### **Workshop Announcement**



2016/04/28-29 (Frankfurt a. M.)

Two-Day Workshop on Technology-Based Assessment with the CBA ItemBuilder Version 7.2 - Basics (Day 1), Advanced Test Delivery (Day 2)

The Centre for Technology-Based Assessment (TBA) and the Work Unit Technology-Based Testing (TBT) for the National Educational Panel Study (NEPS) at DIPF are pleased to announce a two-day workshop on technology-based assessment with the CBA ItemBuilder Version 7.2.

#### Introduction

The importance of technology-based testing for educational research is growing. Many international and national large-scale assessments such as PISA, PIAAC and NEPS, for instance, introduce computer-based testing for their regular assessments. From a diagnostic point of view, main advantages of technology-based testing are the increased standardisation, potential gains in measurement efficiency, the possibility of new interactive response methods as well as the collection of comprehensive log- and process data that can give insights into test-taking behaviour and response processes.

#### Workshop Goals

The workshop starts with an overview about current possibilities of computer-based tests, including the operationalisation of different closed and constructed response formats, and gives guidelines for the design of units for computer-based assessment that are expected to result in a better construct representation than paper-based tests. The aim of the workshop's first day is to provide a hands-on introduction to computer-based assessment with the freely available CBA ItemBuilder, a graphical item authoring tool that can be used without requiring knowledge in a specific programming language. Important practical issues such as the implementation of items with a variety of response formats as well as scoring of items will be presented and practiced by the participants. The goal of the second day is to address advanced test delivery issues. Based on the possibilities to automatically score responses in simple and complex items, the workshop will present ways to implement computer-based adaptive testing (CAT) with the CBA ItemBuilder. Finally, using the so-called "Execution Environment" the workshop will cover possibilities of online assessment using items developed with the CBA ItemBuilder.

The workshop will be held in English. For active participation a notebook with Microsoft Windows or with a Virtual Machine running Windows will be required. Participation will be limited, so please let us know until 2016/03/31, if you wish to attend. No registration fee is required, but please note that travelling and accommodation costs will not be covered. Participation on one day only is possible. However, prior knowledge about the CBA ItemBuilder is required for the second workshop day.

Location

Room A206 Solmsstraße 73-75 60486 Frankfurt am Main Date & Time

2016/04/28 11 a.m.-5 p.m. 2016/04/29 9 a.m. -3 p.m. **Contact Information & Registration** 

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## One-Day Workshop: Technology-Based Assessment with CBA ItemBuilder Version 7.2



2016/04/28-29 (Frankfurt a. M.) Marisa Herrmann, Carolin Hahnel & Ulf Kröhne

### Agenda Day 1

Time	Content	Hands-On Training		
10:30- 11:00	Registration, CBA ItemBuilder Installation and Distribution of Workshop Material			
11:00- 11:45	Introduction, Workshop Goals, Terminology, New Features of the Current Version		UK	
11:45- 12:30	Overview of Common Item Types	Open and Preview prepared Example Items in the CBA ItemBuilder	СН	
	Introduction of the User Interface and General Workflow	<ul> <li>Arrange Windows, find Property View and Component View,</li> </ul>	СН	
12:30 12:45		Coffee Break		
12:45 <b>-</b> 01:15	Example Item: My First Item (with Assistance and Support)	<ul> <li>Create Project, Add Pages</li> <li>Add Basic Containers (Frame and Panel)</li> <li>Add Elements (Texts, Images, RadioButtons)</li> </ul>	МН	
01:15 <b>-</b> 01:45		Lunch Break		
01:45- 02:30	Extending the First Item: Logic with Links & Pages (with Assistance and Support)	<ul> <li>Multiple Pages, Page Types, &amp; X-Pages</li> <li>UserDefinedIDs</li> <li>Links and Conditional Links</li> <li>Dialogs and Modal Dialogs</li> </ul>	МН	
02:30 <b>-</b> 03:15	Introduction of the Finite State Machine with Small Examples	<ul><li>States, Events &amp; Rules</li><li>Variables, ValueMaps, ValueDisplays</li><li>Drag and Drop</li></ul>	СН	
03:15 <b>-</b> 03:30		Coffee Break		
03:30 <b>-</b> 04:15	Example: A More Complex Item (with Assistance and Support)	<ul> <li>Build Missing Value Notification</li> <li>Restriction of Text Input with Regular Expressions</li> </ul>	МН	
04:15 <sup>-</sup> 05:00	Simple Scoring (with Hands-on Scoring)	<ul> <li>Simple Elements</li> <li>Define Classes and Hits</li> <li>Incorporate ResultText</li> </ul>	СН	

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### Agenda Day 2

Time	Content	Hands-On Training	
9:00-	Review of the First Workshop	• ItemBuilder Dreams ;-)	СН
9:30	Day and Open Questions		
09:30-	Introduction to Test Delivery	Different Purposes	UK
10:00		Online / Offline / USB	
		Project Specific Requirements	
10:00 <b>-</b> 10:15		Coffee Break	
10:15-	Computerized Adaptive Testing	Short Introduction of CAT	UK
12:00	(CAT)	Installation of MATE	
		Configuration of CAT	
		Simulation of CAT	
12:00-		Lunch Break	
12:30		Lunch break	
12:30-	Example CAT with Items	CAT Administration	UK
01:00	developed with CBA ItemBuilder	Test Delivery	
01:00-	(Online) Test Delivery: CBA	Setup Execution Environment	MH
01:45	Execution Environment	Import Items and Start Test	
		Import User	
01:45-	Collecting Result Data and Log-	Finding Log Data	UK
02:15	and Process Data	<ul> <li>Reading and Processing XML's</li> </ul>	
02:15 <b>-</b> 02:30		Coffee Break	
02:30-	Summary and Closing	Common and User-Defined Log-Events	UK
03:00			