CORPORATE AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data						
Module Title	The Development of Reasoning					
Module Code	UTTGQK-30-3		Level	3	Version	2
Owning Faculty	ACE		Field	Primary, Early Childhood and Education Studies		
Contributes towards	BA (Hons) Early Childhood BA (Hons) Education & Early Childhood					
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Standard	
Pre-requisites			Co- requisites			
Excluded Combinations			Module Entry requirements			
Valid From	September 2013		Valid to	September 2019		

CAP Approval Date	2nd May 2012 November 2016

Part 2: Learning and Teaching

| Learning Outcomes | On successful completion of this module students will be able to:

1. Demonstrate a critical understanding of current accounts of the physical, emotional and cognitive development of the human brain. (Comp B)

2. Be able to give a critical account of how babies and young children acquire conceptual understanding through investigation and hypothesising about the world around them and how this influences future learning. (Comp A and B)

3. Be able to give a critical account of children's reasoning and their developing capabilities for communicating their understanding and ideas. (Comp A and B)

4. Be able to critically discuss ways in which children's conceptual and creative thinking and reasoning can be supported and promoted by the provision of a range of play-based opportunities and environments, and how adults can assist and facilitate these experiences. (Comp A)

In addition the educational experience may explore, develop, and practise <u>but not formally discretely assess</u> the following:

5. Be able to organise and present ideas and information coherently

6. Be able to communicate effectively, including the capacity to communicate the processes and outcomes of their learning

7. Be able to work effectively as an independent and self-motivated learner. |
|---|---|

Syllabus Outline	1. Understanding children's conceptual development
	2. Distinguishing kinds of reasoning.
	3. An exploration of different theories of children's developing understanding about the world
	4. Recognition of significance of social reasoning
	5. Reasoning in relation to the disciplines of mathematics and science in early years /KS1 settings.
	6. The role of shared attention, gaze and pointing.
	7. Knowledge of other minds
	8. Children's developing use of language to communicate their ideas.
	9. Reflections on experiences of working with young children.
	10. Understanding of the relevance of current research and developments in national initiatives with particular reference to policy and curriculum arrangements for children 0-8
	11. Examining ways that adults can create environments to encourage children's conceptual and creative thinking and how they can facilitate or assist these performances.
Contact Hours/Scheduled Hours	Contact time for this module will take the form of lectures, seminars, tutorials, directed study, online engagement and e-mail contact.
	The following structure represents a typical delivery; the precise delivery pattern will vary from year to year.
	Whole cohort events: 22 hours
	Smaller group events (seminars, tutorials, workshops, presentations):39 hours
	Guided study (group and individual tasks, including online engagement): 11 hours
Teaching and Learning Methods	**Scheduled learning:** This includes lectures, seminars, tutorials, workshops, presentations, directed study, online engagement and e-mail contact.
	Independent learning: There is an expectation that students engage in approximately 3 hours of independent learning for each hour of contact time on a module. This work includes hours engaged with essential reading, additional reading around areas of particular interest, assignment preparation and completion and review of feedback.

Key Information Sets Information	Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.

Key Information Set - Module data

Number of credits for this module				30	

Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours	
300	72	228	0	300	✓

The table below indicates as a percentage the total assessment of the module which constitutes a -

Written Exam: Unseen written exam, open book written exam, In-class test
Coursework: Written assignment or essay, report, dissertation, portfolio, project
Practical Exam: Oral Assessment and/or presentation, practical skills assessment, practical exam

Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:

Total assessment of the module:			
Written exam assessment percentage			0%
Coursework assessment percentage			50%
Practical exam assessment percentage			50%
			100%

Reading Strategy*	**Essential reading:** Students are expected to read one or more of the wide range of texts related to the issues covered in this module. Key texts will be listed in the module handbook and a copy of each is provided in the Library. Where texts are available as e-books, these will be available on the library website.
	Further reading: All students are expected to read widely using the library catalogue, a variety of bibliographic and full text databases and Internet resources. Many resources can be accessed remotely. Guidance to some key authors and journal titles available through the Library will be given in the Module Guide and updated annually. Assignment reference lists are expected to reflect the range of reading carried out.
	Access and skills: Students are expected to be able to identify and retrieve appropriate reading. Support is offered at L3 in the form of a library skills surgery to support students' work on methodology and their own research work. Additional support is available through the Library Services web pages, including interactive tutorials on finding books and journals, evaluating information and referencing. Sign up workshops are also offered by the Library.
	Indicative reading list: The list included as part of the module specification provides an indication of the type and level of texts which students might be expected to refer to as part of the work on this module. Current advice on additional reading will be found in the module handbook and on Blackboard.

