DATE: 09 January 2015
TO: Shelly Martinez, OMB
THROUGH: Kashka Kubzdela, NCES
FROM: Patrick Gonzales, NCES
RE: Program for International Student Assessments (PISA) 2015 Main Study (OMB\# 1850-0755 v.16)

OMB granted clearance for the PISA 2015 Field Test and Main Study Recruitment on September 19, 2013 (1850-0755 v.14). The purpose of this memo is to summarize changes between the activities and materials approved in the field test package and those that will be used in the PISA 2015 Main Study as described in Parts A and B and appendixes in this submission (the attached final U.S. versions of the 2015 main study questionnaires have been approved by the PISA Governing Board and PISA international consortium).

## Appendix D - Nonresponse Bias Analysis Plan

The following phrase was added to the NRBA plan qualifying that per NCES standards, the NRBA analyses would be done only if the response rates fall below NCES standards: "If school response rates are below NCES statistical standards".

## Part A - Procedural

In the PISA 2015 Field Test and Main Study Recruitment request approved on September 19, 2013, we indicated that we planned to subsample 8 students to return for a second assessment session to take the financial literacy assessment on computer. We will now subsample 11 students to ensure that we have the same number of students assessed as expected. This change is a result of a review of data from those countries that administered financial literacy in the field test and is being implemented across all countries administering financial literacy in the main study. We have updated Part A and Part B to reflect this procedural change. This change does not affect the burden estimate.

## Part A - Burden

We have updated the burden estimates (see Section 12 of Part A) to reflect the possible participation in PISA 2015 of two states that desire state-level estimates (in addition to the participation of Puerto Rico which was included in 1850-0755 v.14). The revised overall estimate is based on a national sample, two state samples, and a Puerto Rico sample.

## Appendix C-Questionnaire Items

Changes between the field test and main study questionnaire items, including revisions to the field test items, new items, and eliminated field test items (more items were field tested than were planned to be used in the main study), are listed below in tables. In the main study, one student questionnaire form will be used, whereas the field test used 3 forms with items rotated across students. As discussed in the briefing NCES provided to OMB in June 2014, the field trial evaluated whether the items and scales functioned properly to measure the target constructs: (a) that they were intended to measure (validity), (b) in a cross-nationally valid manner, and (c) efficiently. In some cases, the field trial was used to compare alternative measurement approaches for measuring constructs. Several new, innovative measurement methods were introduced in the PISA 2015 field trial. These appeared throughout the questionnaires, but primarily in the student and teacher questionnaires. Statistical analyses of the field test data conducted by the International Consortium focused on evaluating the psychometric functioning of (a) items within scales and (b) the scales themselves. Some of the new methods were deemed successful and the PISA Governing Board approved their use in the main study questionnaires. The selection of items for the main study also took into consideration research risk, policy implications, country priorities, implementation issues, and per-item and per-construct timing information.

Additionally, Appendix C presents the student locator items that will be asked of students to support a possible future methodological study to validate PISA by relating student performance on PISA 2015 to other cognitive, education, and employment outcomes. In addition to the items that were cleared for use in PISA 2012 (1850-0755 v.13), we will also ask students for email addresses of a relative or another contact to facilitate follow up.

## Summary of Changes to Field Test School and Student Questionnaire Items

A. School Questionnaire Items

1. Modified Items
2. Deleted items
B. Student Questionnaire Items

Note: There is only 1 form of the student questionnaire for the Main Study. Each student will complete the questionnaire estimated at 30 minutes. Also, there are no new items in the Student questionnaire for the Main Study (i.e., added post field trial).

1. Modified Items
2. Deleted items
C. General Teacher Questionnaire Items
3. Modified Items
4. Deleted Items
D. Science Teacher Questionnaire Items
5. Modified Items
6. Deleted Items

