

**DIRECTORATE FOR EDUCATION AND SKILLS
PROGRAMME FOR TEACHING AND LEARNING INTERNATIONAL SURVEY**

Governing Board

TALIS-PISA SYNERGIES PROGRESS

22-23 March 2016, Singapore, Singapore

The TALIS Governing Board is invited to:

- *TAKE NOTE* of short-term progress concerning the development of the joint conceptual framework and the implementation of its recommendations with respect to instruments alignment between the TALIS and PISA 2018 teacher questionnaires (TQs);
- *ADVISE* on the medium-term directions concerning the alignment of cycles and the articulation of TALIS and PISA in terms of options and focus areas;
- *ADVISE* on the medium-term directions concerning collaboration between the two surveys in terms of expert groups, research and development agenda, and strategic steering;
- *NOTE* and *COMMENT* on the next steps on TALIS-PISA synergies.

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TALIS-PISA SYNERGIES PROGRESS

Introduction

1. This paper provides an update on the ongoing efforts towards enhancing synergies between TALIS and PISA, following up on earlier discussions in May 2015 [[EDU/INES/TALIS\(2015\)5](#)]. The potential collaboration between the TALIS and PISA surveys is part of a broader Directorate-wide strategic reflection and effort to create greater synergies across the various OECD large-scale education surveys that has been endorsed in by the Education Policy Committee and the PISA Governing Board [[EDU/EDPC\(2015\)6](#); [EDU/EDPC/M\(2015\)1](#) and [EDU/PISA/GB/M\(2015\)1](#)]. Accordingly, the TALIS-PISA synergies have been a crucial component of the 17th, 18th and 19th Board of Participating Countries (BPC) meetings [[EDU/INES/TALIS\(2014\)10](#); [EDU/INES/TALIS/M\(2015\)1](#); [EDU/INES/TALIS/M\(2015\)2](#)].

2. The document starts with a brief overview of the road map for the key areas of synergies to provide some background to recent efforts. It then provides an update on recent initiatives to move this agenda forward, with respect to short-term synergies, as well as the mid-term development plan.

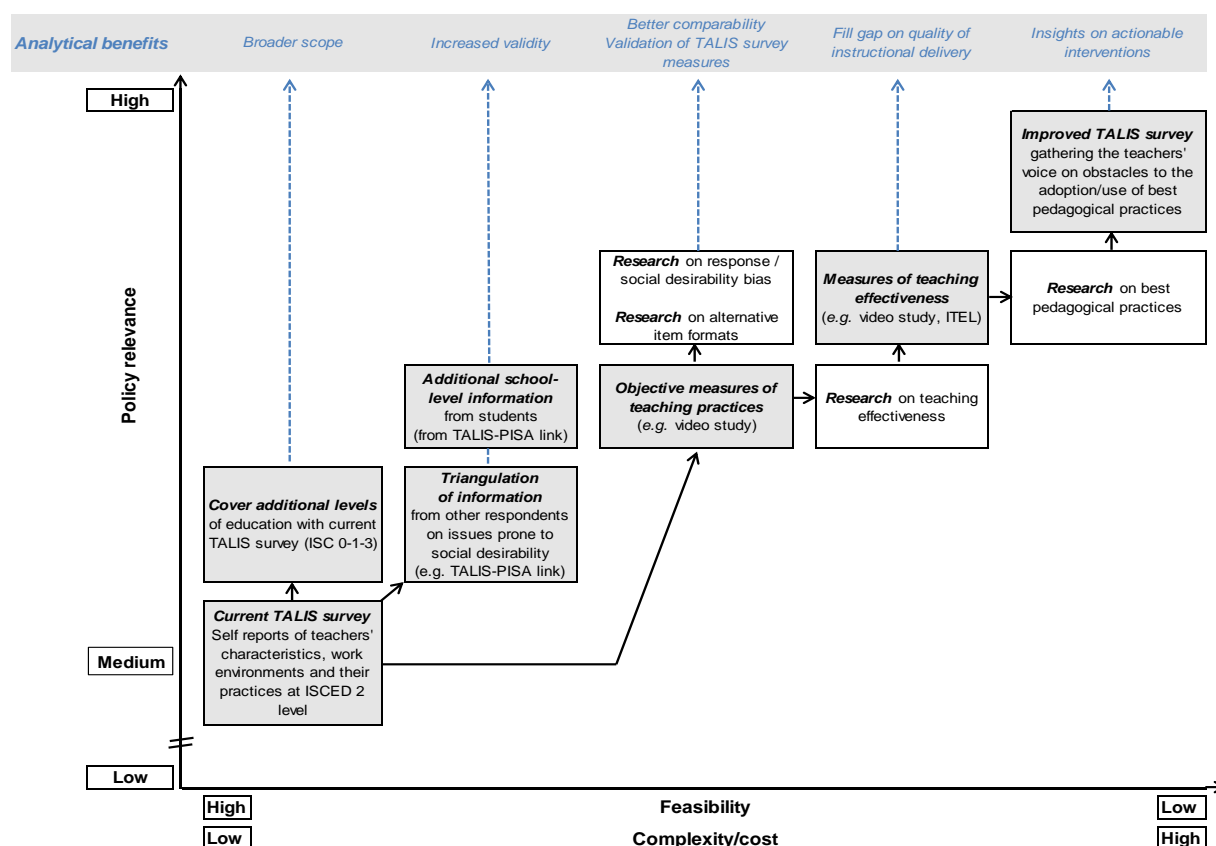
3. The TALIS Governing Board (TGB) is invited to:

