THE DEVELOPMENT OF THE JRA AND BACKGROUND QUESTIONNAIRE ITEMS: A PROGRESS REPORT

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A PROGRESS REPORT

NOTE BY THE SECRETARIAT

1. The purpose of this paper is to provide a report on progress with developing items for both the
Job Requirements Approach (JRA) module and the Background Questionnaire (BQ). Progress with the
JRA items, and in particular the JRA pilot study, is reviewed in Section 1, followed by a summary in
Section 2 of the development work that has been carried on the BQ items. The next steps to be taken are
summarised in Section 3, followed by some general conclusions. A separate paper provides an overview of
the strategy that has been proposed for validating these items [COM/DELSA/EDU/PIAAC(2008)24].

2. Delegates are asked to:
   • NOTE the progress to date with respect to the development of the JRA and BQ items; and
   • PROVIDE GUIDANCE on issues raised by the PIAAC Consortium concerning the
development of the JRA and BQ items.

1. Progress on the JRA items

Progress to date

3. The main purpose of the JRA items is to capture information about a broad range of generic skills
used in the workplace and which go beyond the use of literacy skills. However, while the JRA
methodology has been used in several national surveys, it has not been used extensively in any previous
international survey of adult skills. Therefore, a pilot study was launched, involving Australia, France,
Greece, Korea and the United States, to test its feasibility and validity for use in the PIAAC survey.¹ The
timetable for the pilot study is shown in Table 1.

4. Good progress has been made in the conduct of the pilot in Australia, France, Greece and Korea.
In these countries, the surveys have been completed and datasets have been sent to the Secretariat.
Unfortunately, the United States has experienced administrative delays in obtaining approval for
conducting the pilot survey. It now looks increasingly unlikely that it will be possible to include the United
States in any of the comparative validation work based on the JRA pilot study that will be carried out
during the remainder of this year.

¹ The rationale for the JRA items and the development and implementation of the JRA pilot study are
described in more detail in [COM/DELSA/EDU/PIAAC(2008)9].
Table 1. Timeline for JRA pilots

<table>
<thead>
<tr>
<th>Activity</th>
<th>2008</th>
<th>2009</th>
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<tr>
<td>1. Conduct of pilot survey.</td>
<td>M</td>
<td>A</td>
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<tr>
<td>2. Delivery of pilot country data sets to OECD.</td>
<td>A</td>
<td>M</td>
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<tr>
<td>3. Preparation of each country’s national report according to OECD template.</td>
<td>J</td>
<td>J</td>
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<tr>
<td>4. Analysis of data by OECD and preparation of synthesis report.</td>
<td>A</td>
<td>S</td>
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<tr>
<td>5. Bilateral meetings, as necessary, with country experts to review findings.</td>
<td>J</td>
<td>O</td>
</tr>
<tr>
<td>6. Workshop with international experts* to review country/synthesis reports.</td>
<td>J</td>
<td>N</td>
</tr>
<tr>
<td>7. Presentation of findings at International Validation Seminar.</td>
<td>N</td>
<td>D</td>
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* These international experts will include members of the group that met in Paris in September 2006 and March 2007, some of whom may also act as country experts if their country participates.

5. Based on the technical reports received (for Australia, France and Korea), concerning the implementation of the pilot surveys, a number of issues have emerged which have potentially important implications for both the field trial and the main study. These include:

- First, on a positive note, it appears that the JRA pilot questionnaire ran smoothly. Respondents generally seemed to understand the questions, found them to be interesting and followed the questionnaire flow quite easily. Non-response rates for most JRA items have been low. This suggests that the extensive development work that went on designing the questionnaire and in refining the questions based on the results of cognitive interviews in each country was successful. Hopefully, it also bodes well for the comparability of the results, given that no country seems to stand out significantly in terms of the difficulty or reluctance experienced by respondents in answering the JRA items. It also has implications for the BQ items, as it underscores the importance of allowing enough time for the development and pre-testing of these items.

- In Korea, it proved to be difficult to encourage individuals to participate in the survey. The initial rate of refusal was quite high and a substantial effort was required to boost the number of respondents (and some departure from the initial sampling plan) to achieve the target of 500 for the random sample. The use of Computer Assisted Interviews (CAPI) proved off-putting to some respondents who preferred to have a paper-and-pencil version of the survey which they could fill out at their leisure and return at a later stage. Thus, in both the field trial and the main study, countries like Korea, and possibly Japan as well, may have considerable difficulties in achieving the target response rates based on personal interviews at the respondent’s household.