## A. School Questionnaire Items

## 1. Modified Items

| 2015 Main Study |  |
| :--- | :--- |
| Item \# | Item |
| General <br> Directio <br> $\mathbf{n}$ | Note: The estimated time to complete has been reduced from 60 minutes to 45 minutes |
| SC002 | Note: Stem has been updated to school year of interest <br> As of February 1, 2015, what was the total school enrolment (number of students)? |
| SC018 | Note: Responses Q03NA and Q04NA have been deleted. <br> How many of the following teachers are on the staff of your school? <br> Q03TA) Teachers with less than an associate's degree <br> Q04TA) Teachers with an associate's degree |


| SC037 | Note: Responses Q11NA, Q12NA, Q13NA have been deleted. <br> Do the following arrangements aimed at quality assurance and improvements exist in your school and where do they come from? <br> Q11TA) Policies on negative consequences for teachers performing poorly <br> Q12TA) Policies on rewards for teachers performing exceptionally well <br> Q13TA) Policies on the continuing professional development of particular poorly performing teachers |
| :---: | :---: |
| SC040 | Note: Responses Q01NA, 04NA, 06NA, 07NA, 08NA, 09NA, 10NA, 13NA, and 14NA have been deleted. Based on your last internal school evaluation results, did your school implement any measures in the following areas? <br> Q01NA) School's edueational resources (e.g., textbooks, computer, library materials, laboratery materials) <br> Q04NA) Extra-etrrieular activities (such as participation, content) <br> Q06NA) Assessment practices <br> Q07NA) Social climate in sehool <br> Q00NA) Teacher cooperation <br> Q09NA) Use of ICT for teaching and leaming <br> Q10NA) School management (leadership, counseling, cooperation, sehool program) <br> Q13NA) Diversity management <br> Q14NA) Cooperation with external partners |
| SC041 | Note: Responses Q02NA and Q07NA have been deleted. Thinking about the last external evaluation in your school. Do the following statements apply? Q02NA) We used the results of the external evaluation to draw up clearly defined measures. Q07NA) The effects triggered by the extemal evaluation "disappeared" very quickly at our sehool. |
| SC063 | Note: Responses Q01NA, Q07NA, and Q08NA have been deleted. Do the following statements about parental involvement apply to your school? <br> Q01NA) Our school invites parents to participate in school-wide activities on a regular basis. <br> Q07NA) Our school identifies and integrates resources and services from the community to strengthen sehool programs, family practices, and student learning and development. <br> Q08NA) Ourr sehool keeps parents informed about their child's progress. |
| SC064 | Note: Responses Q05NA01 and Q06TA01 have been deleted. <br> During 2012-2013 academic year, what proportion of students' parents participated in the following schoolrelated activities? <br> Q05NA01) Volunteered to support school activities (e.g., volunteered in the sehool library, media center, of eafeteria, assisted a teacher, appeared as a guest speaker) $\qquad$ <br> Q06TA01) Assisted in fundraising for the sehool. $\qquad$ |

## 2. Deleted Items

| Item \# | Stem |
| :--- | :--- |
| SC005 | Do the following statements about ICT use apply to your school? |$|$| SC006 | How many instructional days per calendar week does your school provide to students in 10th grade? |
| :--- | :--- |
| SC007 | On approximately how many days in the last 12 months was your school closed or deviated from the <br> regular curriculum because of the following reasons? |
| SC008 | Which of the following statements best describes the schooling available to students in your location? |
| SC011 | About what percentage of your total funding for a typical school year comes from the following <br> sources? |
| SC015 | How many teachers in your school are teaching any of the following science subjects? |
| SC020 | Which of the following procedures for recruiting teachers is more common at your school? |
| SC021 | Is the completion of a teacher education or training program required to teach at your school? |
| SC022 | In your school the completion of a teacher education or training program is required to teach. How <br> strict is this rule? |
| SC023 | In the last academic year, did you fill all vacant 10th grade science teaching positions at your school? |
| SC024 | For how many days within a school year is a teacher in your school required to take part in <br> professional development activities? |
| SC026 | Does your school have a formal policy concerning professional development activities? |
| SC028 | Dand |


| SC029 | Does your formal school policy concerning professional development activities include the following <br> topics? |
| :--- | :--- |
| SC030 | What resources does your school provide for professional development activities? |
| SC031 | Which proportion of all professional development activities attended by science teachers from your <br> school has been dedicated to each of the following three areas? |
| SC033 | Please indicate the frequency that each of the following occurs in this school following a teacher <br> appraisal. |
| SC038 | Did the last internal evaluation at your school address any of the following? |
| SC039 | Thinking about the last internal evaluation in your school. Do the following statements apply? |
| SC043 | Which policies regarding grade retention are implemented in your school? |
| SC044 | Which measures to support students at risk of academic failure are implemented in your school? |
| SC045 | Among the students in your school's final grade, what proportion of them left school without a <br> diploma or alternative credential (e.g., a GED in the last academic year? |
| SC046 | Does your school have a policy on additional instruction for grades with 15-year-olds (e.g., tutoring, <br> private lessons, additional instruction)? |
| SC047 | How do your school, district or other governing authority or government handle additional <br> instruction? |
| SC049 | Schools differ in the way they address cultural diversity. For each of the following pairs of <br> statements, please choose the statement that the majority of teachers in your school would agree with. |
| SC050 | How many teachers in your school would agree with he following statements? |
| SC051 | Do the following statements reflect practices for multicultural learning in your school? |
| SC054 | Do the following statements regarding students' lunch apply to your school? |