- **TAKE NOTE** of short-term progress concerning the development of the joint conceptual framework and the implementation of its recommendations with respect to instruments alignment between the TALIS and PISA 2018 teacher questionnaires (TQs);
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- **ADVISE** on the medium-term directions concerning collaboration between the two surveys in terms of expert groups, research and development agenda, and strategic steering;
- **NOTE** and **COMMENT** on the next steps on TALIS-PISA synergies.

Background

4. As a starting point, it is useful to recall that the TALIS-PISA synergies are embedded in the long-term development trajectory for TALIS that has been previously discussed and approved by the TALIS BPC [[EDU/INES/TALIS\(2014\)10](#) and [EDU/INES/TALIS/M\(2014\)2](#)]. This development trajectory – reproduced in Figure 1 below – outlines a number of intermediate milestones to be achieved along a long-term research and development agenda for TALIS to progressively gain in policy relevance, as well as illustrates the analytical gains deriving from each step along the way.

Figure 1. TALIS long-term development trajectory



5. From Figure 1 it can be observed that a closer alignment with PISA can enable the triangulation of information from multiple sources/respondents (through alignment of instruments) and also the addition of school level information collected by PISA (through the alignment of samples). Furthermore, strengthening the association between TALIS and PISA can provide useful information at the system level. Overall, PISA data can be used to increase the validity of the data reported by TALIS. The upcoming TALIS-PISA link report [EDU/TALIS/GB(2016)3] will illustrate how such an alignment can yield sound policy messages concerning teaching practices.

6. However, while the search of synergies can provide valuable analytical insights, it is also important to ensure that each survey preserves its original research purposes and unique characteristics. Thus, the search for enhanced synergies needs to dig deep into how these surveys can complement each other.

7. Such an approach is in line with the consensus reached in the TALIS BPC, the Education Policy Committee and the PISA Governing Board, as summarised below:

- There is support for strengthening coherence, co-ordination and alignment between the two surveys with regard to concepts, instrumentation, constructs, methods and analytic synergies – e.g. through collaboration between expert groups [EDU/INES/TALIS/M(2012)1; EDU/INES/TALIS/M(2014)2 and EDU/PISA/GB/M(2015)1].

- At the same time, all three committees have stressed the unique character of TALIS and its importance in giving teachers a voice in the policy debate [[EDU/EDPC/M\(2014\)1](#); [EDU/INES/TALIS/M\(2014\)2](#) and [EDU/PISA/GB/M\(2015\)1](#)].
- As a result, achieving greater synergies between TALIS and PISA was welcomed by the three committees insofar as the separate identity and unique character of both instruments is maintained and the search for synergies does not compromise the integrity and operational feasibility of either survey or respondent participation [[EDU/EDPC/M\(2012\)2](#); [EDU/EDPC/M\(2014\)1](#); and [EDU/PISA/GB/M\(2015\)1](#)].

