檔　　號：
保存年限：

國家教育研究院　函

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主旨：檢送我國參加OECD「國際學生能力評量計畫（PISA）2025」國家調查執行團隊徵選計畫書及相關附件1份，投件截止日為111年7月8日（星期五）17時30分（以送達時間為準），請協助公告並鼓勵踴躍投件，請查照。

說明：

一、本院接受教育部國民及學前教育署委託辦理OECD「國際學生能力評量計畫（PISA）2025」國家調查執行團隊徵選。

二、本案徵求期程自公告日起至111年7月8日（星期五）17時30分止，請依本院檢附計畫書與經費表格式繕打，並檢附書面1式5份及電子檔光碟1份，由機關具文提出申請。

三、本案執行期程自112年4月1日起至116年6月30日止，相關計畫執行重點需求與計畫審查重點，請詳閱本計畫之計畫徵求說明書，亦可至國際大型教育評比調查專案辦公

室（網址：https://cirn.moe.edu.tw/Module/index.aspx?sid=1199）下載。

正本：公立大專院校
副本：教育部國民及學前教育署（含附件）、本院測驗及評量研究中心 111/06/06 11:26:28

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我國參加「OECD 國際學生能力評量計畫2025（PISA 2025）」

國家調查執行團隊計畫徵求說明書

壹、 案名

我國參加「OECD 國際學生能力評量計畫 2025（PISA 2025）」

國家調查執行團隊徵求計畫

貳、 背景及說明

教育部為參加經濟合作暨發展組織（Organisation for Economic Co-operation and Development，OECD）主辦之國際學生能力評量計畫（Programme for International Student Assessment，PISA）2025，特公開徵求國內調查執行團隊。邀請具執行大型教育評比調查實務經驗與研究專業之大專院校及研究機構， 以同校、跨校等方式組成研究團隊，提出計畫申請。

參、 計畫期程：本案期程自 2023 年 4 月 1 日起至 2027 年 6 月 30 日止（以國教署簽約期程為主）。

肆、 計畫執行重點需求：

一、 組成 PISA 2025 國家研究中心

組成包括研究、行政、調查執行團隊成員之 PISA 2025 國家研究中心，綜整所有調查事務及職責，計畫主持人需擔任國家執行團隊主持人（National Project Manager，NPM）負責與 OECD PISA 國際調查中心聯繫與合作。

二、 抽樣

1. 提供我國15歲學生之抽樣架構供OECD進行學校抽樣（含預試及正式施測）。
2. 以PISA總部要求進行樣本學校內之學生抽樣（含預試及正式施測）。

三、 調查工具準備

1. 與PISA計畫各參加國共同協商發展全球性調查工具。
2. 在 OECD 規範下，適切增修符合我國國情之背景問卷題項。
3. 在OECD 規範下，進行調查工具（含各科素養測驗工具、背景問卷題目與電腦化介面）之中文翻譯。

四、 進行調查

1. 進行我國 15 歲群學生數學、閱讀與科學三大領域的能力調查研究；本次調查將以科學素養為主測科目，採單機版電腦化評量。
2. 預計2024 年預試，2025 年正式施測。

五、 參加OECD舉行之NPM 會議及訓練研習。每次參加人數2 人，並請以OCED 本部所在地（法國巴黎）預估經費。

六、 報告撰寫

我國 15 歲學生數學、科學與閱讀素養分析及國際比較研究運用PISA 調查之資料，深入分析，進行相關研究：

1. 我國學生科學(含各分項及綜合)、閱讀與數學素養分析
2. 我國學生科學(含各分項及綜合)、閱讀與數學素養趨勢分析
3. 我國學生科學(含各分項及綜合)、閱讀與數學素養與國際比較研究
4. 以上分析結果應於 OECD 正式公佈結果前 1 個月，完成調查結果分析、與國際比較及對政策建議等之中、英文精簡報告；並於正式公佈結果日起 6 個月內完成中文完整國家報告後，繳交本院進行外部專家審查後出版。
5. 研究團隊須於 OECD 正式公佈結果前 1 個月，提供國內記者會簡報及新聞稿，並義務性參加與 OECD 同步之國內正式調查結果公佈記者會與會前會，計畫執行期間並需配合教育部不定期提供計畫相關問題之回應。

七、 依國教署要求建置 PISA 2021 中文網頁。

八、 需組成專家小組進行內部品質管控機制，並審查各項工具及文件中譯本的適切性。

伍、計畫申請

一、 申請本計畫，請依規定將相關資料（紙本1式5份）請於 **2022 年 7 月 8 日 17 時 30 分前**寄達申請資料（地址：237201 新北市三峽區三樹路2號，國際評比辦公室收），並由機關具文提出申請，執行期間從**2023 年 4 月 1 日至 2027 年 6 月 30 日**止。

二、 本案通過後，將由教育部逕與研究團隊簽屬行政協議書，並核撥經費。其他未盡事項及相關經費編列依據，請參考「教育部委辦及補助編列基準表」及「教育部委辦及補助核撥結報作業要點」規定辦理

三、 本計畫為本院協助教育部國民及學前教育署（以下簡稱國教署）徵選團隊，確認後將以行政協助方式，由國教署向獲選團隊進行協議書簽約、採逐年方式經費審查及經費付款事宜。

四、 本計畫經費將視審核結果進行調整，並應各年度相關公務預算經行政院及立法院審查結果辦理。即若各年度所需經費未獲立法院審議通過或部分刪除，得終止契約；若經費遭刪減，則以預算經法定程序審查通過之金額為準，該金額由本院調整後另行通知。如機關預算遭凍結不能如期動支，將延後辦理無息支付。

陸、 計畫書製作及申請期限：

一、 計畫內容：

(一) 整體計畫及分項計畫之名稱、目的、文獻評述、計畫進行方式、步驟、執行進度。

(二) 計畫總主持人、共同主持人、及研究團隊之個人資料、學經歷、專長、以及參與本計畫之特殊考慮，工作任務等。

(三) 專家諮詢顧問之組成及運作模式（需取得專家諮詢顧問簽名之同意書，附件6）

(四) 對所蒐集資料保存管理、進行深度分析及成果發表之規劃。

(五) 預期成果與應用、國際交流之構想等。

(六) 申請單位配合提供之空間、電腦(工作站級)及相關設備、可運用之資源...等之說明及單位之承諾書。

二、 執行單位之支援。

三、 人力及經費：本計畫分五期進行，請預估並述明所需之研究人力及相關經費（分期列明：第1期2023年4月1日至2024年3月31日，第2期2024年4月1日至2024年12月31日，第3期2025年1月1日至2025年12月31日，第4期2026年1月1日至2026年12月31日，第5期2027年1月1日至2027年6月30日）。

四、 製作格式：請依本院計畫書格式繕打，並檢附1式5份。另請檢附1份電子檔（光碟型式儲存）。

五、 申請本計畫，請依規定於2022年7月8日17時30分前寄達申請資料（地址：237201新北市三峽區三樹路2號，國際評比辦公室收），並由機關具文向本院提出申請。

柒、 計畫審查與評估

一、 本計畫分為初審（專家書面審查）及複審（國際大型教育評比調查諮詢小組會議審查），於複審時，協請各計畫申請團隊

進行現場報告，報告時間為 15 分鐘，問答 15 分鐘，採統問統答方式辦理。

二、 本計畫審查重點：

（一）主持人與共同主持人專業能力

（1）主持人及參與人員具執行國際性/大型調查計畫之經驗及能力（20%）

（2）整體團隊在相關領域研究之能力（20%）

（二） 計畫執行方式與步驟（含計畫經費合理性，包括總經費及分年經費增刪建議等）（50%）

（三） 所需資源之合理性及執行單位之配合程度（10%）

捌、 計畫團隊注意事項：

一、 所有團隊成員需遵守並簽署 OECD 所規定之任何保密協定、執行進度、資料釋出規定，以免影響我國在國際組織之權益。

二、 計畫執行期間所蒐集之資料及執行成果等智慧財產權屬教育部，未經機關同意不得擅自對外發表。

三、 計畫執行期間所蒐集之資料及分析結果，計畫團隊需協助完整保存及管理，並遵循行政協助協議書規範期程，於計畫結束後，整理相關資料並繳回本院。

玖、 相關附件：

一、 附件 1：PISA 2022 TECHNICAL STANDARDS

二、 附件 2：PISA 2025 International options相關資料

三、 附件 3：本院計畫申請書格式

四、 附件 4：教育部國民及學前教育署委辦計畫經費申請表

五、 附件 5：專家書面審查表(PISA 2025)

六、 附件 6：國家調查執行團隊專家諮詢顧問同意書(PISA 2025)

PISA 2022
TECHNICAL STANDARDS

Purpose of document

1. The purpose of this document is to list the set of standards upon which the PISA 2022 data collection activities will be based, as was the case for previous PISA. In following the procedures specified in the standards, the partners involved in the data collection activities contribute to creating an international dataset of a quality that allows for valid cross-national inferences to be made.

2. The standards for data collection and submission were developed with three major, and inter-related, goals in mind: consistency, precision and generalisability of the data. Furthermore, the standards serve to ensure a timely progression of the project in general.

- *Consistency*: Data should be collected in an equivalent fashion in all countries, using equivalent test materials that were translated and/or adapted as appropriate. Comparable samples of each country's student population should perform under test conditions that are as similar as possible. Given consistent data collection (and sufficiently high response rates), test results are likely to be comparable across regions and countries. The test results in different countries will reflect differences in the performance of the students measured, and will not be caused by factors which are un-related to performance.
- *Precision*: Data collection and submission practices should leave as little room as possible for spurious variation or error. This holds for both systematic and random error sources, e.g. when the testing environment differs from one group of students to another, or when data entry procedures are questionable. An increase in precision relates directly to the quality of results one can expect: The more precise the data, the more powerful the (statistical) analyses, and the more trustworthy the results to be obtained.
- *Generalisability*: Data are collected from specific individuals, in a specific situation, and at a certain point in time. Individuals to be tested should be selected, and test materials and tasks etc. be developed in a way that will ensure that the conclusions reached from a given set of data do not simply reflect the setting in which the data were collected but hold for a variety of settings and are valid in the target population at large. Thus, collecting data from a representative sample of the population, for example, will be essential, but not sufficient, for the results to accurately reflect the level of literacy of fifteen-year-old students in a country.
- *Timeliness*: Consistency, precision and generalisability of the data can be obtained in a variety of ways. However, the tight timelines and budgets in PISA, as well as the sheer number of participating countries, preclude the option of developing and monitoring local solutions to be harmonised at a later stage in the project. Therefore, the standards specify one clear-cut path along which data collection, coding and data submission should progress.

3. This document strives to establish a collective agreement of mutual accountability among countries, and of the international contractor towards the countries. This document details each standard, and the quality assurance and quality management plan to demonstrate that the standard has been met. While the terms quality assurance and quality

control are sometimes used interchangeably, they relate to different aspects of quality. Quality assurance is most often associated with the processes and procedures that are put in place to make sure the survey is likely to meet its intended goals. Quality control, on the other hand, relates to the set of judgements that are made with regard to the suitability of the quality assurance procedures and the suitability of the survey results in terms of their intended uses or applications.

4. Where standards have been fully met and data quality of the final databases judged as appropriate, the international contractors will recommend to the OECD Secretariat that the data be included in the PISA 2022 database. Where standards have not been fully met or data quality has been questioned, an adjudication process will determine the extent to which the quality and international comparability of the data have been affected or whether additional analysis or evidence are necessary. The result of data adjudication will determine whether the data will be recommended for inclusion in the PISA 2022 dataset.

5. In principle each dataset should be evaluated against all standards jointly. Also, it is possible that countries' proposed plans for implementation are not, for various and often unforeseen circumstances, actually implemented (e.g. national teacher strike affecting not only response rates but also testing conditions; unforeseen National Centre budget cuts which impact on testing, printing and data management quality). Therefore, the final evaluation of standards needs to be made with respect to the data as submitted since this is the definitive indication of what may appear in the released international dataset.

6. If any issues with attaining standards or data quality are identified, the International Survey Director initiates communication with the National Centre as soon as possible to give advice on resolving problems.

7. The PISA standards serve as benchmarks of best practice. As such, the standards are designed to assist National Centres and the international contractors by explicitly indicating the expectations of data quality and study implementation endorsed by the PISA Governing Board, and by clarifying the timelines of the activities involved. The standards formulate levels of attainment, while timelines and feedback schedules of both the participating countries and the contractors are defined in the PISA operations manuals.

8. As specified in the contracts for the implementation of the eighth cycle of the OECD Programme for International Student Assessment, the international contractors take responsibility for developing and implementing procedures for assuring data quality. Therefore, the internaitonal contractors mediate, and monitor the countries' activities specified in this document, while the adherence to the standards by all international contractors is monitored by the participating countries via the OECD Secretariat. The international contractors must communicate timelines and tasks well in advance to National Centres and give reasonable deadlines for National Centres to respond to tasks.

9. Where the technical standards stipulate that variations from the standards require agreement between participating countries and the international contractors, National Project Managers are asked to initiate the process of negotiation and to undertake everything possible to facilitate an agreement. Where agreement between National Project Managers and the international contractors cannot be reached, the OECD will adjudicate and resolve the issues. The OECD will also adjudicate any issues resulting from non-compliance with the technical standards that cannot be resolved between participating countries and the contractors.

10. There are three types of standards in this document; each with a specific purpose:

- Data Standards refer to aspects of study implementation that directly concern the data qualityand its assurance.
- These standards have been reviewed by the Technical Advisory Group, and their comments and suggestions have been taken into careful consideration in finalising the standards.
- Management Standards are in place to ensure that all PISA operational objectives are met in a timely and coordinated manner.
- National Involvement Standards reflect the expectations set out in the PISA 2022 Terms of Reference that the content of the PISA tests is established in consultation with national representatives with international content expertise. In particular, these standards ensure that the internationally developed instruments are widely examined for cross-national, cross-cultural and cross-linguistic validity and that the interests and involvement of national stakeholders are considered throughout the study.

Format of the document

11. The standards are grouped into sections that relate to specific tasks in the PISA data collection process. For every section, a rationale is given explaining why standard setting is necessary. The standards in each section consist of three distinct elements. First, there are the Standards themselves that are numbered and are shown in shaded boxes. Second, there are Notes that provide additional information on the standards directly. The notes are listed after the standards in each section. Third, there are the quality control measures that will be used to assess if a standard has been met or not. These are listed at the end of each section. In addition, the standards contain words that have a defined meaning in the context of the standards. These words are shown in italics throughout the document and are clarified in the Definitions section at the end of the document, where the terms are listed alphabetically.