- While the special sample of (100) primary-school teachers was expected to be a fairly homogeneous occupational group, the Australian pilot showed that some respondents were “atypical”. For example, teachers such as sports teachers and school principals undertook quite different tasks and used different skill sets compared to the majority of primary-school teachers. In Australian, coding was developed to identify explicitly these teachers. This approach was also taken in Korea, but it was not possible to do this systematically for France. This problem highlights the fact that it is not possible to anticipate every issue that may arise when going in to the field with a questionnaire. Therefore, it is both useful to conduct a pilot to uncover these
issues before the full survey is implemented and, as will be done for the JRA pilot results, to also involve country experts who can point out and help explain any anomalies in the results.

- In all 3 countries, it proved very difficult to obtain data on earnings with non-response to this question being high in every country. It may be useful to investigate further what is best practice in this area based on the experience of other international household surveys in collecting earnings data.

6. It should be noted that these are only tentative conclusions at this stage and that a more comprehensive discussion of these issues will be provided as part of the report on the results of the pilot.

Next steps

7. A report is being prepared by a consultant, Professor Francis Green (Kent University), on the results of the JRA pilot. A first draft of this report will be presented at a technical workshop in Paris on 1-2 December 2008. The purpose of this meeting will be to review the draft report and assess: a) whether in each country the JRA pilot has succeeded in accurately measuring the importance of a range of skills used at work; and b) the extent to which the results are comparable across countries. At the meeting, there will be country experts who were responsible for organising the pilot as well as experts from the PIAAC Consortium.

8. A final report will then be prepared in light of the outcomes of the discussions at the December technical workshop. This will serve as the basis for a revised set of JRA items which will be prepared by the PIAAC Consortium for inclusion in a new version (Version 4, see below) of the combined BQ/JRA items that is to be completed by the end of December 2008. This work will also include the results of cognitive interviews that are being carried out as part of the development work for the BQ items (see below) but which are also being used to examine the feasibility of extending the JRA items to the non-employed with recent job experience.

9. As previously announced [COM/DELSA/EDU/PIAAC(2008)9], the JRA pilot results will also be presented at an international validation seminar on 12-13 February 2009 to be hosted by the European Centre for the Development of Vocational Training (Cedefop) in Thessaloniki, Greece. This seminar will serve to disseminate more widely the result of this methodology for collecting information on skills used at work. It will also include presentations by other experts of the results of national surveys using a similar methodology.

2. Progress with developing the BQ

Recent developments

10. Originally, it had been planned to hold a BQ/JRA pilot in several countries later this year as part of the development and validation work on the BQ and JRA items. However, it became apparent that it would not be possible to achieve a suitable geographical coverage within the budget and timeframe that had been proposed for these pilots. Furthermore, the process would not have allowed enough time for countries to comment on the draft BQ/JRA items before their finalisation for the field trial in 2010. Therefore, after consultation with the PIAAC Bureau (and as noted in the Secretariat’s communication with the BPC on 18 September 2008), it was decided to replace the BQ/JRA pilot by a series of cognitive interviews that are being carried out as part of the development work for the BQ items (see below) but which are also being used to examine the feasibility of extending the JRA items to the non-employed with recent job experience.

2. As shown in the timetable (Table 1), bilateral meeting with participating in the pilot had also been scheduled to discuss any issues concerning a country’s dataset but to date it has been possible to resolve these issues by email.
laboratories to be held during the remainder of 2008 to test and refine the content and structure of the BQ and JRA items. It was also decided to rely more heavily on the field trial as part of the validation strategy for the BQ and JRA items [see COM/DELSA/EDU/PIAAC(2008)24 for further details of this strategy].

11. As part of this new process, the PIAAC Consortium provided a new version of the combined BQ and JRA items (Version 3) at the beginning of October 2008, which was circulated for comment both to national Project Managers (NPMs) and to the BPC. It is expected that the NPMs will provided comments. Arrangements were also made for meetings with participating countries to discuss the BQ and JRA items on 1 November in Lisbon (immediately following the NPM meeting) and 5 November in Paris (preceding the BPC meeting).

