

## Vygotsky - Mark Scheme

### Q1.

[AO2 = 2]

Up to two marks for a valid explanation. 1 mark for outline of relevant concept. Second mark for application to classroom situation. Does not have to be science, but must be classroom. Possible answer: peer tutoring – use of mixed ability pairs so more able can aid less able; collaborative learning – working in small groups of mixed ability; teacher helping child set up apparatus / pour liquid / measure liquid etc, then withdraws support as child becomes more able to do it alone; how ZPD / scaffolding could be applied; setting up a community of inquiry.

### Q2.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

[AO3 = 3]

1 mark – credit description of how any design (repeated, independent or matched) could be used.

1 mark – both IV & DV: whether or not child receives scaffolding and jigsaw success

3<sup>rd</sup> mark – for appropriate expansion / elaboration of how the experiment would be conducted eg more detail of variables (eg adult encouragement in form of 'well done' for placing a piece correctly; time taken to complete a 15-piece jigsaw or the number of pieces correctly positioned in ten minutes) or of the design.

Example answer: independent design: one group of children solves jigsaw puzzles with an adult giving encouragement the other group has an adult present but there is no encouragement (the IV). The psychologist would measure the time taken to complete the jigsaw (the DV).

### Q3.

[AO1 = 6 AO3 = 10]

Level	Marks	Description
4	13 – 16	Knowledge of Vygotsky's theory of cognitive development is accurate and generally well detailed. Evaluation is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and / or expansion of argument sometimes lacking.
3	9 – 12	Knowledge of Vygotsky's explanation of cognitive development is evident. There are occasional inaccuracies. Evaluation is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is

		mostly used effectively. Lacks focus in places.
2	5 – 8	Some knowledge of Vygotsky's explanation of cognitive development is present. Focus is mainly on description. Any evaluation is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1 – 4	Knowledge of Vygotsky's explanation of cognitive development is limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

**Possible content:**

- social interactionist theory – focus on role of social interaction and culture in development of cognition – how child internalises the understanding of others through social interaction child develops tools of culture, eg language
- importance of language – enables shift from elementary mental functions to higher mental functions; external monologue > inner speech > internalised thought
- scaffolding – more knowledgeable others (parents, older peers, teachers, siblings) provide a supportive framework which is gradually withdrawn
- zone of proximal development – gap between what child can do unaided and what child can do with help – difference between current ability and potential ability – where scaffolding operates to extend child's abilities.

Credit other relevant Vygotskian concepts.

**Possible evaluation points:**

- evidence in favour of Vygotsky, eg Wood and Middleton (1975)
- evidence against Vygotsky, eg tutoring does not accelerate learning Gelman (1969)
- cross-cultural findings to support role of social factors
- implications for education – peer tutoring, classroom organisation, role of the teacher
- comparisons with Piaget – social interactionism vs constructivism; different views on the role of language (key to thought vs by-product of thought); child as apprentice vs child as scientist.

Credit other relevant evaluation points.

Only credit evaluation of the methodology used in studies when made relevant to evaluation of the explanation.

**Q4.**

[AO1 = 6 AO2 = 4 AO3 = 6]

Level	Marks	Description
4	13 – 16	Knowledge of Piaget's and Vygotsky's views is accurate and generally well detailed. Discussion is thorough and effective. Application to the stem is appropriate and links between views of the two researchers and stem content are explained. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	9 – 12	Knowledge of Piaget's and Vygotsky's views is evident. Discussion is apparent and mostly effective. There are occasional inaccuracies. Application to the stem is appropriate although links to the views of the researchers are not always explained. The answer is mostly clear and organised. Specialist terminology mostly used effectively. Lacks focus in places.
2	5 – 8	Knowledge of Piaget's and Vygotsky's views is present but is vague/inaccurate <b>or</b> one view only is present. Focus is mainly on description. Any discussion is only partly effective. Application to the stem is partial. The answer lacks clarity, accuracy and organisation in places. Specialist terminology used inappropriately on occasions.
1	1 – 4	Knowledge of Piaget's and/or Vygotsky's views is limited. Discussion is limited, poorly focused or absent. Application is limited or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

**Possible content:**

- Piaget – cognition develops as a result of active discovery; action on the world; child as scientist; schema development via assimilation and adaptation and striving for equilibrium; development takes place in stages (description of Piaget's stages is neither necessary nor expected); language as a byproduct of cognitive development
- Vygotsky – cognition is socially and culturally determined; child as apprentice learning tools of the culture; scaffolding as a support structure provided by more knowledgeable others and gradually withdrawn as child becomes more capable; peer learning; language as the key to cognitive development

