

OECD Teaching and Learning International Survey  
(TALIS 2013 Field Trial and Main Study)

Supporting Statement Part C

National Center for Education Statistics  
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## INSTRUMENT DEVELOPMENT SUPPORTING DOCUMENTATION

The Teaching and Learning International Survey (TALIS) is an international survey of teachers and principals focusing on the working conditions of teachers and the teaching and learning practices in schools. TALIS has been administered one time previously, in 2008. To prepare for the second TALIS data collection in 2013, the international sponsoring organization, the Organization for Economic Cooperation and Development (OECD), created an Item Development Expert Group (IDEG) to guide the refinement of the 2008 survey instruments as well as the development of new (to TALIS) measures. TALIS is a collaborative effort by the participating countries, guided by their governments on the basis of shared policy driven interests. Representatives of each country form the TALIS Board of Participating Countries (BPC), which determines the policy orientations of TALIS as well as the analysis and results produced from it. Through the National Center for Education Statistics (NCES) of the Institute of Education Sciences, the United States has engaged in the development of the 2013 instruments, which are currently in a field trial phase. The TALIS 2013 survey instruments—a school questionnaire for the principal or head administrator and a teacher questionnaire—will continue to undergo refinement through August of 2012, in preparation for the main study data collection. The versions of the instruments submitted in this package are the final, adapted versions to be administered in the field trial during spring 2012.

TALIS 2013 focuses on teacher training and professional development, teachers' appraisal and feedback, school climate, school leadership, teachers' instructional beliefs, and teachers' pedagogical practices. The school and teacher questionnaires are guided by a study framework (not yet published) that builds on the themes described below. The school questionnaire includes sections on principal's personal background information, school background information, school climate, school management and leadership, teacher appraisal and feedback, and teacher continuous professional development. The teacher questionnaire includes sections on teacher's background information, teacher continuous professional development, teacher appraisal and feedback, teaching practices beliefs and attitudes, school management, school climate, and job satisfaction.

Because the themes explored in TALIS cut across the school and teacher questionnaire, the themes are discussed jointly. The rationale for each of these themes is briefly outlined below, excerpted from the not-yet published study framework.

**Theme: personal background information** (School field trial instrument Q1-Q6; Teacher field trial instrument Q1-Q15)

This theme focuses primarily on key socio-demographic variables that are fairly standard for data collections of this type. Questions related to a respondent's gender, age, educational attainment, and years of experience are considered key factors that may relate to differences found in the other themes explored in TALIS. The teacher questionnaire includes items related to employment status and elements of the respondent's teacher training program.

**Theme: school background information** (School field trial instrument Q7-Q13)

This theme includes basic school socio-demographic factors that may relate to differences explored in other themes in TALIS. Questions in this theme relate to the size of the school, funding sources, urbanicity (school locale), school choice competition, and basic information on student characteristics such as English Language Learners, special needs students, and students from disadvantaged homes.

**Theme: teacher appraisal** (School field trial instrument Q25-Q27; Teacher field trial instrument Q25-Q30)

This theme focuses on the presence of and processes related to teacher appraisal and feedback, as performed by the school principal. As defined in TALIS, teacher appraisal and feedback occurs when a teachers' work is reviewed by the school principal, an external inspector, or a teacher's colleagues. Such evaluations provide an opportunity for teachers to receive feedback on their work and can serve as a way to identify what is and is not working in the classroom.<sup>1</sup> As learned through TALIS 2008, the specific form of appraisal can vary widely across contexts and can be formal or informal, subjective or objective, and summative or formative. Research suggests that summative evaluation systems may be useful for quality assurance and accountability purposes as well as teacher recognition while formative evaluation systems can help teachers further develop their pedagogical practices.<sup>2</sup> Research also suggests that it is important that appraisal and feedback systems be viewed as an integrated part of the school culture rather than an "add-on."<sup>3</sup> Depending on the form of teacher appraisal and feedback, evaluation can have a significant impact on elements of teachers' professional lives, including professional development, job satisfaction, and compensation. Based on TALIS 2008 data, teacher appraisal and feedback is often only weakly linked to teacher professional development opportunities but teachers reported that appraisal and feedback increased their job satisfaction.<sup>4</sup> Because teachers' level of job satisfaction has been found to have an impact on the classroom environment and student outcomes,<sup>5</sup> the kinds of evaluation and feedback systems in place in schools may have an indirect affect on student learning.

To round out the information obtained from teachers, the school questionnaire includes items about the appraisal and feedback that principals receive (Q19-Q20).