12. The revised version of the BQ and JRA items reflected both the outcomes of discussions at the second meeting of the BQ/JRA Expert Group on 23-24 June in Frankfurt as well as the comments than had been received from countries on the previous version. The accompanying documentation that was circulated with this version describes the main revisions that had been made as well as provided a revised version of the conceptual framework and a draft analysis and validation plan. In addition, a set of guidelines concerning translation and national adaptations of BQ items was provided.

13. The main concerns addressed in the revised set of BQ and JRA items cover: the flow and wording of questions; the questions on education and training; and the need to reduce the cognitive burden on respondents as well as the overall length of the BQ/JRA items. The conceptual framework paper has been revised in response to concerns that: the ability of PIAAC to make causal inferences and to make macro-economic claims should not be over-emphasised; the policy and analytical relevance of the JRA module needed to be developed; and less emphasis should be given to issues relating to health and other social outcomes.

14. A number of issues have been identified by the PIAAC Consortium concerning the development of the BQ items for which the advice of the BPC is sought (see the explanatory note which accompanied Version 3 of the BQ and JRA items). These include:

- **Length of the questionnaire.** The length of the BQ and JRA items has been shortened in comparison with the previous version. Moreover, as part of the validation strategy for the BQ and JRA items, the results of the field test will be used to cut down further the number of items that will feed into the questionnaire for the main study [see COM/DELSA/EDU/PIAAC(2008)24 for further details of this strategy]. Nevertheless, is there scope to prune the number of items prior to the field test?

- **Relation of items with previous surveys.** The BPC has already indicated that it would like to maintain comparability in the scores of literacy and numeracy in the direct assessment with the results of the previous surveys, IALS and ALLS. However, to what extent does this extend to the BQ items and for which items in particular? For instance, should exactly the same items used to define socio-economic status in ALLS be retained for the PIAAC survey, so that changes in the gradient of literacy scores by socio-economic status can be compared over time?

- **Changes in JRA items concerning literacy, numeracy and IT skills.** In light of discussions with the Subject Matter Expert Groups for the direct assessment, the Consortium has revised substantially the original JRA items on literacy, numeracy and IT skills. Thus, in the revised version, similar questions will be asked both for respondents’ work and non-work activities. Is this appropriate and are the revised questions satisfactory?
Defining the employment status of the respondent. Should this be defined according to the standard OECD/ILO guidelines or as proposed by the Consortium based on a smaller set of questions? Strict adherence to the OECD/ILO guidelines would require a number of additional items to be included. This would mainly imply an increased response burden for the unemployed but would provide internationally comparable measures of employment status as well as additional information about job search strategies and reasons for not looking for work. The Consortium’s proposal has the benefit of being very parsimonious.

Treatment of educational attainment and field of study. Is the proposed categorisation of educational attainment and field of study in the current version of the BQ and JRA items appropriate?

Questions on earnings. Are the revised items on earnings adequate to deal with the potential problems with collecting information on earnings (and as identified in the JRA pilot, see above)?

Next steps

15. It is planned to complete a revised version of the BQ and JRA items (Version 4) by end December 2008 which will be circulated to countries for a new round of comments to be submitted by 24 January 2009. Countries will be also be required to provide initial proposals for any national adaptations or extensions to the BQ items by 1 December 2008 and to finalise these adaptations and extensions in light of feedback from the Consortium by 20 December 2008.

16. Version 4 of the BQ and JRA items will be based on the comments received from countries based on Version 3, the outcomes of the first round of cognitive laboratories and the report on results of the JRA pilot. A meeting of the BQ/JRA Expert Group is planned for mid February 2009 to discuss Version 4 in light of the country comments and the results of the first and second rounds of cognitive laboratories. Following this meeting, a final version of the BQ and JRA items (Version 5) for the field test will be prepared by mid March 2009 for approval by the BPC. Countries will then have until mid May 2009 to complete the translation of the BQ and JRA items, including any national adaptations and extensions.

Conclusions

17. Apart from the setback with the United States, the JRA pilot study remains on track and a technical workshop has been organised for 1-2 December 2008 to discuss the preliminary results. Good progress has also been made on developing the BQ items and the scope for country involvement has been increased.