Scope

12. The standards in this document apply to data from adjudicated entities that include both PISA participants and additional adjudicated entities. The PISA Governing Board will approve the list of adjudicated entities to be included in a PISA cycle.

Data standards

1.1.1. Target population and sampling

13. Rationale: Meeting the standards specified in this section will ensure that in all countries, the students tested come from the same target population in every country, and are in a nearly equivalent age range. Therefore, the results obtained will not be confounded by potential age effects. Furthermore, to be able to draw conclusions that are valid for the entire population of fifteen-year-old students, a representative sample shall be selected for participation in the test. The size of this representative sample should not be too small, in order to achieve a certain precision of measurement in all countries. For this reason, minimum numbers of participating students and schools are specified. In PISA 2022, a teacher questionnaire will be offered as an international option. The response-rate standard for teachers specified in this section applies only to countries that

participate in this international option, and will ensure that the analysis and reporting goals for this option can be met.

14. The procedures for drawing the samples used in the study are crucial to data quality. The goal of the project is to collect data that are representative for the population at large, in such a way that the results are comparable, reliable and valid. To reach these goals the sampling procedures must follow established scientific principles for drawing samples from finite populations.

Standard 1.1 The PISA Desired Target Population is agreed upon through negotiation between the National Project Manager and the international contractors within the constraints imposed by the definition of the *PISA Target Population*. The *Target Population* for PISA starts with students attending all educational institutions located within the country, and in grade 7 or higher. The "standard" PISA target population is further refined to its age basis: students between 15 years and 3 (completed) months and 16 years and 2 (completed) months at the beginning of the testing period.

Standard 1.2 Unless *otherwise agreed upon* only *PISA-eligible students* participate in the test.

Standard 1.3 Unless *otherwise agreed upon,* the *testing period*:

- is no longer than eight consecutive weeks in duration for computer-based testing participants,
- is no longer than six consecutive weeks in duration for paper-based testing participants,
- does not coincide with the first six weeks of the academic year, and
- begins exactly three years from the beginning of the testing period in the previous PISA cycle

Standard 1.4 Schools are sampled using *agreed upon*, established and professionally recognised principles of scientific sampling.

Standard 1.5 Student lists should not be collected more than 8 weeks prior to the start of data collection, unless otherwise *agreed upon*.

Standard 1.6 Students are sampled using *agreed upon*, established and professionally recognised principles of scientific sampling and in a way that represents the full population of *PISA-Eligible students*.

Standard 1.7 The *PISA Defined Target Population* covers 95% or more of the *PISA Desired Target Population*. That is, *school-level exclusions* and *within-school exclusions* combined do not exceed 5%.

Standard 1.8 The student sample size for the **computer-based mode** is a minimum of 6300 assessed students, and 2100 for *additional adjudicated entities*, or the entire *PISA Defined Target Population* where the *PISA Defined Target Population* is below 6300 and 2100 respectively. The student sample size of assessed students for the **paper-based mode** is a minimum of 5250.

Standard 1.9 The school sample size needs to result in a minimum of 150 participating schools, and 50 participating schools for *additional adjudicated entities*, or all schools that have students in the *PISA Defined Target Population* where the number of schools

with students in the *PISA Defined Target Population* is below 150 and 50 respectively. Countries not having at least 150 schools, but which have more students than the required minimum student sample size, can be permitted, *if agreed upon* , to take a smaller sample of schools while still ensuring enough sampled PISA students overall.

Standard 1.10 The minimum acceptable sample size in each school is 25 students per school (all students in the case of school with fewer than 25 eligible students enrolled).

Standard 1.11 The final weighted school response rate is at least 85% of sampled eligible and non-excluded schools. If a response rate is below 85% then an acceptable response rate can still be achieved through *agreed upon* use of replacement schools.

Standard 1.12 The final weighted student response rate is at least 80% of all sampled students across responding schools.

Standard 1.13 The final weighted teacher response rate is at least 75% of all sampled teachers across responding schools.

Standard 1.14 The final weighted sampling unit response rate for any optional cognitive assessment is at least 80% of all sampled students across responding schools.

Standard 1.15 Analyses based on questionnaire data that do not link to a weighted 75% of the target population shall be flagged or replaced by a missing code in OECD reports.

Standard 1.16 Unless *otherwise agreed upon*, the international contractors will draw the school sample for the Main Survey.

Standard 1.17 Unless *otherwise agreed upon*, the National Centre will use the sampling contractor's software to draw the student sample, using the list of eligible students provided for each school.

Note 1.1 Standards 1.1 through 1.17 apply to the Main Survey but not the Field Trial.

Note 1.2 Data from schools where the (unweighted) student response rate is greater than 33% will be included in the PISA dataset and the school counted as a respondent. Otherwise, the school will be a non-respondent, and no student, school or teacher data will be retained.

Note 1.3 A PISA-eligible student recorded in the database as not doing the minimum required number of questions of the main cognitive part of the PISA assessment will be counted as a nonparticipant.

Note 1.4 Acceptable response rates obtained through the use of replacement schools are described in detail in the School Sampling Preparation Manual.

Note 1.5 Guidelines for acceptable exclusions that do not affect standard adherence, are as follows:

- School level exclusions that are exclusions due to geographical inaccessibility, extremely small school size, administration of PISA would be not feasible within the school, and other agreed upon reasons and whose students total to less than 0.5 % of the PISA Desired Target Population,
- School level exclusions that are due to a school containing only students that would be within-school exclusions and that total to less than 2.0 % of the PISA Desired Target Population, and
- Within-school exclusions that total to less than 2.5 % of the PISA Desired Target Population – these exclusions could include, for example, students not able to do the test because of a functional disability.

Note 1.6 Principles of scientific sampling include, but are not limited to:

- The identification of appropriate stratification variables to reduce sampling variance and facilitate the computation of non-response adjustments.
- The incorporation of an agreed target cluster size of PISA-eligible students from each sampled school: The recommended target cluster size is 42 and 25 is the minimum. In determining the target cluster size for a given country, or stratum within a country, it is necessary to ensure that the minimum sample size requirements for both schools and students will be met.

Note 1.7 Any exceptional costs associated with verifying a school sample taken by the National Centre, or a student sample selected other than by using the sampling contractor's software will be borne by the National Centre.

Note 1.8 Agreement with the international contractor on alternative methods of drawing samples will be subject to the principle that the sampling methods used are scientifically valid and consistent with PISA's documented sampling methods. Where a PISA participating country chooses to draw the school sample, the National Centre provides the international contractor with the data and documentation required for it to verify the correctness of the sampling procedures applied. Where a PISA participating country chooses not to use the sampling contractor's software to draw the student sample, the National Centre provides the international contractor with the data and documentation required for it to verify the correctness of the sampling procedures applied.

Note 1.9 Teachers recorded in the database as completing at least one valid response will be counted as respondents.

15. Quality assurance

- Sampling procedures as specified in the PISA operations manuals
- School sample drawn by the international contractors (or if drawn by the National Centre, then verified by the international contractors)
- Student sample drawn through the sampling contractor's software (or if drawn by other means, then verified by the international contractors)
- Sampling forms submitted to the international contractors
- Main Survey Review Form

1.1.2. Language of testing

16. Rationale: Using the language of instruction will ensure analogous testing conditions for all students within a country, thereby strengthening the consistency of the data. It is assumed that the students tested have reached a level of understanding in the language of instruction that is sufficient to be able to work on the PISA test without encountering linguistic problems (see also the criteria for excluding students from the potential assessment due to insufficient experience in the language of assessment: within-school exclusions). Thus, the level of literacy in reading, mathematics and science can be assessed without interference due to a critical variation in language proficiency.

Standard 2.1 The PISA test is administered to a student in a language of instruction provided by the sampled school to that sampled student in the major domain (Mathematics) of the test.

If the language of instruction in the major domain is not well defined across the set of sampled students then, if *agreed upon*, a choice of language can be provided, with the decision being made at the student, school, or National Centre level. Agreement with the international contractor will be subject to the principle that the language options provided should be languages that are common in the community and are common languages of instruction in schools in that *adjudicated entity*.

If the language of instruction differs across domains then, if *agreed upon,* students may be tested using assessment instruments in more than one language on the condition that the test language of each domain matches the language of instruction for that domain. Information obtained from the Field Trial will be used to gauge the suitability of using assessment instruments with more than one language in the Main Survey.

In all cases the choice of test language(s) in the assessment instruments is made prior to the administration of the test.

1.1.3. Field Trial participation

17. Rationale: The Field Trial gives countries the opportunity to try out the logistics of their test procedures and allows the contractors to make detailed analyses of the items so that only suitable ones are included in the Main Survey.

Standard 3.1 PISA participants participating in the PISA 2021 Main Survey will have successfully implemented the Field Trial. Unless otherwise agreed upon:

- A Field Trial should occur in an assessment language if that language group represents more than 5% of the target population.
- For the largest language group among the target population, the Field Trial student sample should be a minimum of 200 students per item.
- For all other assessment languages that apply to at least 5% of the target population, the Field Trial student sample should be a minimum of 100 students per item.
- For additional adjudicated entities, where the assessment language applies to at least 5% of the target population in the entity, the Field Trial student sample should be a minimum of 100 students per item.

Note 3.1 The PISA Technical Standards for the Main Survey generally apply to the Field Trial, except for the Target Population standard, the Sampling standard, and the Quality Monitoring standard. For the Field Trial a sampling plan needs to be agreed upon.

Note 3.2 The sample size for the Field Trial will be a function of the test design and will be set to achieve the standard of 200 student responses per item.

Note 3.3 Consideration will be given to reducing the required number of students per item in the Field Trial where there are fewer than 200 students in total expected to be assessed in that language in the Main Survey.

1.1.4. Adaptation of tests, questionnaires and school-level materials

18. Rationale: In order to be able to assess how the performance in a country has evolved from one PISA cycle to the other, the same instruments have to be used in all assessments. If instruments differ, then it is unclear whether changes in performance reflect changes in competencies or whether they just mirror the variation in the test items. The same holds true for the assessment instruments that are used within a PISA cycle: To validly compare performance across countries, all assessment instruments and other survey materials have to be as equivalent as possible. In fact, it is of utmost importance to provide equivalent information to the students in all countries that take part in the study. Therefore, not only the assessment instruments, but also the instructions given to the students and the procedures of data-collection have to be equivalent. To achieve this goal, other individuals who play a key role in the data-collection process, i.e. the test administrators, school coordinators, and school associates, should receive equivalent information and training in all participating countries.

Standard 4.1 The majority of test items used in previous cycles will be administered unchanged from their previous administration, unless amendments have been made to source versions, or outright errors have been identified in the national versions.

Standard 4.2 All assessment instruments are equivalent to the source versions. Agreed upon adaptations to the local context are made if needed.

Standard 4.3 National versions of questionnaire items used in previous cycles will be administered unchanged from their previous administration, unless amendments have been made to source versions, outright errors have been identified in the national versions, or a change in the national context calls for an adjustment.

Standard 4.4 The questionnaire instruments are equivalent to the source versions. Agreed upon adaptations to the local context are made if as needed.

Standard 4.5 School-level materials are equivalent to the source versions. Agreed upon adaptations to the local context are made as needed.

Note 4.1 The quality assurance requirements for this standard apply to instruments that are in an assessment language used as a language of instruction for more than 10% of the target population.

19. Quality assurance

- Agreed upon adaptation to school-level materials using methods specified by the international contractors
- Questionnaire Adaptation Spreadsheet (QAS)
- Test Adaptation Spreadsheets (TAS, for paper and computer instruments) or other agreed upon monitoring tool in which adaptations to assessment units, orientation and help files and coding guides are documented. For languages that are the languages of instruction for 10% or more of the target population, adaptations will be checked for compliance with the PISA Translation and Adaptation Guidelines by international verifiers, and the verifiers' recommendations will be vetted by the translation referee.
- For languages that are the languages of instruction for 10% or more of the target population: Verifier Reports (verification statistics generated by the monitoring tool, in combination with a short qualitative report)
- Field Trial and Main Survey Review Forms.
- Item and scale statistics generated by the international contractors (assessment materials and questionnaires).

1.1.5. Translation of assessment instruments, questionnaires and school-level materials

20. Rationale: To be able to compare the performance of students across countries, and of students with different instruction languages within a country, the linguistic equivalence of all materials is central. While Standards 4.1 to 4.4 serve to ensure that equivalent information is given to the students in all countries involved, in general, the following Standards 5.1 and 5.2 emphasise the importance of language. Again the goal is to ensure that competencies will be assessed, and not variations of information caused by differences in the translation of materials.

Standard 5.1 The following documents are translated into the assessment language in order to be linguistically equivalent to the international source versions.

- All administered assessment instruments
- All administered questionnaires

- The Test Administrator script from the Test Administrator (or School Associate) Manual
- The Coding Guides (unless otherwise agreed upon)

Standard 5.2 Unless otherwise agreed upon, school-level materials are translated/ adapted into the assessment language to make them functionally equivalent to the international source versions.

Note 5.1 The quality assurance requirements for this standard apply to instruments that are in a language that is administered to more than 10% of the target population.

21. Quality assurance

- Agreed upon Translation Plan, developed in accordance with the specifications in the PISA operations manuals, that requires double translation by independent translators followed by reconciliation for any newly translated questionnaires and cognitive instruments; and a thoroughly documented adaptation process for any materials adapted from one of the source versions, from a common reference version, or from verified materials borrowed from another country.
- Agreed Upon Questionnaire Adaptation Spreadsheet (QAS)
- Test Adaptation Spreadsheets (TAS) or other agreed upon monitoring tool in which adaptations to assessment units, orientation and help files and coding guides are documented. Adaptations will be checked for compliance with the PISA Translation and Adaptation Guidelines by international verifiers, and the verifiers' recommendations will be vetted by the translation referee.
- Verifier Reports (verification statistics generated by the monitoring tool, in combination with a short qualitative report)
- Submitted final materials as used in the study
- Field Trial and Main Survey Review Forms
- Item and scale statistics generated by the international contractors (assessment materials and questionnaires)

1.1.6. Testing of national software versions

22. Rationale: Countries must thoroughly test and validate the national software releases that are used to deliver the PISA computer-based instruments in schools, as well as the online questionnaires that are delivered via the Internet.