Indicative Reading List	**Key text:** Goswami, U. (2008). *Cognitive development: the learning brain.* Hove: Psychology Press. **Further Reading:** Barbarin, O. & Wasik, B. (Eds). (2009*). Handbook of child development and early education: research into practice.* New York: The Guilford Press. Baron-Cohen, S., Tager-Flusberg, H. & Lombardo, M. (Eds). (2013). *Understanding other minds: Perspectives from developmental social neuroscience.* Oxford: Oxford University Press. Barrouillet, P. and Gauffroy, C. (2013) *The development of thinking and reasoning.* East Sussex: Psychology Press. Doherty, M.J. (2009) *Theory of mind: how children understand others' thoughts and feelings.* Hove: Psychology Press. Donaldson, M., Greive, R. & Pratt, C. (Eds). (1983*). Early childhood development and education: readings in psychology.* Oxford: Basil Blackwell. Dunlosky, J. & Metcalfe, J. (2009). *Metacognition.* London: Sage. English, L.D. (2004) *Mathematical and analogical reasoning of young learners.* London: Lawrence Erlbaum Associates. Gallagher, S. (2001) The Narrative Alternative to Theory of Mind in R. Menary (ed.), *Radical Enactivism: Intentionality, Phenomenology, and Narrative* (pp.223-229). Amsterdam: John Benjamins Gallagher, S., Hutto, D. (2004) Understanding others through primary interaction and narrative practice. In J. Zlatev, T. Racine, C. Sinha and E. Itonen (eds*). The Shared Mind: Perspectives on Intersubjectivity.* Amsterdam: John Benjamins. Gallagher, S. (2013) When the Problem of Intersubjectivity becomes the Solution. In: Legerstee, M., Haley, D., and Bornstein, M., eds.(2013) *The Infant mind: origins of the social brain.* London: Guilford Press, pp. 48-77. Goswami, U. (1992) *Analogical Reasoning in Children.* Hove: Lawrence Erlbaum Associates. Goswami, U. (1998) *Cognition in children.* Hove: Psychology Press. Goswami, U. (2011*) The Wiley-Blackwell handbook of childhood cognitive development.* Chichester: Wiley-Blackwell. Hughes, M. (1986). *Children and Number.* Oxford: Blackwell Johnson-Laird, P. (1996). Mental models, deductive reasoning and the brain. In, Gazzaniga, M. (Ed) 1996). *The cognitive neurosciences.* London: MIT Press. Legerstee, M., Haley, D.W. & Bornstein, M.H. (2013) *The Infant mind: origins of the social brain.* London: Guilford Press. Leighton, P. (2004) *The Nature of Reasoning.* Cambridge: CUP Meadows, S. (1993). *The child as thinker.* London: Routledge. Mitchell, P. & Riggs, K. (2000) *Children's Reasoning and the Mind.* Hove: Psychology Press.

Moore, C. (2006). *The Development of Common Sense Psychology.* Hove: Psychology Press.

Piaget, J. (1997). *The moral judgement of the child.* New York: Free Press.

Sabbagh, M. Benson, J. and Kuhlmeier, V. (2013) False-Belief Understanding in Infants and Preschoolers. In: Legerstee, M., Haley, D., and Bornstein, M., eds. (2013) *The Infant mind: origins of the social brain.* London: Guilford Press, pp. 301-324.

Sodian, B. (2005) Theory of mind – The Case of conceptual Development. In: Schneider, W., Schumann-Hengsteler, R. and Sodian, B., eds. (2005) *Young children's cognitive development: interrelationships among executive functioning, working memory, verbal ability, and theory of mind.* London: Lawrence Erlbaum Associates, pp. 95-131.

Zelazo, P., Chandler, M. & Crone, E. (Eds) (2010). *Developmental Social Cognitive Neuroscience.* Hove: Psychology Press

Journal articles:

Buccino, G., Binkofski, F. and Riggio, L. (2004) The mirror neuron system and action recognition. Brain and language. Vol. 89(2), pp. 370-376.

Callaghan, T., Rochat, P., Lillard, A., Claux, M. L., Odden, H., Itakura, S., Tapanya, S. and Singh, S. (2005). Synchrony in the onset of mental-state reasoning. *Psychological science.* Vol. 16(5). Pp 378-384.

Carpendale, J.I.M. and Lewis, C. (2004) Constructing an understanding of mind: The development of children's social understanding within social interaction. Behavioral and Brain Sciences. Vol. 27(1), pp. 79-96.

Casey, B., Trainor, R., Orendi, J., Schubert, A., Nystrom, L., Giedd, J., Castellanos, F., Haxby, J., Noll, D., Cohen, J., Forman, S., Dahl, R. & Rapoport, A. (1997). A developmental functional MRI study of prefrontal activation during performance of a go-no-go task. *Journal of Cognitive Neuroscience* 9, pp. 835– 847.

Chaparro, M.P., Kim, H., Fernández, A. and Malti, T. (2013) The development of children's sympathy, moral emotion attributions, and moral reasoning in two cultures. *European Journal of Developmental Psychology.* Vol. 10(4), pp. 495.