8. In the last TALIS BPC meeting it was suggested that the PISA Strategic Development Group (SDG) and the TALIS Executive Strategic Group (ESG) shall work together with the Secretariat on moving this agenda forward, by developing an operational roadmap for the collaboration between TALIS and PISA in the medium term [[EDU/INES/TALIS/M\(2015\)2](#)].

9. The Secretariat has identified the following synergy areas for consideration/discussion:

- joint conceptual framework
- coherence in instrumentation
- alignment in survey cycles and implications for the offer and articulation of survey options
- joint efforts in terms of expert groups and research agenda
- coherence in strategic steering

10. Each area is scheduled to be developed in the short or in the medium term. Indeed, an immediate constraint on the discussion of synergies is that the Education Policy Committee has underlined the importance to better align the different education surveys conceptually, methodologically and operationally in time for the 2018 round, so that they serve participating countries most effectively [[EDU/EDPC/M\(2015\)1](#)]. Given that the instrument development process for PISA is well ahead of TALIS, the timeframe for achieving greater coherence in survey instruments is therefore extremely limited. In this context, the Secretariat has had to adopt a pragmatic, two-step approach, working directly with the TALIS and PISA Questionnaire Expert Groups and Consortia in the short term to achieve synergies in instrumentation for 2018, and identifying key areas for TALIS-PISA synergies in the medium term, for discussion with the TALIS and PISA Strategic Groups in June.

11. The following sections provide more details on the current status of reflection and progress for each time horizon and synergy area.

Short-term developments

12. By short-term developments we are referring to synergy initiatives that have concluded or are in progress for the 2018 wave of TALIS and PISA. Specifically these initiatives include the elaboration of the joint conceptual framework for TALIS and PISA and the search for greater coherence between the questions and items used by both surveys. Indeed, in May 2015, the TALIS BPC agreed to the principle of developing a joint conceptual framework for TALIS and PISA, and aligning identical questions whenever similar information is sought, unless there is a substantive explanation for why they need to be different [[EDU/INES/TALIS/M\(2015\)1](#)].

Joint conceptual framework

13. In 2015, the OECD Secretariat commissioned a joint conceptual framework for TALIS and PISA to support greater coherence and alignment between existing instruments [[EDU/INES/TALIS\(2015\)6](#)]. The paper was elaborated by Ben Jensen and Samara Cooper and highlighted common policy indicators, as well as distinctive attributes for the TALIS and PISA questionnaires. Additionally, the conceptual framework provided design recommendations in order to gain information from multiple perspectives, increase the validity and reliability of the data, maximise the data gathering process and efficiently distribute policy indicators in each survey.

14. The joint conceptual framework was presented and discussed at the 19th meeting of the TALIS BPC in November 2015. The BPC welcomed the joint conceptual framework for TALIS and PISA and generally supported the Secretariat's pursuit of the search for synergies at an operational level, but underlined that synergies should be sought in a way that retains the unique characteristic of TALIS as the voice of teachers, as well as some scope for the measurement of trends on key indicators [[EDU/INES/TALIS/M\(2015\)2](#)]. Additionally the framework served as valuable input for the elaboration of the TALIS 2018 conceptual framework [[EDU/TALIS/GB\(2016\)4](#)].

15. One of the key messages of the joint conceptual framework for TALIS and PISA was to pursue alignment between indicators measuring the same construct across both surveys. The alignment of survey questions and items would allow an easier comparison of the responses of different respondents concerning similar issues (e.g. comparing TALIS teachers' responses and PISA students' responses regarding the implementation of classroom practices) and it would allow an increase in reliability when comparing the responses of the same population of respondents across the surveys (e.g. comparing the TALIS teachers with PISA teachers professional development frequency).