**Theme: school climate and ethos** (School field trial instrument Q28-Q30; Teacher field trial instrument Q48)

School climate in TALIS refers broadly to the quality and character of school life, and has been shown to be related to student well-being and academic achievement.<sup>6</sup> The theme of school climate and ethos are intended to provide indicators about teacher-parent and teacher-student relations, factors shown to be related to student achievement.<sup>7</sup> Although the definition of school climate varies across studies and contexts, research has identified several factors that contribute to a positive school climate. Among these are teaching and learning practices, disciplinary norms, decision-making processes, organizational structures, safety, a sense of community, and interpersonal relationships.<sup>8</sup> Of these issues, TALIS focuses on disciplinary issues, organizational structures, and community/interpersonal relationships.

Results of studies suggest a relationship between student achievement and school organization. For example, one study found that measures of professional culture in schools—including three dimensions: satisfaction with leadership, professional cooperation, and consensus—were related to levels of bullying found in the schools: schools with the highest levels of bullying had significantly worse scores on these

professional culture measures than schools with the lowest levels of bullying.<sup>9</sup> Another study found that a safe and stimulating learning environment had a positive effect on student involvement, attitudes, and educational attainment.<sup>10</sup> Further, research suggests that the impact of a positive school climate may be particularly important for “at risk” and immigrant students.<sup>11</sup> School climate has been found to also affect teachers. Studies suggest that a positive school climate has a positive impact on teachers, including teacher retention.<sup>12</sup>

**Theme: school management and leadership** (School field trial instrument Q14-Q24; Teacher field trial instrument Q47)

This theme focuses on identifying the factors associated with effective school leadership and its relation to teacher and school effectiveness. As found in TALIS 2008, effective school leadership appears to play a role in teachers’ working lives and can help develop the ability of teachers to support student achievement.<sup>13</sup> And, as noted in a report on PISA 2009 results, “the quality of an education system cannot exceed the quality of its teachers and principals.”<sup>14</sup> The IDEG and BPC thus considered it important to more closely examine the characteristics of effective school leadership, how effective leadership may impact both teachers and students, and how effective leadership may be cultivated. In TALIS, school leadership has been expanded beyond the sole responsibility of the school principal to include the possibility of distributed or team leadership within schools. Two core elements of a principal’s role or style of leadership included in TALIS are instructional leadership and administrative management. Instructional leadership is defined as the actions that a principal takes to promote growth in student learning.<sup>15</sup> Research suggests that principals who take a strong role in instructional leadership emphasize high-quality instruction and develop policies that support student achievement, such as supporting the development of learning communities, giving instructional feedback to teachers, modeling effective instruction, and supporting the use of assessment data in the classroom.<sup>16</sup> In addition to taking a leadership role in the area of instruction, research suggests that successful school leaders develop the organization by strengthening the school’s collaborative culture and creating a more flexible organization structure by demonstrating participatory or distributed leadership.<sup>17</sup> Distributed leadership in school is thought to result in a work culture that promotes collegiality and collaborative problem solving, both of which have been shown to have positive impacts on student achievement by affecting key teacher variables such as teacher motivation and teacher capacity.<sup>18</sup> Of course, effective distributed leadership does not spontaneously occur; rather, it is thought to result from collective discussion, development, and dialogue among those working within the school.<sup>19</sup>

**Theme: teacher continuous professional development and mentoring/induction** (Teacher field trial instrument Q16-24 and Q31-36)

This theme focuses on teacher education, from initial education through induction to in-service professional development and mentoring. Research suggests that teacher quality has implications for student success.<sup>20</sup> In some countries, schools attempt to support professional development by allowing professional development activities to be organized during work hours and permitting teachers to obtain a leave of absence or a research grant to undertake studies. Results from TALIS 2008 indicated, however, that many teachers report persistently unmet professional development needs, particularly in the areas of teaching special needs students, teaching with technology, and student discipline.<sup>21</sup> Although most

teachers indicated that they participated in some form of professional development, the majority of teachers reported they participated in professional development activities for less than one day per month. Given the gap between teachers' reported professional development needs and the training they are receiving, TALIS seeks to examine in more detail the practice, needs, and limitations to pursuing professional development.

It is thought that high-quality professional development, particularly in the form of mentoring or induction, may increase the likelihood of retaining teachers in the profession, an issue shared by a number of countries.<sup>22</sup> A number of studies suggest that mentoring is effective for increased retention and stability in schools and can result in changes in teaching practices.<sup>23</sup>

Teacher professional development has also been shown to help teachers improve their classroom practices.<sup>24</sup> However, its impact appears varied, as the research literature suggests it may have the strongest impact on changes in teacher learning, followed by changes in teacher behavior, and less of an impact on student learning.<sup>25</sup> Research also suggests that professional development that occurs in a continuous fashion and at regular intervals is most effective for supporting changes in teachers' practices.<sup>26</sup> TALIS seeks to examine in more detail how schools implement teacher professional development, particularly in an era of increased accountability and student diversity.<sup>27</sup>