## B. Student Questionnaire

## 1. Modified Items

| 2015 Main Study |  |
| :--- | :--- |
| Item \# | Item |
| ST011 | $\begin{array}{l}\text { Note: Responses Q13NA, Q14NA, and Q15NA have been deleted. } \\ \text { Which of the following are in your home? }\end{array}$ |
| Q13NA) A DVD playef |  |
| Q14NA) Flat sereen TV/Plasma TVILCD TV |  |
| Q15NA) Cable TV/Pay TV/Satellite TV |  |$]$


| ST082 | Note: Responses Q04NA, Q05NA, Q06NA, Q07NA, Q10NA, Q11NA, Q15NA, Q16NA, Q17NA, and Q18NA have been deleted. <br> To what extent do you disagree or agree with the following statements about yourself? <br> QO4NA)- like to be in charge of groups or projects. <br> Q05NA) I enjoy sharing ideas. <br> Q06NA) I convince others to see things my way. <br> Q07NA) I enjoy exchanging ideas. <br> Q10NA) I like convincing peers. <br> Q11NA) I enjoy bringing a team together. <br> Q15NA) I enjoy cooperating with peers. <br> Q16NA) I am open to all sonts of opinions. <br> Q17NA) I enjoy providing feedback. <br> Q18NA) I am flexible when working with a team. |
| :---: | :---: |
| ST092 | Note: Responses Q03NA, and Q07TA have been deleted. <br> How informed are you about the following environmental issues? <br> QO3NA) Acid raim <br> Q07NA) Energy shortages |
| ST093 | Note: Responses Q02NA, and Q09TA have been deleted. <br> Do you think problems associated with the environmental issues below will improve or get worse over the next 20 years? <br> QO2NA) Energy shortages <br> Q09NA) Acid rain |
| ST095 | Note: Responses Q01NA, Q02NA, Q03NA, Q05NA, Q06NA, Q09NA, Q10NA, Q11NA, Q12NA, Q14NA, and Q16NA have been deleted. <br> To what extent are you interested in the following science topics? <br> Q01NA) The concept of an organism (e.g., umieellular and multieellular) <br> Q02NA) Humans (e.g., health, nuttrition) <br> Q03NA) Populations (e.g., species, evolution, biodiversity) <br> Q05NA) Struture of matter (e.g., particle model, bonds) <br> Q06NA) Chemical changes of matter (e.g., chemieal reactions, energy transfer) <br> Q09NA) Interactions between energy and matter (e.g., light and radio waves) <br> Q10NA) Change in Eatth systems (e.g., plate tectonies, constructive and destructive forces) <br> Q11NA) Earth's history (e.g., fossits, origin and evolution) <br> Q12NA) Earth in space (e.g., gravity, solar systems, galaxies) <br> Q14NA) Explanations of how things work <br> Q16NA) How seience can help solve environmental problems |
| ST098 | Note: Responses Q04NA, Q11NA, Q12NA, and Q13NA have been deleted. <br> When learning science topics at school, how often do the following activities occur? <br> Q04NA) The conclusions of experiments integrate students' arguments. <br> Q11NA) Students have the opportunity to repeat experiments and compare observations. <br> Q12NA) Students are eneouraged to question and critique seientific arguments made by other students. <br> Q13NA) Students are required to engage in diseussions among |
| ST103 | Note: Responses Q02NA, Q04NA, Q05NA, Q06NA, Q07NA, Q09NA, Q10NA, Q12NA, Q13NA, Q14NA, Q15NA, Q16NA, Q17NA, Q18NA, Q19NA and Q20NA have been deleted. <br> How often do these things happen in your classes for this science course? <br> Q02NA) A small group discussion between students takes place. <br> Q04NA) Gurrent scientific issues are diseussed. <br> Q05NA)-Students make caleulations using seientific formulas. <br> Q06NA) The teacher uses an interactive white board. <br> Q07NA) Students do their own scientific study and related research. <br> Q09NA) Students carry out practical work. <br> Q10NA) Students write up laboratory reports. <br> Q12NA)-The teacher diseusses questions of practical relevance. <br> Q13NA) Students read materials from a textbook. <br> Q14NA) Students take notes from the board. <br> Q15NA) Students diseuss materials from a textbook. <br> Q16NA) Students wateh videos. <br> Q17NA) Students use the internet. |