Standard 6.1 The international contractors must test all national software versions prior to their release to ensure that they were assembled correctly and have no technical problems.

Standard 6.2 Once released, countries must test the national software versions following testing plans to ensure the correct implementation of national adaptations and extensions, display of national languages, and proper functioning on computers typically found in schools in each country. Testing results must be submitted to the international contractors so that any errors can be promptly resolved.

23. Quality assurance

- Detailed testing plans
- Review of testing results

1.1.7. Technical support

24. Rationale: Countries participating in the computer-based delivery mode will be primarily responsible for resolving PISA-related operational issues in their countries, including hardware issues and provision of technical support to schools and test administrators.

Standard 7.1 Each country should have a designated PISA helpdesk with contact information provided to each of its *test administrators* and school coordinators.

Standard 7.2 In countries that administer the computer-based version of PISA, the helpdesk staff must:

- be familiar with the PISA computer system requirements applications and training materials,
- be familiar with all national software standards and procedures; and
- attend the *test administrator* training sessions to become familiar with the computer-based assessments and appreciate the challenges faced by schools and test *administrators*.

25. Quality assurance

- National Centre Quality Monitoring
- Field Trial and Main Survey Review Forms

1.1.8. Test administration

26. Rationale: Certain variations in the testing procedure are particularly likely to affect test performance. Among them are session timing, the administration of test materials and support material like blank papers and calculators, the instructions given prior to testing, the rules for excluding students from the assessment, etc. A list of these and other relevant test conditions is given in the school-level materials. To ensure that the data are collected consistently, and in a comparable fashion, for all participants, it is therefore very important to keep the chain of action in the data collection process as constant as possible.

27. Furthermore, the goal of the assessment is to arrive at results which cover a wide range of areas. Given the time constraints, any one student is presented only with a certain portion of the test items. Moreover, to preclude sources of random error unforeseen by the test administrators and the test designers, the students taking part in the survey have to be selected a-priori, in a statistically random fashion. Only then will the students participating in the study mirror the population of fifteen-year-old students in the country. The statistical analysis will take this sampling design into account, thereby arriving at results that are representative for the population at large. For these reasons, it is of utmost importance to assign the proper instruments (tests and questionnaires) to the participants specified beforehand. The student tracking form is central in monitoring whether this goal has been achieved.

28. The test administrator plays a central role in all of these issues. Special consideration is therefore given to the training of the test administrators, ensuring that as little variation in the data as possible is caused by random or systematic variation in the activities of test administrators.

29. An important part of the testing situation relates to the relationship between test administrators and test participants. Therefore, any personal interaction between test administrators and students, either in the past or in the testing situation, counteracts the goal of collecting data in a consistent fashion across countries and participants. Strict objectivity of the test administrator, on the other hand, is instrumental in collecting data that reflect the level of literacy obtained, and that are not influenced by factors un-related to literacy. The results based on these data will be representative for the population under consideration.

Standard 8.1 All test sessions follow international procedures as specified in the PISA school-level materials, particularly the procedures that relate to:

- test session timing,
- maintaining test conditions,
- responding to students' questions,
- student tracking, and
- assigning assessment materials.

Standard 8.2 The relationship between Test Administrators and participating students must not compromise the credibility of the test session. In particular, the Test Administrator should not be the reading, mathematics, or science instructor, a relative, or a personal acquaintance of any student in the assessment sessions he or she will administer for PISA.

Standard 8.3 National Centres must not offer rewards or incentives that are related to student achievement in the PISA test to students, teachers, or schools.

Note 8.1 Test Administrators should preferably not be school staff.

Note 8.2 This does not apply to incentives or rewards intended to improve participation, and that are unrelated to student achievement in the PISA test.

30. Quality assurance

- Session Report Forms
- PISA Quality Monitors feedback and Data Collection Forms (only for Main Survey)
- Field Trial and Main Survey Review Forms

1.1.9. Training support

31. Rationale: NPMs or their designees shall participate in a train-the-trainer session conducted by qualified contractor staff. This facilitates standardisation of training delivery to test administrators, allows trainers to become familiar with PISA materials and procedures, and informs trainers of their responsibilities for overseeing the PISA testing.

Standard 9.1 Qualified contractor staff will conduct trainer training sessions with NPMs or designees on PISA materials and procedures to prepare them to train PISA test administrators.

Standard 9.2 NPMs or designees shall use the comprehensive training materials and approach developed by the contractors and provided on the PISA Portal to train PISA test administrators.

Standard 9.3 All test administrator training sessions should be scripted to ensure consistency of presentations across training sessions and across countries. Failure to do so could cause errors in data collection and make results less comparable.

Standard 9.4 In-person and/or web based test administrator trainings should be conducted by the NPMs or designees, unless a suitable alternative is *agreed upon*.

Standard 9.5 PQMs need to successfully complete self-training materials, attend webinars to review and enhance the self-training, and attend the *test administrator* training, *unless otherwise agreed upon*.

32. Quality assurance

- Participation in trainer training sessions in standardised procedures by qualified contractor staff
- National Centre Quality Monitoring
- Field Trial and Main Survey Review Forms
- Standard training of PQMs
- Review of Test Administrator Training Observation Forms

1.1.10. Implementation of national options

33. Rationale: These standards serve to ensure that for students participating both in the international and the national survey, the national instruments will not affect the data used for the international comparisons. Data are therefore collected consistently across countries, and potential effects like test fatigue, or learning effects from national test items, are precluded.

Standard 10.1 Only *national options* that are *agreed upon* between the National Centre and the international contractors are implemented.

Standard 10.2 Any *national option* instruments that are not part of the core components of PISA are administered after all the test and questionnaire instruments of the core component of PISA have been administered to students that are part of the international PISA sample, unless otherwise agreed upon.

1.1.11. Security of the material and test preparation

34. Rationale: The goal of the PISA assessment is to measure the literacy levels in the content domains. Prior familiarisation with the test materials, or training to the test, will heavily degrade the consistency and validity of the data. In the extreme case, the results would only reflect how well participants are able to memorise the test items. In order to be

able to assess the competencies obtained during schooling rather than short-term learning success, and to make valid international comparisons, confidentiality is extremely important. As high levels of student and school participation in PISA are very important, it is appropriate for national centres to prepare communication materials for participants with the intent to raise awareness, to set out what is involved in participating in PISA and to encourage participation in the survey. These materials may include general information about the survey, what students and schools might expect on the test day, as well as an OECD set of released test materials prepared for this purpose. The use of sample test items in informational materials could also serve to prepare students for the format of the PISA test in order to reduce potential test anxiety and help the students focus on the subject-matter content when taking the test.

Standard 11.1 PISA materials designated as secure are kept confidential at all times. Secure materials include all test materials, data, and draft materials. In particular:

- no-one other than approved project staff and participating students during the test session is able to access and view the test materials,
- no-one other than approved project staff will have access to secure PISA data and embargoed material, and
- formal confidentiality arrangements will be in place for all approved project staff.

Standard 11.2 Participating schools, students and/or teachers should only receive general information about the test prior to the test session, rather than formal content-specific training. In particular, it is inappropriate to offer formal training sessions to participating students, in order to cover skills or knowledge from PISA test items, with the intention to raise PISA scores.

Note 11.1: It is unnecessary to train students for interacting with the student interface, with different item types or response formats prior to the testing session. All PISA test materials and procedures are accompanied by detailed instructions as well as by orientation modules at the beginning of each test session to ensure that participants are familiarised with the interface and with all the question formats that they will encounter.

Note 11.2: "Formal training sessions" refers to training that relies on standardised instructional material and involves feedback provided by an instructor, machine, or other training participants. Formal training sessions may include (but are not limited to) lectures, practice tests, drills or online instruction modules.

Note 11.3. The general information about the survey shared with participants may include information about the length of the test, the general scoring principles applied to missing and incorrect answers, data protection and confidentiality of results. It may include an OECD set of released test materials prepared for this purpose, but should not assemble sample items in PISA-like test forms with the intent to teach or prepare students for participation in PISA.

35. Quality assurance

- Security arrangements as specified in the PISA operations manuals or agreed upon variation
- National Centre Quality Monitoring
- PISA Quality Monitor feedback and Data Collection Forms (only for Main Survey)
- Field Trial and Main Survey Review Forms

1.1.12. Quality monitoring

36. Rationale: To obtain valid results from the assessment, the data collected have to be of high quality, i.e. they have to be collected in a consistent, reliable and valid fashion. This goal is implemented first and foremost by the test administrators, who are seconded by the quality monitors. The quality monitors provide country-wide supervision of all data-collection activities for the Main Survey.

Standard 12.1 PISA Main Survey test administration is monitored using site visits by trained independent quality monitors.

Standard 12.2 Fifteen site visits to observe test administration sessions are conducted in each PISA participating country/economy, and five site visits in each adjudicated region.

Standard 12.3 Test administration sessions that are the subject of a site visit are selected by the international contractors to be representative of a variety of schools in a country/economy.

Note 12.1 A failure to meet the Quality Monitoring standards in the Main Survey could lead to a significant lack of reliable and valid quality assurance information.

Note 12.2 The Quality Monitoring standards apply to the Main Survey but not to the Field Trial.

Note 12.3 The National Centre provides the international contractors the assistance required to implement the site visits effectively. This includes nominating sufficient qualified individuals to ensure that the required number of schools is observed. It also includes timely communication of school contact information and test dates.

37. Quality assurance

- The process of selecting the PISA Quality Monitor nominees .
- PISA Quality Monitor feedback and Data Collection Forms (only for Main Survey)

1.1.13. Assembling and printing paper-based materials

38. Rationale: Variations in assembly and print quality may affect data quality. When the quality of paper and print is very poor, the performance of students is influenced not only by their levels of literacy, but also by the degree to which test materials are legible. To rule out this potential source of error, and to increase the consistency and precision of the data collection, paper and print quality samples are solicited from National Centres participating in paper-based components in their first cycle of participation.

Standard 13.1 All paper-based student assessment material will be centrally assembled by the international contractors and must be printed using the final print-ready file and *agreed upon* paper and print quality. New countries/entities must submit a printed copy of all Field Trial instruments (booklets and questionnaires) for approval of the printing quality for the Main Survey. The same printing standard must be used for both the Field Trial and the Main Survey.

Standard 13.2 The cover page of all national PISA test paper-based materials used for students and schools must contain all titles and approved logos in a standard format provided in the international version.

Standard 13.3 The layout and pagination of all test paper-based material is the same as in the *source versions*, *unless otherwise agreed upon.*

Standard 13.4 The layout and formatting of the paper-based questionnaire material is equivalent to the source versions, with the exception of changes made necessary by national adaptations.

Note 13.1 The cover page of all PISA PBA instruments used in schools should contain all information necessary to identify the material as being part of the data-collection process for PISA, and for checking whether the data collection follows the assessment design, i.e. whether the mapping of the student on the one hand, and test booklets and questionnaires, on the other, have been correctly established The features of the cover page referred to in Standard 13.2 are specified in the PISA operations manuals.

39. Quality assurance

- Agreement that quality will be similar to Field Trial versions
- For new countries/economies, materials submitted to the international contractors, as described in Standard 13.1 above.
- Field Trial and Main Survey Review Forms

1.1.14. Response coding

40. Rationale: To ensure the comparability of the data, the responses from all test participants in all participating countries have to be coded following approved coding designs that are presented to both the Field Trial and the Main Survey. Therefore, all coding procedures have to be standardised, and coders have to complete training sessions to master this task.

Standard 14.1 The coding scheme described in the coding guides is implemented according to instructions from the international contractors' item developers.

Standard 14.2 Representatives from each National Centre attend the international PISA coder training session for both the Field Trial and the Main Survey.

Standard 14.3 Both the single and multiple coding procedures must be implemented as specified in the *PISA operations manuals* (see Note 14.1). These procedures are implemented in the coding software that countries will be required to use.

Standard 14.4 Coders are recruited and trained following *agreed procedures*.

Note 14.1 Preferred procedures for recruiting and training coders are outlined in the *PISA operations manuals*.

Note 14.2 The number of Coder Training session participants will depend on factors such as the expertise of National Centre staff, and resource availability.

41. Quality assurance

- Indices of inter-coder agreement
- Field Trial and Main Survey Review Forms

1.1.15. Data submission

42. Rationale: The timely progression of the project, within the tight timelines given depends on the quick and efficient submission of all collected data. Therefore, one single data submission format is proposed, and countries are asked to submit only one database to the international contractors. Furthermore, to avoid potential errors when consolidating the national databases, any changes in format that were implemented subsequent to the general agreement have to be announced.

Standard 15.1 Each *PISA participant* submits its data in a single complete database, unless otherwise *agreed upon.*

Standard 15.2 All *data* collected for PISA will be imported into a national database using the Data Management Expert (DME) data integration software provided by the international contractors following specifications in the corresponding operational manuals and international/national record layouts (codebooks). Data are submitted in the DME format.

Standard 15.3 Data for all *instruments* are submitted. This includes the assessment data, questionnaires data, and tracking data as described in the *PISA operations manuals*.

Standard 15.4 Unless *agreed upon*, all data are submitted without recoding any of the original response variables.

Standard 15.5 Each PISA participating country's database is submitted with full documentation as specified in the *PISA operations manuals.*

Management standards

1.1.16. Communication with the international contractors

43. Rationale: Given the tight schedule of the project, delays in communication between the National Centres and the international contractors should be minimised. Therefore, National Centres need continuous access to the various resources provided by the contractors.

Standard 16.1 The international contractors ensure that qualified staff are available to respond in English to requests by the National Centres during all stages of the project. The qualified staff:

- Are authorised to respond to National Centre queries,
- Acknowledge receipt of National Centre queries within one working day,
- Respond to coder queries from National Centres within one working day,
- Respond to other queries from National Centres within five working days, or, if processing the query takes longer, give an indication of the amount of time required to respond to the query.

Standard 16.2 The National Centre ensures that qualified staff are available to respond to requests in English by the international contractors during all stages of the project. The qualified staff:

- Are authorised to respond to queries,
- Are able to communicate in English,
- Acknowledge receipt of queries within one working day,

Respond to queries from the international contractors within five working days, or, if processing the query takes longer, give an indication of the amount of time required to respond to the query.

