comprehend fundamental concepts in mathematics and the physical, chemical, biological and earth sciences, and understand the interconnectivity among the sciences and other disciplines; (5) Analyze scientific aspects of complex issues, and recognize and appraise moral and ethical issues within the sciences and related disciplines;	2. Apply the principles and skills acquired to tackle with complex scientific issues and to construct an effective learning environment for pupils;	2. Plan and implement contextually responsive and innovative teaching to construct effective learning experiences; 4. Construct an environment conducive to effective learning;
3. *Critical self-reflection, greater understanding of others, and upholding personal and professional ethics*	(5) Analyze scientific aspects of complex issues, and recognize and appraise moral and ethical issues within the sciences and related disciplines;	3. Reflect critically on issues in sciences and science education, and uphold professional ethics as an emerging scholar of the disciplines;	3. Critically evaluate underlying theories and concepts of learning and whole-person development; 6. Reflect critically on personal strengths and weaknesses to develop knowledge, skills and strategies for continuing professional improvement;

4. Intercultural communication and global citizenship	(4) Effectively communicate within and across the science disciplines; (5) Analyze scientific aspects of complex issues, and recognize and appraise moral and ethical issues within the sciences and related disciplines;	4. Create an environment conducive to learning and teaching of sciences for the well-being of mankind;	4. Construct an environment conducive to effective learning; 5. Communicate effectively with stakeholders to promote the enhancement of teaching and learning and respond to changes in education;
5. Communication and collaboration	(4) Effectively communicate within and across the science disciplines;	5. Communicate and collaborate effectively, within and across, science and science education disciplines;	4. Construct an environment conducive to effective learning; 5. Communicate effectively with stakeholders to promote the enhancement of teaching and learning and respond to changes in education; 6. Reflect critically on personal strengths and weaknesses to develop knowledge, skills and strategies for continuing professional improvement;

6. *Leadership and advocacy for the improvement of the human condition*	(2) Comprehend fundamental concepts in mathematics and the physical, chemical, biological and earth sciences, and understand the interconnectivity among the sciences and other disciplines; (5) Analyze scientific aspects of complex issues, and recognize and appraise moral and ethical issues within the sciences and related disciplines.	6. Engage with different stakeholders in the disciplines, and innovate in scientific research and teaching of sciences.	5. Communicate effectively with stakeholders to promote the enhancement of teaching and learning and respond to changes in education.

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