|  | Q18NA) The class corrects homework or a test. <br> Q19NA ) Students fill out worksheets. <br> Q20NA) Students present something to the rest of the class. |
| :---: | :---: |
| ST107 | Note: Response Q04NA has been deleted. <br> How often do these things happen in your classes for this science course? <br> Q04NA) The teacher provides individual support for advanced students. |
| ST123 | Note: Responses Q05NA, Q06NA, Q07, Q08NA, and Q09NA have been deleted. <br> Thinking about this school year: to what extent do you agree or disagree with the following statements? <br> Q05NA) My parents support school rules and sehool discipline. <br> Q07NA) My parents encourage me to learn new skills. <br> Q08NA) My parents provide me with support to complete school tasks. <br> Q09NA) My parents ask me questions to initiate a deeper understanding of what I'm studying. |
| ST131 | Note: Responses Q02NA, Q05NA, Q07NA, Q09NA, Q10NA, and Q12NA have been deleted. How much do you disagree or agree with the statements below? <br> Q02NA) Some ideas in science today are different than what seientists used to think. <br> Q05NA) There are some questions that scientists cannot answer. <br> Q07NA) New discoveries can change what scientists think is trte. <br> Q09NA) It is good to have an idea before I stant an experiment. <br> Q10NA) One important part of science is doing experiments to come up with ideas about how things work. <br> Q12NA) In science, there can be more tham one way for scientists to test their ideas. |

## 2. Deleted items

| Item \# | Stem |
| :---: | :---: |
| ST009 | What is your mother currently doing? |
| ST010 | What is your father currently doing? |
| ST017 | Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. |
| ST018 | Thinking about your life: how much do you disagree or agree with each of the following statements? |
| ST020 | How old were you when you arrived in the United States? |
| ST023 | Which language do you usually speak with the following people? |
| ST024 | Discrimination refers to negative behavior directed against people because of their membership in a particular group. Would you describe yourself as a member of a cultural or ethnic group that is discriminated against in the United States? |
| ST025 | Thinking about your experiences in school: to how many teachers in your school do the following statements apply? |
| ST028 | When you eat lunch at school, where do you usually get the food you eat? |
| ST029 | During the past 7 days, how many days did you eat or drink the following? |
| ST030 | Were you taught any of the following in your classes this school year or last school year? |
| ST033 | How much do you disagree or agree with each of the following statements about yourself? |
| ST036 | Thinking about your school: to what extent do you agree with the following statements? |
| ST037 | How often do these things happen in your classes? |
| ST040 | Thinking about the teachers at your school: to what extent do you agree with the following statements? |
| ST041 | Who pays for the following things at your school? |
| ST042 | How many weeks did you spend on the following activities during your school vacation? |
| ST045 | Regarding the activities mentioned in the previous question, do you or your family have to save money in advance them? |
| ST046 | How often do you do the following things with your parents or someone else in your home? |
| ST048 | Is your mother working as an employee or is she self-employed? |
| ST049 | At her job, does your mother have any formal responsibility for supervising the work of other employees? |
| ST050 | How many people work for your mother's employer at the place where she works? |
| ST051 | Does your mother work on her own or does she have employees? |
| ST052 | How many people does your mother employ? |
| ST053 | Is your father working as an employee or is he self-employed? |
| ST054 | At his job, does your father have any formal responsibility for supervising the work of other employees? |
| ST055 | How many people work for your father's employer at the place where he works? |
| ST056 | Does your father work on his own or does he have employees? |
| ST057 | How many people does your father employ? |