Note 16.1 Response timelines and feedback schedules for the National Centres and the international contractor are further specified in the Tasks section of the PISA Portal.

1.1.17. Notification of international and national options

44. Rationale: Given the tight timelines, the deadlines given in the following two standards will enable the international contractors to progress with work on time.

Standard 17.1 National options are agreed *upon* with the international contractors before 1 December in the year preceding the Field Trial and confirmed before 1 November in the year preceding the Main Survey.

Standard 17.2 The National Centre notifies the OECD Secretariat of its intention to participate in specific international options three months prior to the start of the translation period. International options can only be dropped between the Field Trial and the Main Survey, not added.

1.1.18. Schedule for submission of materials

45. Rationale: To meet the requirements of the work programme, and to progress according to the timelines of the project, the international contractor will need to receive a number of materials on time.

Standard 18.1 An *agreed upon Translation Plan* will be negotiated between each National Centre and the international contractors.

Standard 18.2 The *following* items are submitted to the international contractors in accordance with *agreed timelines*:

- the Translation Plan
- a print sample of booklets prior to final printing, for new countries/entities using the paper-based instruments (where this is required, see Standard 13.1),
- results from the national checking of adapted computer-based assessment materials and questionnaires,
- adaptations to school-level materials,
- sampling forms (see Standard 1),
- demographic tables,
- completed Field Trial and Main Survey Review Forms,
- documents related to PISA Quality Monitors: nomination information, Test Administrator training schedules, translated school-level materials, school contact information, test dates, and
- other documents as specified in the PISA operations manuals.

Standard 18.3 *Questionnaire* materials are submitted for linguistic verification only after all adaptations have been *agreed upon*.

Standard 18.4 All adaptations to those elements of the school-level materials that are required to be functionally equivalent to the source as specified in Standard 5.2, need to be *agreed upon.*

46. Quality assurance

- Agreed upon Translation Plan
- International contractors' records from communications, forms, or documents
- Assessment materials submitted for linguistic verification with corresponding adaptation spreadsheets filled in by the National Centre

1.1.19. Management of data

47. Rationale: Consolidating and merging the national databases is a time-consuming and difficult task. To ensure the timely and efficient progress of the project, the international contractors need continuous access to national resources helping to rule out uncertainties and to resolve discrepancies. This standard aims to prevent substantial delays to the whole project which could result from a delay in processing the data of a small number of participating countries.

Standard 19.1 The timeline for submission of national databases to the international contractors is within eight weeks of the last day of testing for the Field Trial and within eight weeks of the last day of testing for the Main Survey, unless otherwise *agreed upon*.

Standard 19.2 National Centres execute data checking procedures as specified in the *PISA operations manuals* before submitting the database.

Standard 19.3 National Centres make a data manager available upon submission of the database. The data manager:

- is authorised to respond to international contractor data queries,
- is available for a three-month period immediately after the database is submitted unless otherwise *agreed upon*,
- is able to communicate in English,
- is able to respond to international contractor queries within three working days, and
- is able to resolve data discrepancies.

Standard 19.4 A complete set of PISA paper-based instruments as administered and including any *national options*, is forwarded to the international contractors on or before the first day of testing. The submission must include the : electronic PDF and/or Word versions of all instruments

Standard 19.5 To enable the *PISA participant* to submit a single dataset, all instruments for all *additional adjudicated entities* will contain the same variables as the primary *adjudicated entity* of the *PISA participant*.

Note 19.1:

Each participating country/economy will receive its own national micro-level PISA database (the "national database"), in electronic form and delivered as agreed upon a pre-specified timeline that varies based on their data submission. The national database will

contain the complete set of responses from the students, school principals and surveyed participants (parents, teachers) in that country/economy.

Each participating country/economy has access to and can publish its own data after a date that is established by the PISA Governing Board for the publication of the initial OECD publication of the survey results (the "initial international OECD publication").

The OECD Secretariat will not release national data to other countries/economies until participating countries/economies have been given an opportunity to review and comment on their own national data and until the release of such data has been approved by the national authorities.

A deadline and procedures for withdrawing countries/economies' national data from the international micro-level PISA database (the "international database") will be decided upon by the PISA Governing Board. Countries/economies can withdraw data only prior to obtaining access to data from other countries/economies. Withdrawn data will not be made available to other countries/economies.

The PISA Governing Board will discuss with participating countries/economies whose data manifests technical anomalies as to whether the data concerned can be included in the international database. The decision of the PISA Governing Board will be final. Participating countries/economies may, however, continue to use data that are excluded from the international database at the national level.

The international contractors will then compile the international database, which will comprise the complete set of national PISA databases, except those data elements that have been withdrawn by participating countries/economies or by the PISA Governing Board at the previous stage. The international database will remain confidential until the date on which the initial international OECD publication is released.

National data from all participating countries/economies represented in the international database will be made available to all participating countries/economies from the date on which the initial international OECD publication is released.

After release of the initial international OECD publication, the international database will be made publicly available on a cost-free basis, through the OECD Secretariat. The database may not be offered for sale.

The international database will form the basis for OECD indicator reports and publications.

The international contractors will have no ownership of instruments or data nor any rights of publication and will be subject to the confidentiality terms set in this agreement.

The OECD establishes rules to ensure adherence to the above procedure and to the continued confidentiality of the PISA data and materials until the agreed release dates. These include confidentiality agreements with all individuals that have access to the PISA material prior to its release.

As guardian of the process and producer of the international database, the OECD will hold copyright in the database and in all original material used to develop, or be included in, the PISA Field Trial and PISA Main Survey (among them the assessment materials, school-level materials, and coding guides) in any language and format.

48. Quality assurance

- International contractors' records of communications, forms, or documents

1.1.20. Archiving of materials

49. Rationale: The international contractors will maintain an electronic archive. This will provide an overview of all materials used and ensure continuity of materials available in participating countries across PISA survey cycles, therefore building upon the knowledge gained nationally in the course of the PISA cycles. This will also ensure that the international contractors have the relevant materials available during data cleaning, when they are first required.

Standard 20.1 The international contractors will maintain a permanent electronic archive of all assessment materials, school-level materials and coding guides, including all national versions. For documents that are finalised by countries, they are required to upload the latest version to the PISA Portal.

Standard 20.2 The National Project Manager must submit one copy of each of the following adapted and translated Main Survey materials to the international contractors:

- electronic versions (Word and/or PDF) of all administered Test Instruments, including international and *national options*
- electronic versions (Word and/or PDF) of all administered Questionnaires, including international and *national options* (paper-based countries only);
- electronic versions of the school-level materials; and
- electronic versions of the Coding Guides.

Standard 20.3 Unless otherwise requested, National Centres will retain (1) all Field Trial materials until the beginning of the Main Survey, and (2) all Main Survey materials until the end of the calendar year, two years after the year when the Main Survey is conducted, (i.e., when the last international reports containing the results of the Main Survey will have been published).. Materials to be archived include:

- all respondents' paper-based test booklets and questionnaires (PBA countries or whenever paper-based materials are used in CBA countries)
- all respondents' SDS result files and all associated data obtained from USB drives or other delivery mode (CBA countries)
- all sampling forms,
- all respondent lists,
- all tracking instruments, and
- all data submitted to the international contractors.

After completion of a survey, the National Centre will transfer final versions of all national materials to the international contractors who will compile the national archives from all participants and transfer them to OECD after completion of the Main Survey.

Note 20.1. Archiving applies to all materials from the Field Trial or Main Survey, including student, school, parent and teacher materials, as applicable.

Note 20.2. Should national legislation or other circumstances require that the Field Trial or Main Survey materials be deleted/erased before the timeline in Standard 20.3, countries must nevertheless retain these records, at a minimum, until the publication of the PISA dataset (and publication of the related international reports).

Note 20.3. It is recommended to retain the original USB drives (if used) and all paper-based booklets and questionnaires for all respondents until certified data has been released to the National Centres. Original USB drives are not required for long-term archiving purposes as long as there are copies of SDS result files for all respondents.

Note 20.4. Sampling forms for each sampling task for the Field Trial and Main Survey data collections must be retained for the periods outlined in Standard 20.3.

Note 20.5. "Respondent lists" refers to the student list (and teacher list if applicable) used for within-school sampling, and must be retained until, at a minimum, the period set out in Note 20.2.

Note 20.6. "Tracking instruments" refers to the Student Tracking Form (and Teacher Tracking Form if applicable) completed in each school, and must be retained until, at a minimum, the period set out in Note 20.2.

1.1.21. Data protection and the processing of personal data

50. Rationale: The OECD is committed to protecting the personal data it processes, in accordance with its Personal Data Protection Rules. The OECD, countries and contractors must protect the personal data of participants collected during PISA, ensuring that all data is stored and processed in a secure and standardised manner. This standard aims to ensure that National Centres process personal data securely, that participants are provided with clear information on data protection in PISA and the data rights of participants to access, rectify or erase their data are facilitated by countries and contractors.

Standard 21.1 Each National Centre must make data protection information available to all participants, that at least includes:

- Contact details of the National Centre
- Contact details of the OECD's Data Protection Officer and Data Protection Commissioner
- The purpose of the processing of the data
- Recipients of the data, including any international organisations or third party (this includes the PISA contractors and any national contractors)
- The storage and retention period of data
- The existence of the rights of data subjects, including the timeline for facilitating these requests.

Standard 21.2 Each National Centre will process the additional information related to a participant/data subject (e.g., link files with records of student names) securely and separately from the datasets during data processing and archiving (i.e. the data collected during the assessment will be categorised and treated as pseudonymised).

Standard 21.3 National Centres must inform schools or other holders of PISA forms that include student and/or teacher names, to delete, confidentially shred or return these materials to the National Centre. Materials to be deleted/shredded/returned include:

- All tracking instruments
- All respondent lists.

Standard 21.4 Each National Centre must facilitate requests from participants to exercise their data rights.

- Data access requests will be possible using the raw data from the assessment. No scaled data will be provided in breach of the PISA data embargo.
- Data erasure requests will be possible for a limited period before submission to the Contractors. This is to be decided by each National Centre, with two options, up to the submission of ST12 or to upload of student data files to the OECS.
- Each National Centre will retain and update a log of completed data requests for data erasure, to facilitate quality control processes. This information must be submitted to the PISA contractors in a timely manner to comply with the requests and for the purpose of data management and sampling processes.

Note 21.1. It Is best practice to make data protection information available to participants at the time of the data collection.

Note 21.2. National Centres may communicate data protection information to participants in the most effective way for their national context. The information may be provided in several ways, e.g., a video, an information sheet, a data protection notice, on a National Centre website or a link to the OECD's PISA 2022 data protection notice.

Note 21.3. "Tracking instruments" refers to the Student Tracking Form (and Teacher Tracking Form if applicable) completed in each school. "Respondent lists" refers to a list of students (or list of teachers if applicable) used during the implementation of PISA.

Note 21.4. The records of student/teacher names in link files or on PISA forms are permitted but must be stored separately and securely to the data collected during the assessment.

Note 21.5. The data collected from students as part of PISA is categorised as pseudonymised, as identifying characteristics in the data have been replaced with a number or value that does not allow the data subject to be directly identified. This also pertains to data from parents or teachers, if applicable. Pseudonymisation means that the data collected remains personal data, but can no longer be assigned to a natural person without additional information (e.g. record of a student name and the PISA student ID number).

Note 21.6. After the archiving period for the Field Trial and Main Survey materials, National Centres may choose and are encouraged to anonymise the data by breaking the link between the name of the student and the data from the cognitive and questionnaire sessions. Anonymisation of the data requires deleting and/or confidentially shredding all files and records that connect the PISA student ID number to identifying information (name, date of birth, national student ID, etc.). Once anonymisation is complete and all records of a participant's name are removed, it will be no longer possible to facilitate access and erasure requests.

Note 21.7. The timeline of disposal/return of PISA forms retained by schools is to be decided by the National Centre and communicated to schools. This should be before the end of the archiving period set out in Standard 20.3.

51. Quality assurance:

Adherence to this standard is a National Centre responsibility.

- Retain a copy of national data protection information for PISA 2022 made available to respondents.
- Agreement that additional information related to data subject (e.g., linking information) will be stored separately and securely from datasets.
- Agreement to set and follow-up on the timeline and procedures for the deletion and/or shredding of data in PISA forms held by other parties involved in the implementation of PISA.
- Retain a record of completed data access or erasure requests and submit requests to international contractors in a timely manner.

National involvement standards

1.1.22. National feedback

52. Rationale: National feedback in areas such as test development is important in maintaining the dynamic and collaborative nature of PISA. National feedback ensures that instruments achieve cross-national, cross-cultural and cross-linguistic validity. It also promotes the inclusion of the interests and involvement of national stakeholders.

Standard 22.1 National Centres develop appropriate mechanisms in order to promote participation, effective implementation, and dissemination of results amongst all relevant national stakeholders.

Standard 22.2 National Centres provide feedback to the international contractors on the development of instruments, domain frameworks, the adaptation of instruments, and other domain-related matters that represent the perspectives of the relevant national stakeholders.

Note 22.1 As a guideline, feedback might be sought from the following relevant stakeholders: policy makers, curriculum developers, domain experts, test developers, linguistic experts and experienced teachers.

53. Quality assurance

- National Centre Quality Monitoring
- List of committees and groups of stakeholders
- Membership records of representative groups and/or committees
- Meeting records of representative groups and/or committees

1.1.23. Meeting attendance

54. Rationale: Attendance at National Project Managers and training meetings is required as these represent a key component of participating in PISA. Important information is shared and discussed and training in data management, sampling, computer systems, and coding is conducted at these international meetings. These also allow for individual consultation and communication with the international contractors, which is often very helpful.

Standard 23.1 Representatives from each National Centre are required to attend all PISA international meetings including National Project Manager meetings, coder training, and any separate within-school sampling training, and data management training, as necessary. Up to 6 international meetings are planned per cycle.

Standard 23.2 Representatives from each National Centre who attend international meetings must be able to work and communicate in English.

Note 23.1 The length of these meetings vary from 3 to 5 days.

Note 23.2 Based on the meeting type and hotel arrangements, the OECD Secretariat may, on the request of the international contractors, set a limit to the number of representatives per country that can attend NPM meetings. Countries/economies with separate participating entitites will have the possibility to send teams from all entitites.

