Teaching beliefs and practice

- Most teachers participating in the Teaching and Learning International Survey (TALIS) report that they see themselves as facilitators to students’ own enquiry (94%) and that students should think of their own solutions to practical problems before teachers show them the solution (93%). These answers indicate that most teachers hold constructivist beliefs, i.e., they see learning as an active process that aims to foster critical and independent thinking.

- At the same time, teachers report using passive teaching practices, such as presenting a summary of recently learned work, more frequently than active teaching practices. Less than a third of teachers ask students to work on a project that requires at least a week to complete (an active teaching practice).

- Engagement in professional development and a positive classroom climate are among the factors associated with a more frequent use of active teaching.

What is TALIS?

TALIS (Teaching and Learning International Survey) is the first international survey examining teaching and learning environments in schools. It asks teachers and school principals about their work, their schools and their classrooms. This cross-country analysis helps countries identify others facing similar challenges and learn about their policies.

TALIS 2013 focused on lower secondary education teachers and their principals. It sampled 200 schools in more than 30 countries and 20 teachers in each school.

More information is available at: www.oecd.org/talis
Teachers’ beliefs about teaching and learning

Teachers’ beliefs on how learning happens can influence their choice of teaching methods. TALIS asked teachers whether they agree that: 1) teachers are facilitators of students’ own enquiry; 2) students should be allowed to think of solutions to practical problems themselves before the teacher shows them how they are solved; 3) thinking and reasoning processes are more important than specific curriculum content; and 4) students learn best by finding solutions to problems on their own. These statements describe a constructivist view of teaching, which assumes that actively engaging students fosters critical and independent thinking and allows learning. As Figure 1 shows, the vast majority of teachers across TALIS countries adhere to these beliefs.

![Figure 1: Teachers’ beliefs about teaching and learning](source)

Source: OECD, TALIS 2013 Database.

Classroom practices

Teaching methods such as working in small groups or project-based learning can stimulate students’ holistic development by allowing them to develop a wider range of skills, such as those needed for team work or critical thinking. However, constructivist beliefs do not always translate into a frequent use of active teaching practices.

Figure 2 shows that in general, fewer teachers in TALIS countries report frequently using small group work (an example of an active teaching practice) than presenting a summary of recently learned content (a more passive practice). Similarly, the majority of TALIS teachers (73%) report frequently checking students’ exercise books and homework, whereas giving students projects that take more than a week to complete is frequently used by only 28% of TALIS teachers.

1. The use of ICT in teaching is another active teaching practice that was described in more detail in Teaching in Focus no. 12 (OECD, 2015b).
What this means in practice

Classroom time is a limited resource, especially as it is also devoted to administrative tasks or keeping order. Active practices, such as small group work, project work and the use of ICT, can stimulate students to become critical and independent thinkers. This kind of active teaching and learning is in line with what teachers believe to be the nature of learning and teaching. However, these practices can be more demanding on teachers than more traditional activities, such as summarising learned content. Reliance on one set of teaching methods is unlikely to be the most beneficial to learning, especially if a teacher’s choice is guided by their lack of preparation or time to teach more actively. Instead, active and more traditional methods should be used together to balance the demands of curriculum and limited time with teachers’ beliefs and the need to support active learning.

Factors associated with frequent use of active teaching methods

Several factors are associated with a more frequent use of active teaching methods. For instance, in several TALIS countries, a positive classroom climate and classrooms with a higher proportion of academically gifted students are associated with a more frequent use of active teaching. In contrast, teachers who report having classrooms with a high proportion of students with behavioural problems or special needs tend to use these practices less frequently. This could indicate that teachers regard challenging classrooms as not suited for the use of more active practices, or that these classrooms put too much burden on teachers to enable them to engage in active teaching methods.

2. Please also see Teaching in Focus no. 9 (OECD, 2015b), which looks at keeping order in the classroom in more detail.
In many TALIS countries, teachers who participated in individual or collaborative research on a topic of interest, or are members of professional networks of teachers are more likely to involve students in projects that require more than a week to complete or working in small groups (see Figure 3). Similarly, mentoring and peer observation are also associated with more frequent use of active teaching. Thus, collaboration between teachers can be an important tool for stimulating the use of active teaching practices, in addition to its benefits in terms of teachers’ professional development and job satisfaction.3

Figure 3 • Relationships between active teaching practices and professional development activities

<table>
<thead>
<tr>
<th>Small group practice (no. of countries engaged in activity)</th>
<th>Projects that require at least one week to complete (no. of countries engaged in activity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in a network of teachers formed specifically for the professional development of teachers</td>
<td>13</td>
</tr>
<tr>
<td>Individual or collaborative research on a topic of interest</td>
<td>11</td>
</tr>
<tr>
<td>Mentoring and/or peer observation and coaching</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Cells show the number of countries where a significant positive relationship is found between the use of the teaching practice and the professional development activity.

Source: OECD, TALIS 2013 Database.

The bottom line TALIS shows that teachers generally agree on how teaching should actively involve students and facilitate their own enquiry. However, the reality of teaching is often different and many teachers rely more heavily on passive rather than active teaching practices. Active teaching techniques can greatly benefit students’ holistic development, for example it can give them chance to negotiate with other team members in small group work and practice skills necessary for team work. In order to stimulate active teaching and the development of skills students need for lifelong success, systems should assist teachers in balancing their practice with more active methods. This can be done, for example, by targeted professional development on active teaching practices.

3. Please see also Teaching in Focus no. 5 (OECD, 2014c), which focused on factors associated with teachers job satisfaction.