Chee, C.S. and Murachver, T. (2012) Intention Attribution in Theory of Mind and Moral Judgment. *Psychological Studies.* Vol. 57(1) pp. 40-45.

Fangmeier, T., Knauff, M., Ruff, C. & Sloutsky, V. (2006). fMRI evidence for a three-stage model of deductive reasoning. *Journal of Cognitive Neuroscience.* 18(3), pp320-334

Goel, V., Gold, B.,Kapur, S. & Houle, S. (1998). Neuroanatomical correlates of human reasoning. *Journal of Cognitive Neuroscience.* 10(3), pp 293-302.

Premack, D. and Woodruff, G. (1978) Does the chimpanzee have a theory of mind. *Behavioural and Brain Sciences.* Vol. 1(4), pp. 515-526.

Rizzolatti G, Fogassi L, Gallese V (2001) Neurophysiological underlying the understanding and imitation of action. *Nat Rev Neuroscience* Vol. 2, pp.661–670

Rizzolatti, G. and Fabbri-Destro, M. (2008). Mirror neurons and mirror systems in monkeys and humans. *Physiology.* Vol. 23(3). Pp. 171-179.

Tsujimoto, S. (2008). The Prefrontal Cortex: Functional neural development during early childhood. *The Neuroscientist*. 14, pp345-358.

Trevarthen, C (2011)What Is It Like to Be a Person Who Knows Nothing? Defining the Active Intersubjective Mind of a Newborn Human Being Inf.Chil.Dev 20:119-135

Trevarthen ,C (2012) Finding a place with meaning in a busy human world: how does the story begin, and who helps? European Early Childhood Education Research Journal 20:3, 303-312

Trevarthen, C. (2009)The Intersubjective Pyschobiology of Human Meaning: Learning of Culture Depends on Interest of Co-Operative Practical Work and Affection for the Joyful Art of Good Company, Psychoanalytic Dialogues: The International Journal of relational Perspectives, 19:5, 507-518

Wimmer, H and Perner, J (1983) Beliefs about beliefs : Representation and

constraining function of wrong beliefs in young children's understanding of deception".

Cognition Vol. 13(1), pp.103–128

Part 3: Assessment	
Assessment Strategy	The module learning outcomes will be assessed through an individual presentation and a written assignment. The assessment tasks will be assessed against the following Department of Education assessment criteria: **A L3: Conceptual Domain (Core)** The assignment demonstrates that the student can use and organise coherently relevant ideas, perspectives or theories to interpret and/or explore issues under study and in addition can critically analyse and/or evaluate those ideas, perspectives or theories. **B L3: Literature Domain** The assignment demonstrates that the student can reference appropriate literature and utilise it in the development of analysis and discussion of ideas. **C L3: Contextual Domain** The assignment demonstrates that the student has an awareness of the significance of relevant contextual factors (e.g. personal, locational, historical, political etc) influencing the area of study. **G L3: Action Domain** The assignment demonstrates that the student can explore the relationship between theory and practice, and use reflection to develop personal theory and/or consider its implications for practice, with due regard to issues of equity and social justice, appraising future development needs and/or outcomes.

Identify final assessment component and element	**Component B**	
	A:	**B**:
% weighting between components A and B (Standard modules only)	**50%**	**50%**
First Sit		

Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
Individual presentation on the importance of social reasoning in the development of children's thought with illustrations form the field of practice. The way that adults could support children in this environment should also be briefly discussed and informative sources identified.	100
12 minutes with an additional 2 minutes to respond to tutor questions.	
Students can refer to notes but should not read from a prewritten script.	
Assessment criteria: AL3, BL3 and GL3	

Component B **Description of each element**	**Element weighting** **(as % of component)**

A 2500 word essay on a theme relating to the module learning objectives. The essay will make reference to work in a specified area of learning for young children (eg EYFS).Title to be negotiated with the tutor. Assessment criteria: AL3, BL3, GL3	100

Resit (further attendance at taught classes is not required)	
Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
Individual presentation on the importance of social reasoning in the development of children's thought with illustrations form the field of practice. The way that adults could support children in this environment should also be briefly discussed and informative sources identified. 12 minutes with an additional 2 minutes to respond to tutor questions. Students can refer to notes but should not read from a prewritten script Assessment criteria: AL3, BL3 and GL3	100
Component B FINAL **Description of each element**	**Element weighting** **(as % of component)**
A 2500 word essay on a theme relating to the module learning objectives. The essay will make reference to work in a specified area of learning for young children (eg EYFS).Title to be negotiated with the tutor. Assessment criteria: AL3, BL3, GL3	100
If a student is permitted a retake of the module the assessment will be that indicated by the Module Description at the time that retake commenc	

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First CAP Approval Date	2 May 2012			
Revision CAP Approval Date *Update this row each time a change goes to CAP*	1 February 2017	Version	2	RIA 12224