55. Quality assurance

- Meeting attendance records

Definitions

Adjudicated Entity – a country, geographic region, or similarly defined population, for which the international contractors fully implements quality assurance and quality control mechanisms and endorses, or otherwise, the publication of separate PISA results. A PISA participant may manage more than one adjudicated entity.

Agreed procedures – procedures that are specified in the PISA operations manuals, or variations that are mutually agreed upon between the National Project Manager and the international contractors.

Agreed timelines – timelines that are specified in the PISA operations manuals, or variations that are mutually agreed upon between the National Project Manager and the international contractors.

Agreed upon – variations that are mutually agreed upon between the National Project Manager and the international contractors

Anonymisation - personal data is rendered anonymous, by irreversibly removing the link between each respondent's personal identifier (e.g., respondent name) and the data in the PISA dataset. This is achieved by deleting and erasing all additional information sources containing the link, so respondents in the PISA dataset cannot be personally identified. This applies to students, parents or teachers, if these options are administered, and anonymisation can be pursued after the archiving period in Standard 20.3.

Centrally produced reference documents – documents provided in English (and, for some documents, French and/or Spanish) by the international contractors according to contractual specifications.

Common reference version – a language version of assessment instruments that is used by countries sharing that language as a starting point to produce their respective national versions.

International options – optional additional international instruments or procedures sponsored by the OECD and fully supported by the international contractors.

National Centre quality monitoring – the procedures by which the international contractors monitor the quality of all aspects of the implementation of the survey by a National Centre.

National option – a national option occurs if:

a) National Centre administers any additional instrumentation, for example a test or questionnaire, to schools or students that are part of the PISA international sample. Note that in the case of adding items to the questionnaires, an addition of five or more items to either the school questionnaire or the student questionnaire is regarded as a national option.

   OR

b) National Centre administers any PISA international instrumentation to any students or schools that are not part of an international PISA sample (age-based or grade-based) and therefore will not be included in the respective PISA international database.

   OR

c) National Centre administers any PISA international option only in some, not all, jurisdictions. The country will in this case sign up for the international option with the OECD, as if it was administered in the entire jurisdiction, and the additional work involved with administering the international option to part of the jurisdiction only is considered a national option.

PISA-eligible students – students who are in the PISA target population. Also see PISA Target Population.

PISA National Project Manager (NPM) – The NPM is responsible for overseeing all national tasks related to the development and implementation of PISA throughout the entire cycle. The NPM is responsible for ensuring that tasks are carried out on schedule and in accordance with the specified international standards.

PISA Operations Manuals – all manuals provided by the international contractors. The preparation of the PISA operations manuals will be carried out by the international

contractors and will describe procedures developed by the international contractors. The manuals will be prepared following consultation with participating countries/economies, the OECD Secretariat, the Technical Advisory Group and other stakeholders.

PISA Participant – an administration centre, commonly called a National Centre, that is managed by a person or persons, usually the National Project Manager, who is/are responsible for administering PISA in one or more adjudicated entities. The National Project Manager(s) must be authorised to communicate with the international contractor on all operational matters relating to the adjudicated entities for which the National Project Manager is responsible.

PISA Portal – the PISA 2022 project website can be accessed through the following address: http://pisa.ets.org/portal.

PISA Quality Monitor (PQM) – a person nominated by the National Project Manager and employed by the international contractors to monitor test administration quality in an adjudicated entity.

PISA Target Population – students aged between 15 years and 3 (completed) months and 16 years and 2 (completed) months at the beginning of the testing period, attending educational institutions located within the adjudicated entity, and in grade 7 or higher. The age range of the population may vary up to one month, either older or younger, but the age range must remain 12 months in length. That is, the population can be as young as between 15 years and 2 (completed) months and 16 years and 1 (completed) month at the beginning of the testing period; or as old as between 15 years and 4 (completed) months and 16 years and 3 (completed) months at the beginning of the testing period.

- **PISA Desired Target Population** – the PISA Target Population defined for a specific adjudicated entity. It provides the most exhaustive coverage of PISA-Eligible students in the participating country/economy as is feasible.
- **PISA Defined Target Population** – all PISA-Eligible students in the schools that are listed on the school sampling frame. That is, the PISA Desired Target Population minus school-level exclusions.

Pseudonymisation – personal data where the personal identifier (e.g., respondent's name) is replaced by an artificial identifier (pseudonym). In PISA, the respondent's name is not included in the data collected on the assessment day, but is replaced with an ID number. Therefore the data is categorised as pseudonymised, as long as the additional information linking the respondent name and the PISA respondent ID is stored in a different file or location.

School Associate (SA) – a person at a school who acts as a liaison between the school and the National Centre to prepare for the assessment and who administers the assessment to students on the day of the assessment.

School Co-ordinator (SC) – a person at a school who acts as a liaison between the school and the National Centre to prepare for the assessment in the school.

School-level exclusions – contractors' approved exclusion of schools from the sampling frame because:

- of geographical inaccessibility (but not part of a region that is omitted from the PISA Desired Target Population),

- administration of the PISA assessment within the school would not be feasible,
- all students in the school would be within-school exclusions, or
- of other reasons as agreed upon.

School-level materials – the key materials include:

- School Co-ordinator Manual and Test Administrator Manual (or School Associate Manual)
- Test administration scripts
- Key forms – Student Tracking Form, Session Attendance Form, and Session Report Form

Source versions assessment instruments provided in English (and, for some documents, in French) by the international cntractors according to contractual specifications.

Target cluster size – the number of students that are to be sampled from schools where not all students are to be included in the sample.

Test administrator – a person who is trained by the National Centre to administer the PISA test in schools. This person may be a Test Administrator or a School Associate (a School Co-ordinator who also has the role of a Test Administrator).

Testing period – the period of time during which data is collected in an adjudicated entity.

Translation plan – documentation of all the processes that are intended to be used for all activities related to translation and languages.

Within-school exclusions – potential exclusion of students from assessment because of one of the following:

- They are functionally disabled in such a way that they cannot take the PISA test. Functionally disabled students are those with a moderate to severe permanent physical disability.
- They have a cognitive, behavioural or emotional disability confirmed by qualified staff, meaning they cannot take the PISA test. These are students who are cognitively, behaviourally or emotionally unable to follow even the general instructions of the assessment.
- They have insufficient assessment language experience to take the PISA test. Students who have insufficient assessment language experience are those who meet all the following three criteria:
  - they are not native speakers of the assessment language,
  - they have limited proficiency in the assessment language, and
  - they have received less than one year of instruction in the assessment language.
- There are no materials available in the language in which the student is taught.
- They cannot be assessed for some other reason as agreed upon.

PISA 2025 International Options

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1. At the 47th meeting of the PISA Governing Board (PGB) in April 2019, it was proposed that the PISA 2025 International Options should be the ICT Questionnaire, the Parent Questionnaire, the Science Teacher Questionnaire, as well as the Foreign Language Assessment – English (FLA), including an optional FLA Teacher Questionnaire. The purpose of the current document is to provide the costs and updated descriptions of the optional questionnaires that were introduced in prior PISA cycles plus a description of the new optional components, namely the PISA 2025 FLA and its associated questionnaires and questionnaire modules.

2. These descriptions include brief overviews of the relevant questionnaire and cognitive frameworks, as well as highlights of the policy relevance of data collected by the different optional components. This is followed by guidance regarding the implementation and operational procedures specific to each International Option.

3. Countries and economies are asked to provide a first indication of interest to participate in each option by **15 April 2022** and a firm commitment on their participation in the options by **30 September 2022**. A webinar for PGB representatives and National Project Managers (NPMs) in which the Secretariat will further explain the International Options will take place in February 2022.

Plan for rotating the International Options between PISA cycles

4. The purpose of the International Options is to gather and analyse internationally comparable data in areas of significant policy interest to some but not all countries, providing flexibility without overloading the core survey. During the development of the proposal regarding the International Options for the PISA 2022 cycle, the PGB noted that the increasing range of options offered in each cycle had led to a reduction in the number of countries taking any one particular option, so that the comparator set may sometimes be smaller than desired. The Secretariat was then asked to develop a multi-cycle strategy, suggesting how frequently each option should appear.

5. At its 47th meeting, the PGB welcomed this approach to the design of the PISA 2025 optional components, and the move towards systematic rotation of International Options. The main purpose of rotating the options over time is to maximise their comparative value while continuing to cover a wide range of topics in the long-term. A more focused offer in each cycle could attract more countries to those options on offer and thereby provide richer comparative data for each participating country. The rotated approach also enables in-depth developmental work to be more focused on the options on offer in each cycle.

6. As outlined in Table 1 below, notable changes from the list of International Options for the PISA 2022 cycle include the absence of the Student Well-being module of the Student Questionnaire[1] and the introduction of the FLA (with the FLA Student, FLA School, FLA Parent Questionnaire modules, the FLA Teacher Questionnaire, and the FLA System-level Questionnaire) to rotate with Financial Literacy every other cycle. It is also

[1] This is to respond to a PGB's request to reduce the number of optional questionnaires.

worth noting that the subject-specific modules from the Teacher Questionnaire are aligned with the change of main domain from Mathematics in PISA 2022 to Science in PISA 2025.

Table 1. Longer-term evolutions for the PISA International Options

	PISA 2018	PISA 2022	PISA 2025	PISA 2028*	PISA 2031*	PISA 2034*
Student modules (Questionnaires)	**ICT Questionnaire** **Well-being Questionnaire** **Educational career Questionaire**	**ICT Questionnaire** **Well-being Questionnaire**	**ICT Questionnnaire**	**Innovative Questionnaire**	**ICT Questionnaire**	**Innovative Questionnaire**
Teachers	**Teacher Questionnaire**	**Teacher Questionnaire** Subject-specific teaching practices	**Teacher Questionnaire** Subject-specific teaching practices (short)	**Teacher Questionnaire** Teaching practices and TALIS questions (full length)	**Teacher Questionnaire** Subject-specific teaching practices (short)	**Teacher Questionnaire** Teaching practices and TALIS questions (full length)
Parents	**Parent Questionnaire**	**Parent Questionnaire**	**Parent Questionnaire**	**Parent Questionnaire**	**Parent Questionnaire**	**Parent Questionnaire**
Full studies	**Financial Literacy** with Student Questionnaire module	**Financial Literacy** with Student Questionnaire module	**Foreign Language Assessment** with Student, Teacher and Parent Questionnaire modules	**Financial Literacy** with Student Questionnaire module	**Foreign Language Assessment** with Student, Teacher and Parent Questionnaire modules	**Financial Literacy** with Student Questionnaire module

Note: **Years are indicative based on the frequency of previous cycles (pending decision about the frequency of future cycles).*

Summary table with cost estimates per option

7. Over the past months, the Secretariat has negotiated the International Options costs with the PISA 2025 contractors. The exact per-country costs for participation in the International Options will depend on the final number of countries that decide to sign up for each option, and the finalised test and questionnaire designs.

Table 2. Summary table (Cost estimates)

International Option Characteristics	ICT Questionnaire	Parent Questionnaire	Science Teacher Questionnaire[2]	Foreign Language Assessment - English	Foreign Language Assessment - English Teacher Questionnaire[3]
Minimum number of participating countries/economies	10	10	10	10	5
Number of participating countries/economies PISA 2022	56	19	23	N/A	N/A
Est. cost (if same number as in PISA 2022 participation, in EUR)	4 420	9 118	11 284	N/A	N/A
Estimated cost (if 10 countries participate, in EUR)	11 646	12 738	17 470	68 777	10 042
Estimated cost (if 20 countries participate, in EUR)	7 247	8 343	11 998	53 276	8 284

[2] The number of participating countries/economies in PISA 2022 and the estimated cost, assuming the same participation number in PISA 2025 for the Science Teacher Questionnaire, are based on participation numbers for the PISA 2022 Teacher Questionnaire International Option (for both mathematics teachers and other teachers).

[3] Countries that participate in both the PISA 2025 Science Teacher and Foreign Language Teacher Questionnaires will have a EUR 2 000 reduction on the international fee as there is reduced contractor work with implementing both.

Chapter 1. PISA 2025 ICT Questionnaire

1.1. Description of the PISA 2025 ICT Questionnaire

8. With the advent of the information age, Information and Communication Technology (ICT) plays an increasingly important role in people's everyday lives. In the current on-going pandemic, ICT plays an even more important role. PISA 2025 offers the ICT Familiarity Questionnaire as an International Option. This optional questionnaire will provide opportunities to collect detailed data on: (i) ICT availability/quality in and out of school; (ii) the use of ICT to support learning; and (iii) student familiarity with ICT. Analyses on the ICT Questionnaire data will shed light on the overall level in these three areas as well as the disparities across and within countries.

9. In 2000, PISA implemented an optional questionnaire asking 15-year-old students about their familiarity with and use of ICT. Since then the ICT Questionnaire has been offered to countries as an optional part of the PISA assessment. For PISA 2022, an ICT Framework was developed for the first time (PISA 2022 ICT Framework).[4] The ICT Framework paints a comprehensive picture about the availability and use of ICT resources in addition to student ICT proficiency. The PISA 2025 ICT Questionnaire will be based on the ICT Framework developed for PISA 2022 and built on the PISA 2022 ICT Questionnaire.

1.2. Added Value for educational policy of the PISA 2025 ICT Questionnaire

10. While the core Student Questionnaire will cover some questions related to ICT, these will be limited to key questions in order to better understand student performance in reading, mathematics, science and the innovative domain (Learning in the Digital World) and student well-being due to the limited space in the core Student Questionnaire. The new questions on digital learning skills for Learning in the Digital World (LDW) assessment are designed to be complementary to the questions in the ICT Questionnaire in that there will be no substantial overlap. A wide coverage of countries in the ICT Questionnaire will thus be helpful also for interpreting differences in performance in the Learning in the Digital World test. Data from the ICT Questionnaire will be particularly important to conduct in-depth analysis on the relationship between ICT familiarity and learning outcomes.

11. Similar to PISA 2022, the PISA 2025 ICT Questionnaire will continue focusing on quality of ICT resources, detailed use of ICT, and students' ICT engagement and self-reported proficiency.

(i) Availability/quality of ICT resources

12. PISA 2025 will collect constructs measuring the availability of *quality* ICT resources because the major variations between student, schools and countries revolve around issues of quality (e.g. Internet speed) rather than quantity of resources. Furthermore,

[4] This work was jointly funded by the European Commission and the OECD and is managed by the OECD-PISA Secretariat.

the focus will also be given to newer mobile devices and to the availability of software that exploits the growing potential of social media and other developments in ICT.

