WORKSHOP TITLE: Developing Constructed Response Test Items

Presenters: Ezekiel Sweiry

Presenters' Bios (500 words):
Ezekiel Sweiry is a Senior Assessment Researcher at AQA. He has 16 years of experience in test development and assessment research. During this time, he has worked for the Department for Education and the three largest UK awarding bodies. As a test developer, he has been involved in the development of a range of high stakes tests in England at both primary and secondary level. His particular research interests include the factors that affect the difficulty and accessibility of test items, the item and mark scheme features that affect marking reliability, and the comparability of paper-based and computer–based assessments.

Why AEA members should attend this workshop:
While considerable research and guidance on writing selected response (SR) test items exists in the literature, guidance on writing constructed response (CR) items is scarce. This is despite the fact that there is far greater potential for examinees to misunderstand the requirements of CR items. In addition, the development of CR mark schemes that show both intrinsic validity and high levels of marker agreement presents serious challenges that are all but absent for SR items. The purpose of this workshop is to present and discuss guidance on developing CR items and their mark schemes.

Who this Workshop is for:
The workshop is aimed at anyone with an interest in constructed response item and mark scheme design, including test developers, educational assessment researchers and those involved in the scoring of responses. No specific prior knowledge is needed.

Overview (500 words):
The guidance in this workshop is based on an synthesis of available research literature on CR item writing, relevant aspects of cognitive psychology (including models of

language comprehension, working memory capacity and cognitive load theory), and the presenter's own experience of high stakes test development across primary (ages 7 - 11) and secondary (ages 11 - 18) education in the UK.

A range of CR item writing issues will be explored, including the appropriate use of language, real-world contexts and diagrams. The workshop will also consider the features of items, mark schemes and examinee responses that can affect marking reliability, and ultimately, how mark schemes can be designed to maximise marking reliability. Mark scheme validity (the extent to which the mark scheme gives credit for, and only for, responses which match expert notions of what an item should be measuring), a concept almost entirely ignored in the literature, will also be explored. Finally, the workshop will consider how qualitative and quantitative evidence from item trialling can be used to identify problematic items and mark schemes. All of these issues will be investigated through an amalgamation of theory and research evidence with practical activities and example test questions, and participants will have the opportunity to review and discuss potential revisions to a variety of sample questions and mark schemes.

The focus of this workshop will be primarily on short constructed-response items (typically worth up to 4 or 5 marks) and their mark schemes, though some aspects of the design of more open- ended items and their mark schemes will also be covered. The primary basis for the guidance will be on ensuring that items and mark schemes are, as far as possible, free of construct irrelevant variance, which occurs when scores are influenced by factors irrelevant to the construct. These factors can make items unintentionally easy (construct irrelevant easiness) or difficult (construct irrelevant difficulty).

Preparation for the workshop:
No specific workshop preparation is required.

Schedule

Time	Session	Presenter
0900	Coffee and registration	
0930	Welcome and introductions Outline of the workshop	Ezekiel Sweiry
0945	Language accessibility in test items	Ezekiel Sweiry
1100	Break	
1130	Item features and construct irrelevant variance	Ezekiel Sweiry
1300	Lunch	
1400	Mark scheme design, marking reliability and mark scheme validity	Ezekiel Sweiry
1530	Break	
1545	Response analysis: interpreting the evidence from item trialling	Ezekiel Sweiry
1630	Workshop close	