| ST058 | How many class periods per week are you typically required to attend for the following subjects? |
| :---: | :---: |
| ST066 | How often do these things happen in this science course? |
| ST067 | In classes for this science course, approximately what proportion of the class time is usually lost due to class interruptions described in the previous question? |
| ST069 | Think about your last two science class periods in the course you named above. About what proportion of time were you not concentrating on things related to this science course? |
| ST070 | This school year or the last school year, have you taken additional instruction in the following subjects? |
| ST072 | Think about your last two sessions in your additional science instruction. How often do these things happen in this additional, non-compulsory science instruction? |
| ST073 | Think about your last two sessions in your additional science instruction. About what proportion of time were you not concentrating on things related to this additional science instruction? |
| ST074 | During the last ten sessions of additional science instruction, how many did you miss? |
| ST075 | The following questions ask about the most recent day you attended school. At what time did you do the following? |
| ST077 | On the most recent day you attended school, how long did you study in the morning before going school? |
| ST079 | On the most recent day you attended school, how long did you study after leaving school? |
| ST083 | How often do you do the following at school? |
| ST084 | How often do you do the following out-of-school? |
| ST085 | How well does each of the following statements below describe you? |
| ST086 | How well does each of the following statements describe you? |
| ST087 | To what extent do you disagree or agree with the following statements about yourself? |
| ST088 | To what extent do you disagree or agree with the following statements about yourself? |
| ST089 | To what extent do you disagree or agree with the following statements about yourself? |
| ST090 | Please read the descriptions about the following three students. Based on the information provided here, how much would you disagree or agree with the statement that this student is organized? |
| ST091 | What kind of work do your father and mother do for their main jobs? |
| ST096 | How interested are you in the following school subjects? |
| ST099 | Within the last month at school, has a computer or a similar device (e. g., a tablet) ever been used for the following purposes in your science classes? |
| ST102 | How often do these things happen in your science classes? |
| ST105 | How often do these things happen in your classes for this science course? |
| ST106 | How do you respond to the teacher's feedback for this science course? |
| ST108 | Thinking of your past two lessons in this science course: how much do you disagree or agree with the following statements? |
| ST109 | Thinking of your past two lessons in this science course: how much do you disagree or agree with the following statements? |
| ST110 | Thinking of your past two lessons in this science course: how much do you disagree or agree with the following statements? |
| ST112 | How much do you agree with the statement below? |
| ST115 | How informed are you about these topics? |
| ST116 | Please read the descriptions about the following three students. Based on the information provided here, how much would you disagree or agree with the statement that this student is anxious about taking a test? |
| ST117 | Please read the descriptions about the following three students. Based on the information provided here, how much would you disagree or agree with the statement that this student is anxious about taking a test? |
| ST118 | To what extent do you disagree or agree with the following statements about yourself? |
| ST120 | Thinking about your school: to what extent do you agree or disagree with the following statements? |
| ST122 | Thinking about people who are important to you and how they view science: to what extent do you disagree or agree with the following statements? |
| ST124 | Did you attend pre-school? |
| ST132 | How easy do you think it would be for you to perform the following tasks on your own? |
| ST133 | We are interested in what you think about the need for scientific skills in the job market today. How much do you disagree or agree with the following statements? |
| ST134 | How much do you agree with the statements below? |
| ST135 | How important should Lucy rate the statements below in her decision to buy the medicine? |
| ST136 | How strongly should the statements below affect Joel's decision to buy a helmet? |
| ST137 | How strongly should the following statements affect Sandra's decision to set up a training plan? |
| ST138 | How strongly should the following statements affect Sandra's decision to set up a training plan? |
| ST139 | How strongly should the following statements affect Sandra's decision to set up a training plan? |
| ST140 | How strongly should the following statements affect Sandra's decision to set up a training plan? |
| ST141 | How much do you disagree or agree with the following statements about yourself? |


| ST142 | Below you can see pairs of different occupations. In each line, please choose the one that you admire more. |
| :--- | :--- |
| ST143 | How much do you disagree or agree with the statements about the use of new technologies (e.g., tablet computer, <br> smartphone, Blu-ray player) below? |
| ST144 | If you were in a position to decide on the application of a certain technology, which of the two arguments is <br> more important in deciding to use each new technology? |
| ST145 | How often do you use the following? |