(ii) Detailed use of ICT

13. PISA 2025 will address the use of ICT to support instruction and learning in science and other subjects. ICT-based or ICT-supported learning may include, for instance, educational games, drilling activities, simulations, tutorials and the use of social media. The collected data would reflect teaching practices using ICT, and how students use ICT to learn. The data could in turn be used to assess the relationships between the ICT use and students' cognitive and non-cognitive outcomes. The use of ICT out of school will also be an important area of investigation, since ICT-related out-of-school activities could enhance or undermine learning. These data will complement the information on ICT in school and will help paint a comprehensive picture about the impact of ICT on the lives of 15-year-olds. The use of ICT out of school would cover social interactions using ICT (e.g. social media and Skype) for purposes which could be related to learning but also to other non-curricular activities.

(iii) Student ICT engagement and proficiency

14. PISA 2025 will continue to measure two dimensions of ICT engagement: ICT related interest and student perceived autonomy in ICT. Interest in ICT is understood as enjoyment of the use of specific ICT-based products, such as mobile devices, games, or social networks, and acknowledging related benefits. ICT autonomy reflects students' perceived control in ICT-related activities. This facet is important because a feeling of control enables individuals to keep up with the latest technological developments. PISA 2025 will also include the questions on engagement to better reflect student ICT skills, knowledge and effectiveness, building on the PISA 2022 ICT Framework and Questionnaire items. Finally, the ICT Questionnaire will collect data about the ways in which students assess the quality, credibility and accuracy of online information.

1.3. Implementation of the PISA 2025 ICT Questionnaire

15. The PISA 2025 ICT Questionnaire is planned to take about 15 minutes and delivered in computer-based format.

16. This questionnaire will be offered to the same student sample as the core Student Questionnaire.

17. In preparing the PISA 2025 ICT Questionnaire, special attention will be given to issues of data comparability and national relevance. PISA has more than 90 participating countries and economies with different levels of technology adoption in their schools. This raises the challenge of finding a balance between producing comparable data which at the same time is nationally relevant.

18. Questions from previous PISA assessments will be partially retained to make trend comparisons possible. Comparisons with earlier PISA cycles will be possible for availability of ICT at home, availability of ICT at school, general computer use and frequencies of ICT use at and out of school.

Chapter 2. PISA 2025 Parent Questionnaire

2.1. Description of the PISA 2025 Parent Questionnaire

19. The questionnaire for parents of students that are assessed in PISA has been implemented as an International Option since PISA 2006. Parents are powerful stakeholders in education. By including the perspective of parents in the analysis, a more coherent picture of the students' learning environments can emerge. Information on parents' views and engagement is, therefore, valuable also within a large-scale assessment like PISA.

20. Similar to earlier PISA assessments, the PISA 2025 Parent Questionnaire will be used to collect data on (i) additional indicators of a student's background, (ii) contextual information on the learning and development of the child in out-of-school learning settings and on the interaction with institutional learning setting, and (iii) learning-related attitudes, expectations and practices of parents.

21. Science is once again the major domain in PISA 2025. Some of the science-related constructs of the PISA 2015 Parent Questionnaire will be resumed to provide information on change in the home learning settings between 2015 and 2025. Innovations in the PISA 2025 Science Framework and the PISA 2025 Learning in Digital World Framework could also be reflected in the Parent Questionnaire.[5]

2.2. Added Value for educational policy of the PISA 2025 Parent Questionnaire

22. The PISA 2025 Questionnaire Framework is organised by thematic modules, as was done in earlier assessments. Within those modules, the focus lies on specific issues that might be addressed by including information from different stakeholders in the educational setting, e.g. students, principals, and if applicable, parents and teachers. Thus, the parents' perspectives collected through the Parent Questionnaire can contribute to the improvement of measures represented by these modules.

23. For countries choosing the Parent Questionnaire, additional prospects for reporting might be found when adding the modules outlined below.

(i) Additional indicators of a student's background

24. The Parent Questionnaire can contribute to the measures of socio-economic background and home resources by providing information such as expenditures for education, their household income, investments made in remedial courses or home resources **("Economic, social, and cultural status" module).**

25. Information provided by parents can be used to assess information on the family's immigration background and the language spoken at home, factors which are related to the learning outcomes of students. **("Migration and language exposure" module)**.

[5] An additional FLA Parent Questionnaire module will be included in the Parent Questionnaire for countries/economies taking the PISA 2025 Foreign Language Assessment - English (FLA). For more information about the FLA Parent Questionnaire module, please refer to section 4.2(iii) FLA Parent Questionnaire module.

(ii) Contextual information on the learning and development of the child

26. Parents' information will add valuable information regarding the quality and quantity of parental involvement in learning. This includes (i) parents' engagement that focuses on the interaction with the institutional learning setting, i.e. teachers and schools, which could be influenced by school policies, and (ii) parents' engagement, at present as well as in the past, that focuses on the interaction with the child, i.e. supporting learning at home. Parents can be asked about support they provide for their children's homework, or about additional out-of-school learning settings regarding science. **("Parental involvement and support" and "Experiences out of regular school hours" modules)**.

27. Information about students' early childhood education might better be assessed by asking parents rather than students, as parents are more likely to provide more valid information. This could include the starting age of ISCED 0 and the availability and reasons for attending day-care. Furthermore, parents can also provide more detailed information about reasons for selecting a specific school or educational track for their child. **("Educational career" module)**.

28. Parents can provide information on environments to support students' aspiration for scince-related careers. For example, parents can be asked if any family members are engaged in science-related occupations. ("**Post-secondary preparedness and aspirations" module)**.

29. PISA currently asks principals about accountability to parents, e.g. reporting of students' outcomes. The Parent Questionnaire might add valuable information by asking parents if and how they use this information, e.g. for engaging in discussion with teachers, or for improving the learning support for their child. **("Assessment, Evaluation and Accountability" module)**.

(iii) Learning-related attitudes, expectations and practices of parents

30. Parents can provide information on their attitudes and beliefs on science and environment. For example, the constructs covered by the Student Questionnaire such as enjoyment of science, epistemic beliefs, environmental awareness, environmental concerns and environmental agency can be included in the Parent Questionnaire. **("Science identity" module).**

31. The Parent Questionnaire can include questions about parents' attitudes towards failure (i.e. whether they view it as debilitating or enhancing) and their beliefs on intelligence (i.e. if they view intelligence as malleable or fixed). Parents' beliefs and practices influence the development of children's mindsets. **("General social and emotional characteristics, growth mindset and well-being" module)**.

32. The innovative domain of assessment in PISA 2025 will be Learning in Digital World (LDW). The parents' questionnaire can include questions addressing parents' contribution to the development of their children's self-directed learning.

2.3. Implementation of the PISA 2025 Parent Questionnaire

33. The PISA 2025 Parent Questionnaire will take approximately 20 minutes, and will be delivered in a paper-based format.

34. The Parent Questionnaire will be administered to the parents of the students participating in PISA. While the Parent Questionnaire is unlikely to have a negative

influence on participation rates at the school or the student level, it should be noted that participation rates of parents have been fluctuating between cycles and between countries. Non-response by parents might be associated with background characteristics, e.g. socio-economic status or immigrant background. For PISA 2025, different measures could be taken to further ensure high participation rates, e.g. engage parents by sharing information on the purpose of the project and the Parent Questionnaire, prepare materials in minority languages and other such measures.

Chapter 3. PISA 2025 Science Teacher Questionnaire

3.1. Description of the PISA 2025 Science Teacher Questionnaire

35. The Teacher Questionnaire was implemented as an International Option for the first time in PISA 2015 in response to a growing interest in teacher-related policies within OECD countries as well as partner countries/economies. Interest in a Teacher Questionnaire reflects the central role teachers' play in education, and their role also as school leaders and key sources of innovation.

36. The Teacher Questionnaire for PISA 2025 has a core module, which is followed by a science teacher module and/or a Foreign Language Assessment –English (FLA) teacher module.[6] Countries/economies implementing in the Science Teacher Questionnaire are able to implement the science teacher module without the FLA teacher module.[7]

37. The PISA 2025 Science Teacher Questionnaire will broaden the scope of PISA by providing additional information about students' learning environments from teachers' perspectives. In addition to the core module of the Teacher Questionnaire, which focuses on questions relevant to teachers across subject domains, the science teacher module will be used to collect information on (i) science teacher background qualifications and professional development, (ii) science teaching practices, (iii) school policies, practices and learning environments, and (iv) science teacher attitudes and beliefs related to students and student outcomes.

38. Teachers' responses complement the information collected from principals and students regarding practices and policies at the school level. Especially, teachers' professional perspectives allow for PISA to collect broader and more valid information on teaching and learning activities and strategies, covering inquiry-based, reflexive as well as traditional kinds of activities. The Teacher Questionnaire also provides reliable information on teachers themselves including professional development, beliefs and attitudes. It is often difficult to collect these data using the student and school questionnaires.

39. Information from sampled teachers can only be used to estimate school-level indicators, since there is no linkage between individual students with individual teachers. Unlike PISA 2022, there is no plan to develop teacher weights in PISA 2025, as the primary aim of the PISA 2025 Science Teacher Questionnaire is to describe students' learning environments rather than describe a teacher population.

[6] In some countries, there may be an overlap between the samples of science teachers and of teachers of foreign languages, when they teach both Science and English as a Foreign language, or they teach science in English, where English is not the main language of instruction of the school/ students. These teachers would be part of the sample of both modules (for countries/economies choosing to take both Science and Teacher Questionnaires).

[7] For more information about the FLA Teacher questionnaire module, please refer to section 4.2(iii) FLA Teacher Questionnaire

3.2. Added value for education policy of the PISA 2025 Science Teacher Questionnaire

40. The PISA 2025 Questionnaire Framework is organised by thematic modules, as was done in earlier assessments. Within those modules, the focus lies on specific issues that might be addressed by including information from different stakeholders in the educational setting, e.g. students, principals, and if applicable, parents and teachers. Thus, the teachers' perspectives collected through the Teacher Questionnaire can contribute to the improvement of measures represented by these modules.

41. For countries choosing the Teacher Questionnaire, additional prospects for reporting might be found when adding the modules outlined below:

(i) Teacher background, qualifications and professional development

42. The PISA 2025 Teacher Questionnaire will include similar questions to the ones included in the PISA 2015, 2018 and 2022 Teacher Questionnaires. These include teacher gender, teacher age, employment status, years of teaching experience, pre-service teacher training, through which pathways teaching qualifications were achieved, areas of teaching qualifications, areas of professional trainings and participation in in-service professional development activities **("Teacher qualification, training and professional development" module)**.

43. With regard to teacher qualifications, a distinction is made between initial education (tertiary/secondary education studies and certificates) and professional development. Professional development activities will cover those that aim to enhance teachers' knowledge in the three distinct areas of (i) content knowledge (related to the subject matter taught, its conceptual foundations, basic ideas), (ii) pedagogical content knowledge (related to teaching and learning the subject matter, including issues of student understanding, teaching practices, assessment procedures), and (iii) general pedagogical knowledge (related to basic concepts of pedagogy, such as classroom management). **("Teacher qualification, training and professional development" module)**.

44. Additional teacher backgrounds such as their socio-economic and immigrant backgrounds can be included in the Science Teacher Questionnaire. This will provide additional information to conduct analyses on the level of diversity in school and on role models in the context of student educational/occupational aspirations. **("School culture and climate" and "Post-secondary preparedness and aspirations" modules)**.

(ii) Teaching practices

45. As in earlier assessments, the PISA 2025 Science Teacher Questionnaire will ask science teachers about science teaching practices, types of tasks and curriculum content and general teacher behaviours (e.g. teacher support) to collect further information in addition to data from students and school principals. Teaching practices aiming to contribute to science identity can also be included. **("Organisation of student learning at school" and "Science teacher behaviour" and "Science identity" modules).**

46. This focus will allow for a broader, deeper and theoretically sound coverage of teaching and learning in countries/economies implementing this option. More specifically, PISA 2025 aims to improve questions regarding teacher guidance of student inquiry and reasoning because inquiry-based teaching practices play a significant role in science education, as detailed in the PISA 2025 Questionnaire Framework.

(ii) School policies, practices and learning environments

47. The PISA 2025 Science Teacher Questionnaire can include questions on interpersonal relations, professional collaboration and leadership. For example, questions can be included relating to (i) trust between teachers, students, parents, and school management, (ii) collaborative teaching, (iii) peer observation, (iv) exchange of teaching materials and practices, and (v) instructional leadership. It can also include questions on disciplinary climate. **("School culture and climate" module)**.

48. Teachers can provide valuable additional information on how content is selected, organised and implemented within the school. In PISA 2025, the Science Teacher Questionnaire can include questions on (i) science learning time in school, (ii) how science classes are organised (by topics, by ability, etc), (iii) whether each science class is compulsory or optional, (iv) the existence of a formal curriculum, and (v) the school philosophy on science teaching and learning. ("**Organisation of student learning at school" and "Exposure to science content" modules)**.

49. Given that they frequently meet with parents, teachers could prove to be a reliable source of information when it comes to measuring parental involvement. The Science Teacher Questionnaire can include questions about (i) whether their teacher education included teacher-parent cooperation as a topic, (ii) how they involve parents in their science teaching, and (iii) types of parental support they receive or they expect to receive. **("Parental involvement and support" module)**.

50. While questions about general school resources (financial, personnel, buildings, educational material) should be answered by the principal, questions about the use of classroom resources (rooms, learning materials, PCs, access to internet) should be better answered by teachers. Only teachers, and possibly students, can report on the frequency of using the existing classroom resources. **("School type and resources" module)**.

51. Assessment is closely related to teaching practices. Besides formal mandatory assessment, such as high-stakes testing and monitoring studies, teachers can provide information about the types and frequency of student assessment and grading. **("Assessment, evaluation and accountability" module)**.

(iv) Teacher attitudes and beliefs related to students and student outcomes

52. Teachers can provide information on their attitudes and beliefs about science and the environment. For example, constructs covered by the Student Questionnaire such as enjoyment of science, epistemic beliefs, environmental awareness, environmental concerns and environmental agency can be included in the Science Teacher Questionnaire. **("Science identity" module).**

53. The Science Teacher Questionnaire can include questions about teachers' attitudes towards failures and their beliefs about intelligence, given that parents' beliefs and practices influence the development of children's mindsets. **("General social and emotional characteristics, growth mindset and well-being" module)**.