Greater coherence in instrumentation

16. Based on Jensen and Cooper's recommendation, along with orientations provided by the TALIS and PISA Executive Strategic Groups and the priority-rating conducted by the TALIS BPC [[EDU/INES/TALIS\(2015\)3](#)], the Secretariat elaborated a proposal for the alignment of a series of indicators between the TALIS and PISA teacher questionnaires. Indicators on job satisfaction, teachers' self-efficacy, professional development, teachers' initial education and classroom practices were suggested for alignment. However, to the extent that the PISA questionnaire development was already in an advanced stage, the depth and scope of alignment was limited and obeyed mostly to a pragmatic approach (i.e. choosing the indicators that were easier to align between the surveys).

17. The Secretariat proposal was discussed in depth by the PISA Questionnaire Expert Group (QEG) in December 2015, which Ralph Carstens (TALIS QEG Chair) attended. Almost all themes suggested were accepted for alignment, whereby PISA adopted TALIS questions and items. The exception was teachers' classroom practices, due to the fact that the PISA teacher questionnaire is subject-specific and thus the PISA QEG considered that an alignment was not pertinent. Overall the proposal was well received, and the PISA QEG agreed to incorporate a few TALIS indicators for the PISA teacher questionnaire field trial.

18. In February 2016, the TALIS QEG met and examined the aligned items. For the most part they agree with the proposal of instrument alignment. Any proposed change in the TALIS questionnaires regarding the align indicators were done in a way that would not affect the comparability between the surveys. During the same meeting, a proposal was made to incorporate in the TALIS teacher questionnaire indicators from the PISA teacher questionnaire concerning issues surrounding multicultural diversity and equity. These indicators were accepted and included in the current draft of the questionnaires.

Medium-term developments

19. The medium-term developments refer to the synergy areas that are more appropriate to be explored for the future cycles of the TALIS and PISA surveys beyond 2018. These areas concern the alignment of the cycles and its implications for the offer and articulation of TALIS and PISA survey options, the scope for collaboration between TALIS and PISA expert groups on a research agenda of common interest, and the possibility of collaboration between the governing boards to achieve greater coherence in terms of strategic steering as proposed by the TALIS BPC in Copenhagen [[EDU/INES/TALIS/M\(2015\)2](#)].

Alignment in survey cycles and implications for the offer and articulation of survey options

20. The alignment of cycles between TALIS and PISA was discussed at length as part of the TALIS long-term strategy in November 2014 [[EDU/INES/TALIS\(2014\)10](#) and [EDU/INES/TALIS/M\(2014\)3](#)] and its follow-up discussion on synergies with other surveys in May 2015 [[EDU/INES/TALIS\(2015\)5](#)]. As a result of these discussions and country consultations through the priority-rating exercise, the TALIS BPC agreed in principle to shift TALIS to a six-year cycle aligned to PISA cycles beyond TALIS 2018, while leaving open the question of interim cycles of TALIS after three years [[EDU/INES/TALIS/M\(2015\)1](#)]. Figure 2 shows the iteration for TALIS and PISA after the 2018 cycle.

Figure 2. PISA and TALIS upcoming cycles

Year	PISA	TALIS
2021	✓	
2024	✓	✓
2027	✓	
2030	✓	✓

21. The alignment of survey cycles between TALIS and PISA has implications in two main respects. On the one hand it will facilitate the implementation of the joint conceptual framework in terms of questionnaire design, along with the ensuing coherence in instrumentation, pending adequate co-ordination between both QEGs. Additionally, efficiency in operational tasks could be gained at national level depending on how countries and economies manage the surveys' operations and their national centres. On the other hand, it requires clarifying the articulation of the TALIS and PISA offers of survey options to capitalise on synergies and complementarities, while avoiding duplication of efforts.

22. As we can appreciate from Figure 2, up to 2030 there will be two overlap and two non-overlap cycles. During overlapping cycles, the risk of the alignment efforts is to have teacher surveys that are just mirroring each other. Indeed, if not careful, the different TALIS and PISA survey options offered to countries by the Secretariat can be seen as redundant, or even competing with each other. For example, the PISA teacher questionnaire option in 2018 can be seen as just a less expensive version of TALIS, thereby undermining participation in the latter.