## General Teacher Questionnaire

## 1. Modified Items

| 2015 Main | Study |
| :---: | :---: |
| Item \# | Item |
| General Direction s | Note: The time to complete the teacher questionnaire has reduced from 45 minutes to 30 minutes. |
| TC007 | Note: Responses Q03NA and Q04NA have been deleted. <br> How many years of work experience do you have? <br> Q03NA01) Year(s) working in other edtreation roles (do not include years working as a teacher) $\qquad$ <br> Q04NA01) Year(s) working in other jobs $\qquad$ |
| TC026 | Note: Responses Q03NA and Q08NA have been deleted. <br> We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements? <br> Q03NA01) I would like to change to another school if that were possible. <br> Q08NA01) I think that the teaching profession is valued in society. |
| TC055 | Note: Responses Q09NA, Q10NA, Q12NA, Q15NA, and Q16NA have been deleted. <br> To what extent do you use the following approaches to assign final semester grades to students in 10th grade? Q09NA) I recognize exeeptional academic merit (e.g., taking patt in a national contest). <br> Q10NA) I use a set seale of percentages of correct responses to assess the students' performanee. <br> Q12NA) I consider the quality of homework. <br> Q15NA) I consider students' behavior (e.g., distuptive or supportive behavion). <br> Q16NA) I base grades on my overall judgement of student's learning. |
| TC060 | Note: Responses Q01NA, Q03NA, Q05NA, Q08NA, Q10NA, Q11NA, Q12NA, Q13NA and Q14NA have been deleted. <br> Q01NA) The principal gives us a sense of purpose <br> Q03NA) The principal has high expectations for us as professionals <br> Q05NA) The principal is aware of my expertise <br> Q08NA) The principal delegates activities that are critical for attaining objectives <br> Q10NA) The principal takes the commmenity's aspirations and requests into account <br> Q11NA) The principal ensures that staffing is equitable <br> Q12NA) The principal regularly observes classroom activities <br> Q13NA) It is easy for staff to approach the principal <br> Q14NA) The prineipal has brought a lot of autonomy to the sehoot |

## 2. Deleted Items

| Item \# | Stem |
| :---: | :---: |
| TC003 | Have you taught 10th grade in the last 12 months? |
| TC008 | Did you submit a written application for the position as a teacher directly to your school? |
| TC009 | You did not submit an application to your school directly. Did the district or other governing agency assign you to your position? |
| TC010 | Was your current position at your school your first choice? |
| TC011 | How important were the following reasons for applying to work at this particular school? |
| TC016 | You attended a standard teacher education or training program. What level of formal education did you reach there? |
| TC017 | For how many months did you attend the teacher education or training program? |
| TC019 | During the last 12 months, did you participate in any of the following professional development activities, and if yes, for how many days did they last? |
| TC022 | How many days within a school year are you required to take part in professional development activities? |
| TC023 | How does your school support your professional development activities? |
| TC024 | Teachers play an important role in communication with parents. From your perspective, to what extent are the following topics of parent-teacher communication important? |
| TC025 | To what extent are the following ways of communicating with your students' parents important to you? |
| TC047 | In your teaching, to what extent can you do the following? |
| TC049 | For these activities, do teams use online collaboration tools such as email, chat, shared documents, etc.? |
| TC050 | What do you do to improve your students' collaboration skills? |
| TC027 | To what extent do you disagree or agree with the following statements about your teaching practices? |
| TC056 | Please estimate the percentage of students in 10th grade at this school who have the following characteristics. |
| TC057 | Schools differ in the way they address cultural diversity. For each of the following pairs of statements, please choose the statement that the majority of teachers in your school would agree with. |
| TC058 | How many teachers in your school would agree with the following statements? |
| TC059 | Do the following statements reflect practices for multicultural learning in your school? |
| TC061 | In relation to the most successful countries in international comparison studies, how much is the education system in the United States losing ground? |
| TC062 | To what extent do you disagree or agree with the following statements regarding your school? |
| TC063 | During the last academic year has there been at least one internal evaluation at your school? |
| TC064 | Did the last internal evaluation at your school address any of the following? |
| TC065 | Thinking about the last internal evaluation in your school. Do the following statements apply? |
| TC066 | Based on your last internal school evaluation results, did your school implement any measures in the following areas? |
| TC068 | Concerning the feedback you have received at this school, to what extent has it directly led to a positive change in any of the following? |