54. The innovative domain of assessment in PISA 2025 will be Learning in Digital World (LDW). The Teacher Questionnaire can include questions addressing teachers' contribution to the development of their students' self-directed learning.

3.3. Implementation of the PISA 2025 Science Teacher Questionnaire

55. The PISA 2025 Science Teacher Questionnaire will take about 30 minutes, and will be delivered online in a computer-based format. This will allow teachers to work flexibly on the questionnaire either at school or from their home.

56. Teachers of the PISA sampled schools will respond to the Science Teacher Questionnaire. A sampling design for teachers will be developed by the PISA 2025 sampling contractor, building on the experiences gained through the PISA 2022 Teacher Questionnaire. In PISA 2022, 10 mathematics teachers and 15 teachers of other subjects are selected per school. If there are not 10 mathematics teachers or 15 teachers of other subjects, all are taken into the teacher sample. While teacher weights are developed in PISA 2022, there is no plan to develop teacher weights for PISA 2025.

57. There have been concerns that a Teacher Questionnaire might affect the participation rate of schools or students. The success of the PISA 2015 and 2018 Teacher Questionnaires indicates that the introduction of an additional Teacher Questionnaire has no negative side effect on the participation rate of schools and students. Satisfactory participation rates were also achieved in most of the countries/economies that distributed the PISA Teacher Questionnaire in 2015 and 2018. However, in a few countries/economies the non-response rate was above 20%.

Chapter 4. PISA 2025 Foreign Language Assessment - English

4.1. The importance of assessing Foreign Language Competency

58. In today's globalised world, economic interdependency, technological innovation and human migration flows have made interactions amongst people from different countries and cultures increasingly important. This has made proficiency in more than one language an essential tool to be able to communicate and interact with others and a key asset for employability. Learning foreign languages brings multiple benefits for individuals and economies, including increased intercultural understanding and global competence skills, economic benefits, and even improvements in cognitive outcomes.

59. Countries and economies around the world are investing significant resources in foreign language teaching and learning, and want to know if their efforts are working. They would like to compare their students' competencies in foreign languages with their own policy goals, international standards and other countries' performance. They are also keen to know if their efforts to promote foreign language teaching and learning are effective, and need evidence on the most effective policies and teaching approaches and methods.

60. The PGB decided in 2019 that the first cycle of the FLA will focus on English. It is expected that the FLA programme will extend to other languages in future cycles. English has become the lingua franca in many higher education settings, work force and civil society contexts where people need to communicate across countries. Reflecting this, English stands out as the most commonly taught foreign language in education systems around the world. It is a compulsory subject in many PISA-participating countries and considered a core subject in some countries.

61. The instruments for the first cycle of the FLA have been designed to consider the specific nature of English as a foreign language. The cognitive language tests will be developed by Cambridge Assessment English, and the Student, School and System-level Questionnaires have been developed to take into account the different ways that students learn English, both through school and – in some cases – through exposure in everyday life. While many countries have their own national assessments of English as a foreign language, the PISA 2025 Foreign Language Assessment - English (FLA) will allow them to interpret their results and policies with an international perspective.

4.2. The PISA assessment strategy for assessing foreign language

The first cycle of the PISA Foreign Language Assessment (FLA) programme

62. PISA 2025 will include for the first time an optional foreign language assessment, which will assess the main foreign language competences needed to study and work in a globalised world. The assessment will be implemented every two PISA cycles, allowing for trend analyses.

63. The PGB suggested feasibility and simplicity as guiding principles for the development of this first cycle, and to consider that further elements can be added in later cycles. Consultations with PISA countries/economies were undertaken to select the language and skills for inclusion in the first cycle of FLA. For this first cycle, the study will assess English as a foreign language and will focus on the three skills of reading,

listening and speaking.[8] The intention is to add other languages and skills in future cycles, subject to interest by countries/economies and technical feasibility.

64. In addition to the cognitive assessment, this option will also collect data on the background factors that relate to foreign language teaching and learning.

(ii) The PISA 2025 FLA cognitive assessment

The cognitive framework

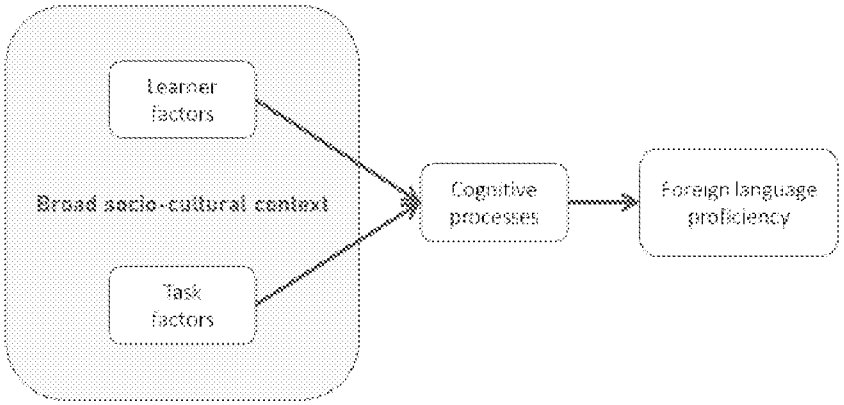
65. The PISA 2025 FLA Framework builds on other international experiences of assessing foreign languages, in particular the Common European Framework of Reference for Languages (CEFR) descriptive scheme and a socio-cognitive model of language use.

66. The framework defines foreign language proficiency as the ability to use a foreign language to communicate effectively. This requires a combination of communicative language competences and general competences that allow the foreign language learner to perform communicative language activities (reception, production, interaction and mediation), which involve one or a combination of reading, listening, speaking and writing skills. It also requires the activation of appropriate language strategies. While the framework provides a comprehensive description of foreign language proficiency, the 2025 assessment will focus only on some of its elements.

67. Foreign language proficiency is viewed as the joint outcome of two combined sources of influence, namely (i) learner factors and (ii) task or activity factors, which determine the cognitive processes that the learner employs when using a foreign language. Learner factors can include motivation, prior foreign language exposure and self-efficacy, as well as school environment, teachers' training, teaching and assessment practices. Task factors are the reasons that motivate the foreign language learner to engage in the language learning activity and meet the demands of the activity. They include task purpose, function, complexity, time constraints and linguistic demands. Learner and task factors interact within a broad socio-cultural context. The framework details how learner and task factors will be addressed in the assessment.

[8]More specifically, reading comprehension, listening comprehension and spoken production.

Figure 1. Factors that contribute to foreign language proficiency



Source: OECD (2021), PISA 2025 Foreign Language Assessment and Analytical Framework, PISA, OECD Publishing, Paris.

68. For more information on the cognitive framework, see the PISA 2025 Foreign Language Assessment Framework and the Framework brochure.

Test design proposal

69. An initial test design proposal was prepared by the OECD Secretariat based on the recommendations the PGB gave at its 46th and 47th meeting and inputs received from countries/economies, experts and the PISA Technical Advisory Group (TAG). It was presented and discussed at a webinar on 18 November 2020 with PISA Governing Board (PGB) representatives, National Project Managers (NPMs) and foreign language experts from countries. The test design will be further developed once the contractors responsible for the design, development and implementation and for sampling of the PISA 2025 cycle are in place.

70. The test design proposal states that the design for FLA should support the reporting goals of providing (i) valid measurement, at the population level, of students' reading, speaking and listening proficiency in a foreign language (ii) inter-correlations among skills assessed by the FLA, as well as between FLA-reading, and (iii) reading in the language of instruction.

71. The test design proposal aims to follow as much as possible the design used for the Financial Literacy in 2018 and 2022, while taking into account the particularities of assessing speaking and listening in the PISA setting, and the inclusion of the PISA Reading test to be administered to a sub-sample of students.

72. Some characteristics of each test are the following:

- For reading, the test will be based on the adaptive design for reading in PISA 2018 and is expected to follow a multi-stage adaptive design. It will last about 60 minutes per student.
- For speaking, the test would be non-adaptive and will last about 15 minutes per student (of which about 7-8 minutes recording time), plus time for testing the equipment.
- For listening, the test is expected to be adaptive, with a simplified multi-stage adaptive design. The overall length of the test is between 30 and 40 minutes (easier testlets are

expected to be slightly shorter than hard testlets, for an equivalent amount of information).

73. For more information, see Test design proposal for the PISA 2025 foreign language assessment [EDU/PISA/GB(2020)22].[9]

Reporting foreign language proficiency

74. For the PISA 2025 FLA, each skill assessed (reading, listening and speaking) will be reported on a separate six-point scale aligned with the CEFR scales. The use of these globally recognised scales will facilitate easy and appropriate interpretation of PISA results by educators and policy makers.

75. The CEFR level descriptors correspond to a progression in language competence; for each level, a series of "can-do" statements indicate what language learners whose competence falls within that level are typically able to do. The levels covered in PISA 2025 will be from Pre-A1 to C1.

76. In addition, it is expected that the results will also be reported on a continuous scale, as is normally done in PISA.

(iii) The PISA 2025 FLA background questionnaires

77. The PISA 2025 FLA includes a set of questions – in addition to the cognitive language test – to be included in the PISA questionnaires for students and school principals. For countries/economies that wish to administer questionnaires to teachers and/or parents, the FLA also includes modules for these two groups.[10] The FLA also includes a System-level Questionnaire that collects information on foreign language teaching and learning from policy officials.

78. The information gathered through the questionnaires will be analysed together with the information on foreign language proficiency collected through the tests to provide a comprehensive picture of the factors that influence foreign language learning inside and outside school.

79. The questionnaire framework was developed based on an in-depth review of the scientific literature and past large-scale international assessments, and on the input received from experts and policy makers. The background questionnaires cover 44 constructs categorised into the four policy domains of (i) Government and school policies, (ii) Students and learning environment, (iii) Teacher's training and profile, and (iv) Teaching practices. In addition, the background questionnaires cover two transversal topics, ICTs, and the use of the target language for instruction in other subjects. Most of the constructs are addressed in multiple questionnaires.

80. While the FLA has been designed as a set of instruments that complement each other to obtain the maximum amount of data, analyses and policy benefits, it is possible for PISA participating countries/economies who cannot engage with the whole assessment to

[9] Available for individuals with access to O.N.E Members and Partners (link) or PISA's SharePoint site (link)

[10] The PISA 2025 school, teacher and Student Questionnaires are computer based, while the Parent Questionnaire is paper-based.

apply only the questionnaires (all of them or some of them). The costs of doing this are described in Annex A.1.

81. For more information on the questionnaire framework, see Section 5 of the PISA 2025 Foreign Language Assessment Framework.

FLA Student and School Questionnaire modules

82. For countries/economies taking the FLA, the Student and School Questionnaires will each include a module of questions related specifically to foreign language.

83. The length of the FLA Student module in the Main Survey is expected to be approximately 10-15 minutes in addition to the main Student Questionnaire, and the length of the School Student module about 5-10 minutes in addition to the main school questionnaire.

FLA Parent Questionnaire module

84. Countries/economies taking both the FLA and the Parent Questionnaire are encouraged to include a module of questions for parents related specifically to foreign language. In principle, all parents would answer the same questionnaire regardless of whether their children are taking the FLA tests or not. Including this module comes at no additional international cost, as it is included in the international fee for the FLA.

85. The length of the module in the Main Survey is expected to be approximately 5 minutes (in addition to the main Parent Questionnaire).

FLA Teacher Questionnaire

86. Countries/economies taking the FLA may choose to administer a questionnaire for teachers who teach English as a foreign language. This is an International Option within the PISA 2025 FLA, with an international fee in addition to the that of the FLA Option. Cost estimates for all International Options are summarised in the summary table (Table 2. Summary table (Cost estimates)).

87. The Teacher Questionnaire for PISA 2025 has a core module, which is followed by a science teacher module and/or a FLA teacher module.[11] Countries/economies are implementing the option are able to implement only the FLA teacher module without the science teacher module.[12]

88. In addition to the core module of the Teacher Questionnaire, which focuses on questions relevant to teachers across subject domains, the FLA Teacher module is composed of questions addressing (i) foreign language teacher profiles and qualifications,

[11] In some countries, there may be an overlap between the samples of science teachers and of teachers of foreign languages, when they teach both Science and English as a Foreign language, or they teach science in English, where English is not the main language of instruction of the school/ students. These teachers would be part of the sample of both modules (for countries/economies choosing to take both Science and Teacher Questionnaires).

[12] For more information about the Science Teacher Questionnaire module, please refer to section 3.1

(ii) foreign language teaching practices, (iii) foreign language teaching environment, and (iv) foreign language teacher professional development.

89. The PISA 2025 FLA Teacher Questionnaire will be delivered online in a computer-based format. This will allow teachers to work flexibly on the questionnaire either at school or from their home.

90. A sampling design for teachers will be developed by the PISA 2025 sampling contractor. It will build on the experiences gained through the previous PISA Teacher Questionnaires.

91. Information from sampled teachers can only be used to estimate school-level indicators, since there is no linkage between individual students with individual teachers. There is no plan to develop teacher weights in PISA 2025, as the primary aim of the PISA 2025 FLA Teacher Questionnaire is to describe students' learning environments rather than describe a teacher population.

92. The length of the FLA Teacher Questionnaire in the Main Survey is expected to be approximately 30 minutes (10 minutes for the Core Module and 20 minutes for the FLA module).

FLA System-level Questionnaire

93. The national centres of countries/economies taking the FLA will be responsible for completing a System-level Questionnaire. Its goal is to collect information on characteristics of an education system and on the wider national context that can have an impact on foreign language learning. The questionnaire will be delivered online in a computer-based format.

94. The system-level questions address the topics of human resources in primary to upper secondary foreign language education, guidelines for language-teaching approaches and assessments. They also address the regulatory environment, for example about who decides which languages are a compulsory part of the curriculum, and on the intensity of target language learning at school. Other dimensions covered include policies on English exposure through the media (e.g. subtitling/dubbing of programmes on public television) and information regarding tourism levels and characteristics.

95. PISA participants who are not taking the PISA 2025 FLA can choose to answer this questionnaire at no additional cost.

4.3. Implementation and feasibility of the PISA 2025 Foreign Language Assessment

Implementation

96. The PISA 2025 FLA cognitive test will be a computer-based assessment that will use the same platform as the other components of PISA. It will take students approximately 120 minutes to complete.