23. In line with the TALIS BPC guidance, the Secretariat considers that the most promising pathway to make the most out of the alignment of cycles is to ensure that the survey options offered 1) preserve the uniqueness of each survey, 2) while allowing for joint work and collaboration on issues of common interest and relevance. With respect to distinctive features of each survey, the following areas of emphasis can be identified:

- **TALIS TQ: The voice of teachers.** The main distinctive attribute of TALIS is that it takes into consideration teachers' perceptions, opinions and attitudes towards educational policies and

practices and conveys the “voice of teachers” on learning environments. Indeed, the major difference between the shared policy items between both surveys is that TALIS includes the opinion and attitudes of teachers regarding collaboration, the quality of their initial training, and the quality of their professional development. On the other hand, the PISA teacher questionnaire has a more descriptive approach insofar as it only presents an account of teachers regarding the content and frequency of these activities.

- **TALIS TQ: Teachers’ working conditions.** Another unique aspect of TALIS lies in the in-depth exploration of teachers’ perceptions about their working conditions, such as their employment status, relations with stakeholders, management opportunities, perceptions of appraisal and feedback systems, among others. Although some of these items are included in PISA, it would be worthwhile to examine the possibility of making these items exclusive to TALIS so as to free space for the development of other issues in the PISA teacher survey. Currently, several countries are undertaking reforms that will impact teachers’ working conditions, and teacher accounts of their trajectory could be a key instrument in keeping track of these changes.
- **PISA TQ: Subject-specific instructional practices.** By contrast, the emphasis of the PISA teacher survey is on better understanding teaching-related differences in student performance, hence an interest in subject-specific instructional practices. Indeed, research has shown that in order to properly study the effectiveness of teaching practices, these must be studied under a specific content domain. Since PISA focuses on a subject domain alternating every three years, it seems to be the most appropriate survey to explore these issues. In this spirit, the TALIS TQ could focus on generic classroom practice to describe learning environments, while the PISA TQ would offer a subject-specific perspective on these issues. Furthermore, freeing the PISA teacher survey from the items on the working conditions of teachers (see point above) would open space for this survey to innovate in the exploration of effective instructional practices. In that way, the TALIS TQ can be presented as a holistic approach to teachers’ work, while the PISA TQ would be limited in scope to the identification of content-bound effective practices.

24. While it seems important to clarify the articulation of the TALIS and PISA offers of survey options to avoid duplication of efforts and build upon each survey’s distinctiveness, it is equally important to recognise that the issue of teaching effectiveness intersects with both surveys as a key area of interest.

25. Indeed, it is important to bear in mind that the key overarching goal of TALIS is not only to provide insights into teachers’ working conditions and learning environments, but to do so as part of an overarching goal to “...fill key international and national data gaps on teachers, their professional development, teaching, the learning environment and the impact that teachers can have on students. TALIS’ general purpose is to provide comparative data and analysis to help with the development of teaching as a profession, aimed at supporting the learning of students.” [EDU/INES/TALIS(2014)10]. As a result, TALIS shares with PISA an interest in better understanding teaching effectiveness, not as an end in itself (e.g. in an accountability perspective), but as a means of identifying important policy levers, obstacles and enabling factors on which the TALIS survey could focus in the future. This joint interest of TALIS and PISA in better understanding what makes teaching effective opens avenues for capitalising on synergies and complementarities through collaboration between both TALIS and PISA. The following direction would seem particularly interesting to pursue in the medium-term:

- **PISA TQ and TALIS Video Study: Towards a study design of effective practices.** If the PISA TQ is to be seen as the best option for examining the effectiveness of teacher practices, further efforts regarding the study design should then be taken. Currently, it is not possible to link the classroom teachers to their students. Student outcomes are associated with aggregated

characteristics and practices of the teachers at the school level. This constrains the identification of the individual practices aimed at improving achievement. It could thus be interesting for PISA to consider the possibility of being able to link classroom teachers with their own students. This would have important implications and costs regarding the design, operations and implementation of the PISA survey. However, this would be a necessary step in presenting a novel and unique strand of analysis to those countries and economies that wish to invest in the exploration of effective teaching.