## Science Teacher Questionnaire

## 1. Modified Items

## Note that TC007 and TC026 are general and science teacher questionnaire common items that have been modified.

| 2015 Main Study |  |
| :--- | :--- |
| Item \# | Item |
| General <br> Direction <br> s | Note: The time to complete the teacher questionnaire has reduced from 45 minutes to 30 minutes. |
| TC007 | Note: Responses Q03NA and Q04NA have been deleted. <br> How many years of work experience do you have? <br> Q03NA01) Year(s) working in other edteation roles (do not inelude years wing as a teacher) _ <br> Q04NA01) Year(s) working in other jobs_ |


| TC026 | Note: Responses Q03NA and Q08NA have been deleted. <br> We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements? <br> Q03NA01) I would like to change to another school if that were possible. <br> Q08NA01) I think that the teaching profession is valued in society. |
| :---: | :---: |
| TC031 | Note: Responses Q01NA, Q02NA, Q03NA, Q05NA, Q06NA, Q08NA, Q09NA, Q10NA, Q12NA, Q16NA, Q17NA, Q19NA, Q21NA and Q22NA have been deleted. <br> To what extent do you disagree or agree with the following statements about regular cooperation among your fellow science teachers and yourself? <br> Q01NA) We pursue the same educational objectives. <br> Q02NA) We decide together what teaching materials should be used in lessons. <br> in science. <br> Q05NA) We commmicate information about subject-related isstes. <br> Q06NA) We cooperate constructively on ways of teaching science. <br> Q08NA) We use our planning periods to work together. <br> Q09NA) We exchange tasks that we used to create written tests. <br> Q10NA) Our criteria for grading tests differ very little. <br> Q12NA) We diseuss ways to stimmlate students' science skills. <br> Q16NA) I diseuss lessons with other seience teachers even outside official meetings and conferences. <br> Q17NA) We exchange teaching material. <br> Q19NA) Otr diseussions mostly focus on the achievements of our students. <br> Q21NA) We discuss strategies for coping with professional problems. <br> Q22NA) We talk in an open manner about our experiences with classroom teaching. |
| TC033 | Note: Responses Q01NA, Q02NA, Q03NA, and Q07NA have been deleted. <br> To what extent can (or could) you do the following? <br> Q01NA) Explain basic scientific ideas (such as energy or photosynthesis) to my science class <br> Q02NA) Design good test questions for my students <br> Q03NA) Provide an alternative explanation, for example when students are confused <br> Q07NA) Identify science related misconceptions through serutiny of student work |
| TC034 | Note: Responses Q03NA, Q05NA, and Q07NA have been deleted. <br> To what extent can (or could) you do the following? <br> Q03NA) Pass an entrance exam for a science bachelor's course at college <br> Q05NA) Recommend high-quality science presentations in the media (TV, magazines) to my students <br> Q07NA) Use formal models to explain scientific phenomena |

## 2. Deleted Items

Note that TC003, 008, 009, 010, 011, 016, 017, 019, 022, 023, 024, and 025 are general and science teacher questionnaire common items that have been deleted.

| TC003 | Have you taught 10th grade in the last 12 months? |
| :--- | :--- |
| TC008 | Did you submit a written application for the position as a teacher directly to your school? |
| TC009 | You did not submit an application to your school directly. Did the district or other governing agency assign you <br> to your position? |
| TC010 | Was your current position at your school your first choice? |
| TC011 | How important were the following reasons for applying to work at this particular school? |
| TC016 | You attended a standard teacher education or training program. <br> What level of formal education did you reach there? |
| TC017 | For how many months did you attend the teacher education or training program?? |
| TC019 | During the last 12 months, did you participate in any of the following professional development activities, and if <br> yes, for how many days did they last? |
| TC022 | How many days within a school year are you required to take part in professional development activities? |
| TC023 | How does your school support your professional development activities? |
| TC024 | Teachers play an important role in communication with parents. From your perspective, to what extent are the <br> following topics of parent-teacher communication important? |
| TC025 | To what extent are the following ways of communicating with your students' parents important to you? |
| TC027 | To what extent do you disagree or agree with the following statements about your teaching practices? |
| TC032 | For the following pairs of statements, please choose the response that is more prevalent in your school. |
| TC035 | Below you will find descriptions of four science teachers. Please read each of the descriptions of these teachers, <br> then state to what extent you disagree or agree with the highlighted final statement about the respective teacher. |
| TC036 | Keeping your main science subject in mind, how much do you disagree or agree with the following statements? |
| TC038 | How often do theses situations occur in your science classes? |
| TC040 | Does the curriculum for science for 10th grade include the following topics? |
| TC042 | In which format is the intended science curriculum for 10th grade made available to teaching staff? |
| TC044 | Are students informed about the availability and content of the science curriculum (e.g., during a school <br> assembly or in a newsletter)? |