97. In order to analyse the relationship between student's proficiency in the FLA and in the core PISA Reading domain, the test design proposal suggests that students participating in the FLA will be placed into three groups taking different combinations of tests, detailed in the table below. This has implications on the data collection procedures.

Table 3. Proposed allocation of students for the FLA

Test type	Proportion of sample	First hour	Second hour	Implications for data collection
1	25%	FLA-reading	PISA Reading*	These students require no special room arrangement and are expected to take the test together with the regular PISA population
2	25%	PISA Reading*	FLA-reading	
3	50%	FLA-speaking and listening	FLA-reading	A separate test session, in a room with specific seating and hardware arrangements, is required. This can be run in parallel to the main test session.

Note: * PISA Reading refers to the reading test in the student's language of instruction which is part of the standard PISA test.

Target population and sampling

98. The PISA 2025 FLA is appropriate for assessing English when it is formally taught in school settings and it is not the main language of instruction (the main language of schooling is defined as the language of the PISA reading test).[13] English will most likely not be an official language of the country, but in some cases, it can be.

99. To the extent possible, the FLA option should use the same population and the same school sampling and student sampling frames as the main PISA. Reporting will occur, in principle, on the same population as for main PISA.

100. However, given the complexities of the language landscape, exceptions may apply, such as:

- Participating entities or schools that use English as the main language of instruction (and where the PISA reading test is therefore administered in English) will normally not be considered eligible for the FLA. It would be possible to make an exception and include schools where, due to a system-level policy to improve students' language skills, English is the main language of instruction but is not the language spoken by students at home and in their social environment.
- Countries/economies implementing the option may choose the FLA to be administered in a subset of school sampling strata only.[14]

101. Ideally, English should not be the mother tongue of a significant percentage of students of the participating entity. This is very difficult to control for when sampling within the PISA context, so being a native speaker will not be an exclusion criteria. However, information about the students' linguistic environment and background will be collected through the Student Questionnaire and used for the analyses.

102. Whenever possible, the FLA sample will be composed of an additional sample of students from the same schools that participate in the core PISA survey. To reduce

[13] While the assessed language can be one of the languages of instruction, it should not be the main language of instruction

[14] Sampling standards for this option would need to be achieved in this subset, including (if needed) through over-sampling of schools and students, and would be adjudicated separately. When selecting (and defining) the strata to include in the target population, countries should be reminded of the implications for trend measurement, and ensure, to the extent possible, that the same definition and meaning of the target population can be kept in future rounds.

burdens for schools and countries, the FLA sample size will be as small as possible, ideally not much larger than the one for Financial Literacy, which is 11 students per school. The final sample size will need to be considered in relation to the overall survey design and may be larger than the one for Financial Literacy. An updated estimate of the FLA sample size will be shared with countries/economies by the end of March 2022.

103. The standard sample design for FLA is expected to fit the situation in most countries/economies. However, there will be national options available for countries/economies that need or wish to modify the sample design. For example, countries/economies implementing the options may choose to identify schools that do content and language integrated learning (CLIL) and/or bilingual schools as an explicit stratum and oversample them.

104. The target population definition and implications for sampling will be further developed and described in the PISA 2025 Technical Standards. While efforts will be made to make accommodations for countries/economies implementing the option that need such accommodations, any exceptions to the definition of the population and to the sampling guidelines will have to be discussed and agreed with the contractors for PISA 2025 and may imply additional international costs if considered a national option. In addition, exceptional approaches may be noted in the reporting of results and could imply that results are not considered comparable to those from other countries/economies implementing the option.

Assessing listening and speaking

105. The FLA in PISA 2025 will be the first time that PISA includes a listening and speaking test. A comprehensive pilot was conducted in 2020 to confirm the feasibility of including these skills in a PISA test setting for 15-year old students. The pilot successfully concluded that these skills can be assessed through PISA. The pilot was implemented in five countries (Colombia, Germany, Russian Federation, Spain and Switzerland). It confirmed both the technical aspects (adequate technological capacity to record and playback quality audio) and operational aspects (seating arrangements and external disturbances) of testing listening and speaking skills.

106. Students taking Listening and Speaking will be in a separate test session in a room with specific seating arrangements and hardware.

107. Ensuring the comparability of the testing conditions is essential for the data collection of listening and speaking. Students taking FLA listening and speaking will require headsets which meet the following technical specifications:

- Over-ear headset with a closed back and padding for comfort;
- Adjustable band to fit variety of head sizes;
- A boom directional microphone (with at least up/down vertical directionality);
- A wired connection via a stereo 3.5mm audio jack or USB-A connector (depending on the computer used for testing);
- Headsets may require appropriate drivers on the computers used for testing, to be installed and confirmed as working before the test day.

108. For more information, see the PISA Foreign Language Assessment: Outcomes of the Pilot Study report draft [EDU/PISA/GB(2021)18].[15]

International and National Costs

109. The international fee for participating in the FLA will, like other options, depend on the number of countries/economies that participate. It is estimated at EUR 68 777 if a total of 10 countries participate, and EUR 53 276 if a total of 20 countries participate (see Table 2 above). The international fee covers the development, co-ordination, survey operations, sampling, data analyses and support. The fee has been kept at a minimum thanks to financial support from the European Commission for the development of the assessment, including the development of the assessment framework, the draft questionnaires, and the coordination of the pilot for speaking and listening. In addition, Cambridge Assessment English is a partner for the development of the test and will conduct the central coding of speaking and provide the cognitive items and technical advice, all free of charge.

110. In addition to the international fee, participating countries will need to cover the national implementation costs. As with all PISA options, national centre resources are required to implement the survey operations for the FLA. The table below provides some key information specific to this Option for national centres to estimate their national implementation costs.

[15] Available for individuals with access to O.N.E Members and Partners (link) or PISA's SharePoint site (link)

Table 4. PISA 2025 FLA: Operational activities that will impact on the national costs

Activity	Tasks/requirements for national centers (Yes/No)	Description
Additional testing room and additional Test Administrator	**Yes**	Students taking the listening and speaking tests will be in a separate testing room and will require an additional test administrator.
Translation/adaptation of cognitive test instructions	**Yes**	The instructions and orientation section of the three tests will require translation and adaptation.
Translation/adaptation of questionnaires	**Yes**	The Student and School Questionnaire modules will require translation and adaptation. The system level questionnaire will not require translation or adaptation. Countries may choose also to participate in optional Parent and Teacher Questionnaire modules, which will also require translation and adaptation.
Provision of headsets	**Yes**	Students taking the listening and speaking tests will require headsets that meet the technical specifications (see **section 4.3 Assessing listening and speaking**). Headsets normally used by schools will not necessarily meet these requirements.
Translation/adaptation of test administrator manuals and materials	**Yes**	The test administrator manuals and materials for listening and speaking will include special instructions that will require translation and adaptation.
Translation/adaptation of cognitive test Items	**No**	The tests will be integrally in English and there will be no translation or adaptation required.
Coding of open-ended questions	**No**	Countries will not need to do any coding of the FLA test. The listening and reading tests will not have open-ended items and the coding of speaking responses will be conducted centrally by Cambridge Assessment English with the technical support of the contractor for PISA 2025.

4.4. Further reading

EDU/PISA/GB(2021)18, PISA Foreign Language Assessment: Outcomes of the Pilot Study[16]

EDU/PISA/GB(2020)22, Test design proposal for the PISA 2025 Foreign Language Assessment[17] OECD (2021), PISA 2025 Foreign Language Assessment Framework, PISA, OECD Publishing, Paris

OECD (2020), Learning Another Language – The PISA 2025 Foreign Language Assessment Framework, PISA, OECD Publishing, Paris

PISA 2025 Foreign Language Assessment (FLA): Responses to questions raised at webinar, 18 November 2020[18]

[16] Available for individuals with access to O.N.E Members and Partners (link) or PISA's SharePoint site (link)

[17] Available for individuals with access to O.N.E Members and Partners (link) or PISA's SharePoint site (link)

[18] Available for individuals with access to PISA's SharePoint site (link)

Annex A. FLA questionnaire costs for PISA participants not taking FLA

Table A A.1. FLA questionnaire costs for PISA participants not taking FLA

	Possible arrangements for PISA participants not taking FLA
FLA Teacher Questionnaire module	This is an International Option described in this document. The costs are the same regardless of whether the PISA participant is taking the FLA option.
FLA System-level Questionnaire	Available free of charge for all PISA participants, regardless of whether they are taking the FLA option or not.
FLA School, Student and Parent modules	Taking some or all of these modules will be considered national options, to be negotiated directly with the contractors.

國家教育研究院計畫申請書

壹、基本資料：　　研究計畫編號：

本計畫主持人姓名			職稱	
本計畫名稱	中文			
	英文			
全程執行期限		自民國112年4月1日起至民國116年6月30日止		
計畫連絡人		姓名：_____ 電話：(公)_____　　(宅/手機)_____ E-Mail：		
對教育(政策)的預期貢獻				
中文摘要				
中文關鍵詞				
英文摘要				
英文關鍵詞				

（※中英文摘要、對教育(政策)的預期貢獻為必填欄位）

申請人簽章：_____　　日期：

貳、計畫人力

請依照「計畫主持人」、「共同主持人」、「專任助理」等類別之順序分別填寫。

姓名	本計畫職級	服務單位與職稱	在本研究計畫內擔任之 具體工作性質、項目及範圍	備註

參、執行經費

年度		總計經費 （單位：新臺幣元）	備註
第1年2023 (112/04/01~113/03/31)	人事費		
	業務費		
	設備費		
第2年2024 (113/04/01~113/12/31)	人事費		
	業務費		
	設備費		
第3年2025 (114/01/01~114/12/31)	人事費		
	業務費		
	設備費		
第4年2026 (115/01/01~115/12/31)	人事費		
	業務費		
	設備費		
第5年2027 (116/01/01~116/06/30)	人事費		
	業務費		
	設備費		
總計			

＊ 詳細明細填列於國教署委辦計畫經費申請表

肆、計畫內容及重點說明

(一)計畫之背景及目的。請詳述本計畫之背景、目的、重要性及國內外有關本計畫之研究情況、重要參考文獻之評述等。

(二)計畫執行方法、進行步驟及執行進度，請分年列述：

1. 本計畫採用之研究方法與原因。

2. 預計可能遭遇之困難及解決途徑。

3. 重要儀器之配合使用情形。

4. 如為須赴國外或大陸地區，請詳述其必要性以及預期成果等。

(三)對所蒐集資料保存管理方式、深度分析及成果發表之規劃

(四)預期完成之工作項目及成果，請分年列述：

1. 預期完成之工作項目。

2. 對於學術研究、國家發展及其他應用方面預期之貢獻。

3. 對於參與之工作人員，預期可獲之訓練。

(五)執行單位之支援事項。

附件4

教育部國民及學前教育署委辦計畫項目經費表

計畫名稱：XXXX				
辦理方式：□行政委託　□行政指示　□行政協助				
計畫期程：　年　月　日至　年　月　日				
計畫經費總額：　元				
經費項目	計畫經費明細			
	單價（元）	數量	總價(元)	說明
人事費				
人事費 小計				
業務費				
業務費 雜支				
業務費 小計				
行政管理費				
設備及投資				
設備及投資 小計				
合　計				

備註：

一、行政管理費按業務費之金額級距，分段乘算下列比率後加總：

（一）業務費300萬元(含)以下者，得按業務費*10%以內編列。

（二）業務費超過300萬元以上部分，得按超過部分*5%以內編列。

二、行政管理費上限為60萬元，但因特殊需要經本署同意者，不在此限。

三、經費執行涉及須依「政府機關政策文宣規劃執行注意事項」及預算法第62條之1及其執行原則等相關規定辦理者，應明確標示其為「廣告」，且揭示教育部國民及學前教育署名稱，並不得以置入性行銷方式進行。

四、經費動支應依中央政府各項經費支用規定及本要點經費編列基準表規定辦理。

五、上述中央政府經費支用規定，得逕於「行政院主計總處網站-友善經費報支專區-內審規定」查詢參考。

六、本經費表新增或勻支二級用途別經費項目，得由執行單位循內部行政程序自行辦理。

七、依政府採購法辦理者，其預算經費表得參照本表辦理。

餘款繳回方式：

□繳回

□不繳回

□依教育部補(捐)助及委辦經費核撥結報作業要點辦理，未執行項目經費（含人事費未依學歷職級或期程聘用人員致剩餘款）應繳回。

□執行率未達____%，計畫餘款應繳回。

□如編列出席費、訪視費、諮詢費、輔導費、講座鐘點費、審查費、國內旅費、工作費等經費項目不得支用其他項目，且該項目餘款應繳回。

國家教育研究院國際評比審查表

主持人：	服務機關：
計畫名稱：	

一、 審查項目及評分：

	%	分數
1.主持人與共同主持人專業能力		
(1)主持人之研究能力、執行國際性研究計畫之經驗、國內學界領導性	20	____
(2)整體團隊在相關領域研究之能力	20	____
請列出不適擔任共同主持人之人員： _____		
2.計畫執行方式及步驟可行性（含計畫經費合理性，包括總經費及分年經費增刪建議等）	50	____
3.所需資源之合理性及執行單位之配合度	10	____

二、 審查結果：

（　　）通過，逕行會議複審(85-100)
（　　）修正後通過，進入會議複審(71-84)
（　　）不通過（70 分以下）

總分

三、 審查意見：請針對上述審查項目給予建議

審查委員：
日期：111 年　　月　　日

國家教育研究院
National Academy for Educational Research

國家調查執行團隊同意書

_____同意_____ _____為申請國家教育研究院「國際學生能力評量計畫（Organisation for Economic Co-operation and Development，PISA）2025」國家調查執行團隊將本人列為該計畫之

☐ 主持人
☐ 共同主持人
☐ 協同主持人
☐ 專家諮詢顧問

並於獲得優選始擔任該計畫之職務。

保密義務：簽署人於擔任該調查計畫之開始，於後續調查執行相關之執行、諮詢、調查材料、會議等資料，皆應遵守保密規定，未經本院同意不得散布、複製、傳送、告知或以任何其他方式揭露予非調查計畫相關之人、機關或團體，須盡保密義務及管理之責任。

計畫申請學校/單位：

計畫申請人：

簽署人：

服務單位：

聯絡電話：

聯絡電址：

中 華 民 國　　年　　月　　日