Four types of professional development have been found to have the most impact on teacher knowledge and behavior: observation of actual classroom methods; microteaching; video/audio feedback; and practice.<sup>28</sup> Research further suggests that three core features of teacher professional development have positive effects on teachers' self-reported increases in knowledge and skills and can lead to change in classroom practices: collaboration and active learning; continuity across time and activities; and differentiation.<sup>29</sup>

**Theme: teaching practices, beliefs, and attitudes** (Teacher field trial instrument Q31-Q46)

Though there are challenges in studying teachers' beliefs due to their subjective nature, a body of research has developed which suggests that teachers' beliefs are related to classroom practices and, ultimately, what students learn.<sup>30</sup> As one component in the process of teaching and learning, teachers' instructional or pedagogical beliefs contribute to a deeper, multifaceted understanding about the context of an effective learning environment. The link between beliefs and practices is fairly well established.<sup>31</sup> Research also shows that of the many factors associated with teaching and learning, teachers' instructional beliefs are relatively malleable,<sup>32</sup> although triggering changes in beliefs remains a challenge.<sup>33</sup>

Evidence from TALIS 2008 suggests that significant variation in beliefs about instruction exists at the country- and teacher-level.<sup>34</sup> That is, teachers within a given school tend to hold different beliefs about instruction as do teachers across countries. It might be unsurprising that meaningful differences in instructional beliefs were found across countries, since language, culture, geography, and values all contribute to the school climate and might influence the belief systems of teachers within a country. Less expected, however, is the relative heterogeneity of teachers' instructional beliefs within schools. One possible explanation for this finding is that teachers' beliefs are formed early on and remain stable over time. TALIS will continue to examine variation in teachers' instructional beliefs at the country, school, and teacher levels.

In addition to understanding more about teachers' instructional beliefs, TALIS also aims to measure teachers' beliefs about student assessment practices since the global movement toward assessment and accountability continues to gain momentum and traction with policy makers.<sup>35</sup> Previous research indicated that, especially with respect to accountability assessments, teachers felt confused and powerless and that testing negatively impacted teacher practices.<sup>36</sup> Research has shown that teachers generally believe that assessment for accountability is more harmful than good and contributes to feelings of anxiety, shame and guilt on the part of the teacher (Haney, 2000).<sup>37</sup> As such, it will be useful to policy makers and researchers to have an international perspective on the way teachers think about assessment and how this relates to effective learning environments.

Pedagogical practices are at the core of teachers' and students' classroom experiences, yet TALIS 2008 revealed that in some countries, including Mexico, Italy, and Turkey, school leaders reported that a lack of pedagogical preparation hindered the provision of instruction.<sup>38</sup> TALIS identifies structure, student orientation, and enhanced activities as basic dimensions of teaching practices. More specifically, pedagogical practices that have shown some relation to student learning include aspects of direct instruction, including close monitoring of student progress, adequate pacing, and clarity of presentation, as well as classroom practices such as clear classroom management, supportive teacher attitudes, and the use of higher order thinking.<sup>39</sup> Research suggests that it is important to offer teachers opportunities not only to develop their classroom practices, but their pedagogical practices as well. For example, research suggests that when teachers have opportunities to expand and develop their own teaching repertoires, they are more likely to provide an increased range of learning opportunities for students.<sup>40</sup> Similarly, in a study of special education teachers recognized for excellence in teaching, teachers who were effectively able to promote literacy development appeared to have experience with a variety of instructional approaches and have extensive background knowledge about instructional practices.<sup>41</sup>

It is important to acknowledge that although effective pedagogical practices clearly overlap across subjects and student populations, some practices may be specific to particular subjects or student populations. For example, for mathematics teachers, research into the benefits of teacher-directed and student-centered instruction remains largely inconclusive, though there is evidence that well designed and effectively implemented tutorials can have a positive impact on mathematics performance, particularly at the middle and high school levels.<sup>42</sup> Physical resources also appear to impact student learning in mathematics, but results are somewhat inconclusive.<sup>43</sup> For example, a study of 8th grade students found that students in classes that use calculators regularly score higher on the National Assessment of Educational Progress than students in classes where calculators are used rarely if at all.<sup>44</sup> At the same time, a review of eleven recent studies found that calculators have limited to no impact on calculation skills, problem solving, or conceptual development over periods of up to one year, though the impact of long-term use was not examined.<sup>45</sup>

Teacher practices are more than just pedagogical in nature; they also include professional practices. Studies of teachers focus not only on what happens in the classroom, but also on the professional activities in which teachers are involved, including the ways in which teachers interact with one another.<sup>46</sup>

Co-operation and collaboration among teachers has repeatedly been found to be a particularly important element of professional practice and can include the exchange of instructional materials, developing curricula, meeting to discuss student progress, and collective learning activities.<sup>47</sup> Some researchers have argued the importance of pedagogical practices for student achievement warrants a shift in initial teacher education from a focus on what teachers know and believe to focus on what teachers do.<sup>48</sup>

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