## Day 1: 25 April 2016 (Monday)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity/Session</th>
<th>Facilitator/Presenter</th>
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<tbody>
<tr>
<td>08.30 – 09.00</td>
<td>Registration</td>
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<tr>
<td>09.00 – 09.30</td>
<td><strong>Opening</strong>&lt;br&gt;• Welcome remarks by the Minister of Education&lt;br&gt;• Welcome remarks from UNESCO Bangkok and introduction to NEQMAP and the workshop</td>
<td>H.E. Mr. Norbu Wangchuk (Ministry of Education)&lt;br&gt;Ms. Ramya Vivekanandan (UNESCO Bangkok)</td>
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<tr>
<td>09.30 – 10.00</td>
<td>An overview of the learning assessment system in Bhutan and introduction to the Bhutan Council for School Examinations and Assessment (BCSEA)</td>
<td>Mr. Tenzin Dorji (BCSEA)</td>
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<td>10.00 – 10.30</td>
<td>Group photo and coffee break</td>
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<td><strong>Session 1</strong>&lt;br&gt;10.30-12.30</td>
<td><strong>Introduction to Modern Assessment Theory: A basis for all assessments</strong>&lt;br&gt;During this session we will&lt;br&gt;• define the terms assessment, testing, evaluation and measurement, summative assessment, formative assessment, school-based assessment, assessment-for and assessment-of learning;&lt;br&gt;• introduce the concept of an image in assessment;&lt;br&gt;• consider ways that marks are given meaning;&lt;br&gt;• introduce the concept of a developmental continuum;&lt;br&gt;• articulate the purposes of educational assessments; and,&lt;br&gt;• discuss the difference between item difficulty and cognition.</td>
<td>Dr. Jim Tognolini</td>
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<tr>
<td>12.30 – 13.30</td>
<td>Lunch</td>
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Session 2  
13.30 – 15.00  
**Introduction to Modern Assessment Theory: A basis for all assessments (continued)**  
During this session we will  
• introduce standards;  
• introduce standards-referencing and building measurement scales;  
• introduce the writing of assessment frameworks (examples taken from subjects and PISA); and,  
• show how to operationalise standards.  

Dr. Jim Tognolini

15.00 – 15.15  
**Coffee break**

Session 3  
15.15 – 17.00  
**Developing quality assessment items**  
During this session we will  
• introduce the principles of reliability and validity;  
• develop selected response cognitive items (test items) to operationalise scales.  
• introduce the basic requirements for writing good quality multiple-choice, short answer and other objective types of items

Dr. Jim Tognolini

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### Day 2: 26 April 2016 (Tuesday)

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<tr>
<th>Time</th>
<th>Activity/Session</th>
<th>Facilitator/Presenter</th>
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| **Session 4**  
09.00 – 09.15 | Reflection of Day 1                                   | Dr. Jim Tognolini     |
| **Session 5**  
09.15 – 10.30 | Workshop session  
During this session we will  
• identify problems in written multiple-choice items. | Dr. Jim Tognolini     |
| 10.30 – 10.45 | Coffee break                                           |                       |
| **Session 6**  
10.45 – 12.30 | Developing quality assessment items (continued)  
During this session we will  
• introduce extended response items;  
• introduce marking rubrics for extended response items. | Dr. Jim Tognolini     |
| 12.30 – 13.30 | Lunch                                                 |                       |
| **Session 7**  
13.30 – 15.00 | Introduction to international large-scale assessments and other assessment initiatives:  
During this session we will  
• introduce international assessment systems (e.g. PISA, PISA_D, TIMSS, PIRLS, EGRA and ASER); | Dr. Jim Tognolini     |
• describe the basic characteristics of such systems;  
• show how they align to modern assessment theory; and,  
• conduct a workshop session where groups review and reflect upon each of the international programs.

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<tr>
<th>15.00–15.15</th>
<th>Coffee break</th>
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**Session 8**  
15.15 – 17.00  

**Introduction to developing questionnaires**  

During this session we will  
• provide hints for constructing and analysing questionnaires using examples taken from the international assessment systems (parent questionnaires, teacher questionnaires and student questionnaires, etc.); and,  
• consider ways to assess non-cognitive attitudes and values.

Dr. Jim Tognolini

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<th>Day 3: 27 April 2016 (Wednesday)</th>
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<td><strong>Time</strong></td>
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| Session 9  
09.00 – 09.15 | Reflection of Day 2 | Dr. Jim Tognolini |
| Session 10  
09.15 – 10.30 | **Introduction to item and test analysis (Classical Test Theory)**  
During this session we will  
• introduce item and test analysis by defining some basic test level statistics using Classical Test Theory analyses - test mean, test discrimination and test reliability (Cronbach’s Alpha);  
• define some basic item level statistics from Classical Test Theory: item difficulty, item discrimination (Findlay Index and Point Biserial Correlation); and,  
• carry-out a practical exercise on data analysis of items using Classical Test Theory (CTT). | Dr. Jim Tognolini |
| 10.30 – 10.45 | Coffee break |
| Session 11  
10.45 – 12.30 | **Introduction to sampling and administration of large scale assessments.**  
During this session we will  
• introduce sampling and administration of large scale assessments through a national case study based on the sampling design of PISA used; | Dr. Jim Tognolini |
- conduct a practical exercise to choose a sample to assess citizenship across the Kingdom of Bhutan.

**Session 12**  
13.30 – 15.00

**Discussion and question and answer session 1**

During this session we will try and address a number of questions related to:

- data-driven, evidence-based policy making;
- benefits and opportunities of participating in PISA, TIMSS and PISA-D;
- issues and challenges of participating in PISA;
- how PISA, TIMSS and PISA-D fit with other assessments/examination (e.g., National Education Assessment (NEA) and Board Examinations /BCSE-Grade X and BHSEC-Grade XII/ of Bhutan); and, how do you cater for physically challenged students in TIMSS and PISA;
- identifying some of the research questions that can be answered by the PISA data analyses;
- the impact on PISA results in developing countries;
- how a system might connect policymakers, curriculum developers, educators, teachers and parents based on datasets;
- how policymakers curriculum developers, educators, teachers and parents might be connected through datasets;
- how PISA and TIMSS results might be reported to stakeholders.

Dr. Jim Tognolini

**Session 13**  
15.15-16.30

**Discussion and question and answer session 2**

During this session we will

- identify next steps to be taken; and,
- answer any outstanding questions that may have been left unanswered during the workshop.

Dr. Jim Tognolini

**16.30 – 17.00**

**Conclusions, certificate ceremony & workshop closing**

Ms. Ramya Vivekanandan (UNESCO Bangkok)