**Possible applications:**

- Piaget – discovery learning 'students worked alone'
- Piaget – teacher's role is to provide the materials and environment 'they were given tasks and materials ... had to sort out the problem by trial and error'
- Vygotsky – child as apprentice and peer tutoring 'worked in pairs of different abilities so they could help each other'
- Vygotsky – scaffolding by more knowledgeable other 'teacher demonstrated

- ..... until they could manage on their own'
- Vygotsky's views on language and thought 'talk it through'

**Possible discussion points:**

- Use of evidence for/against Piaget's view
- Use of evidence for/against Vygotsky's view
- Contrast/comparison of the two views
- Implications of the two views eg for education

Credit other relevant information.

**Q5.**

**Marks for this question: AO1 = 6, AO3 = 10**

Level	Marks	Description
4	13 – 16	Knowledge is accurate and generally well detailed. Discussion / evaluation / application is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and / or expansion of argument sometimes lacking.
3	9 – 12	Knowledge is evident. There are occasional inaccuracies. Discussion / evaluation / application is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.
2	5 – 8	Some knowledge is present. Focus is mainly on description. Any discussion / evaluation / application is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1 – 4	Knowledge is limited. Discussion / evaluation / application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Please note that although the content for this mark scheme remains the same, on most mark schemes for the new AQA Specification (Sept 2015 onwards) content appears as a bulleted list.

**AO1**

Marks for knowledge of what can affect cognitive development (relevant psychological research and theory). Likely content: Vygotsky's work on the role of others – socio-cultural theory; internalisation; references to scaffolding; research eg Wood and Middleton (1975); guided participation Rogoff (1995); ZPD. Candidates should also be credited for knowledge of counter-perspectives eg nativism, Piaget's views on biological maturation (the lone scientist). Broader social

learning theory concepts could also be relevant.

### AO3

Marks for discussion of the role of others in cognitive development. Likely content: discussion of contradictory views; supporting evidence; general evaluation of theories; cognitive development as due to an interaction between various factors. Credit use of relevant evidence and evaluation of evidence where relevant to the question.

### Q6.

**Marks for this question: AO1 = 6, AO3 = 10**

Level	Marks	Description
4	13 – 16	Knowledge is accurate and generally well detailed. Discussion / evaluation / application is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and / or expansion of argument sometimes lacking.
3	9 – 12	Knowledge is evident. There are occasional inaccuracies. Discussion / evaluation / application is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.
2	5 – 8	Some knowledge is present. Focus is mainly on description. Any discussion / evaluation / application is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1 – 4	Knowledge is limited. Discussion / evaluation / application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Please note that although the content for this mark scheme remains the same, on most mark schemes for the new AQA Specification (Sept 2015 onwards) content appears as a bulleted list.

### AO1

Relevant theories of cognitive development in the Specification are Piaget and Vygotsky. There is no requirement for students to cover both. Credit can be awarded for outlines of applications of theories to education. For Piaget this might be stage-specific learning, 'readiness', discovery learning or the concepts of assimilation and accommodation. For Vygotsky, key ideas include the zone of proximal development, scaffolding, the role of language, and collaborative learning. Examiners should be sensitive to depth-breadth trade-offs in answers covering both.

Although not on the specification, other theories of cognitive development, such as Bruner's, would also be relevant to this question.

### **A03**

Research studies have investigated the effectiveness of, eg scaffolding or stage specific learning ('readiness'). Note that methodological evaluation of such studies can only earn credit if explicitly linked to discussion of application of theories. General points include the role of the teacher and the significance of individual differences between children. Observations on the overall significance of Piaget and / or Vygotsky to education may also earn marks.

Further relevant commentary might include some direct comparison of Piaget and / or Vygotsky's theories in relation to education, although this is not essential. Alternative theories, such as Bruner, may earn credit if used either as part of effective commentary on Piaget and / or Vygotsky, or discussed in their own right.

Note that students are not required to evaluate their chosen theory(ies) beyond their applications to education. Classic studies (naughty teddy, three mountains, etc) will not earn credit unless the implications of findings are directly linked to the discussion of applications to education.

Relevant points include cultural and historical issues, with Vygotsky's views in particular shaped by the socio-political environment he was working in.