An important limitation of such an approach, however, is that the practices of teachers teaching 15-year-olds cannot explain all the prior learning of their students, and linking students to their teachers would not be sufficient to capture teaching effectiveness. The study design of an effectiveness study would not only have to link students and their teachers, but it would also have to find ways of controlling for past learning by capturing value added or learning gain (e.g. through pre- and post-tests). Ideally, such a study would also aim to capture teaching practices through direct observations rather than self-reports, which would warrant TALIS and PISA working together on a study design building upon the video study component of TALIS.

- **TALIS TQ: Obstacles and enabling factors to the adoption of effective practices.** Should a study design of effective practices be developed, TALIS could then uniquely capture the voice of teachers on the obstacles and enabling conditions to the adoption of those practices identified as desirable by the effectiveness study due to their impact on students' cognitive and/or socio-emotional outcomes.

26. In light of the above discussion, it would seem important for the teacher questionnaires of each survey to retain their unique characteristics during overlapping years. In that way, countries could clearly identify the differences between each teacher survey and choose the one most relevant to their policy interests at the time. However, it is also important to consider that, although each survey has distinctive characteristics, efforts should be made for each survey to complement the findings of each other, e.g. by retaining alignment in instrumentation for triangulation purposes wherever desirable, or by using the results of PISA teaching effectiveness' analyses to inform TALIS about those teacher characteristics and teaching practices that matter for the improvement of student outcomes. Conversely, TALIS could inform PISA on how widespread and frequent are these factors among the teacher population, and what teachers think of their impact.

27. During non-overlapping years when TALIS does not go into the field, TALIS could have a more active role in the development of the PISA teacher questionnaire so that the PISA teacher questionnaire could take into consideration some of the key teacher characteristics that previous cycles have shown might be associated with enhanced student outcomes.

28. Another possibility currently under discussion within the Secretariat would be to use the interim cycle to undertake some smaller scale projects with interested countries to dig deeper into teaching effectiveness issues. For instance, it could be interesting to integrate a TALIS Video Study module and/or an ITEL teacher pedagogical knowledge module with PISA assessments to provide more meaningful background and context to analyse PISA results and how teacher-related factors and practices impact them.

Joint efforts in terms of expert groups and research agenda

29. The Secretariat is also exploring the scope for expanding the synergies between TALIS and PISA beyond the short-term alignment of instruments and the co-ordination of cycles and survey options. One area of particular relevance relates to the development of joint efforts in terms of expert groups – in particular the Questionnaire Expert Group and the Technical Advisory Group – and research agendas.

Indeed, TALIS and PISA (as well as PIAAC, to some extent) share similar issues – e.g. in terms of non-response bias, rotation design for survey questionnaires, scaling methods, invariance testing – that could benefit from pooling expertise and co-ordinating efforts between the three surveys to strengthen their technical coherence over time. Those efforts would obviously be limited to areas of common relevance, and each survey would retain its technical specificities wherever it makes sense to do so.

30. In co-operation with the PISA and PIAAC teams, the Secretariat is planning to develop guidelines to deal with invariance issues in OECD education surveys. These guidelines could serve as a reference document regarding invariance testing for future bidders and final contractors. The Secretariat considers setting up a group of experts to prepare these guidelines in light of the most recent research approaches and results.

Coherence in strategic steering

31. Last but not least, it is important to recognise that a key component in these various synergy initiatives being successful will be to be backed up by coherent strategic steering of the TALIS and PISA governing bodies. Given the sizes of the TALIS and PISA Governing Boards, joint sessions are not an option, and the Secretariat will thus convene the Strategic Development Groups of TALIS and PISA in June to further discuss the articulation of survey options, the scope for joint research agendas on issues of common interest and relevance, and the implementation of the joint strategic steering proposed by the TALIS BPC in Copenhagen [[EDU/INES/TALIS/M\(2015\)2](#)].

Next steps

32. As indicated above, the TALIS Secretariat is engaged in discussions at various levels with the PISA team, the PISA Consortium, the PISA QEG and the PISA TAG to move forward the various synergy areas identified. A proposal for operationalising TALIS-PISA synergies for the cycles of 2021 and thereafter will be developed and discussed with the TALIS and PISA Strategic Development Groups in June, with a view to submitting this proposal to the PISA and TALIS Governing Boards at their next meetings.