

Self-assessment as a whole-school practice

A school in Burgos uses a self-assessment tool of ICT use in education. Students also assess themselves in class starting from primary school which can help them develop their learning-to-learn skills at an earlier age.

Summary

Teachers in a public primary school in Burgos (Spain) use free digital tools to make formative use of assessment data. The school encourages the continuous professional development of the teaching staff in using digital tools for student-centered pedagogies. The staff also uses SELFIE, a tool developed by the European Commission for a self-assessment of how digital tools are used in teaching practices. The school believes that teachers and the whole staff must be open to constantly reflect on their way of working to improve their practice and adapt to students' needs.

The policy context

Teachers in Spain regularly undergo training in the use of free and open-source tools, enabling them to offer students strategies to progress through the primary school curriculum.

The public primary school syllabus is defined under four legislative frameworks: Law 8/2013 for the Improvement of Educational Quality; Royal Decree 126/2014 establishing the primary education syllabus; Decree 122/200 establishing the pre-school education second cycle syllabus in Castilla y León; and Order EDU/519/2014 establishing the syllabus and regulating the implementation, assessment and development of primary education in Castilla and León.

Contents, evaluation criteria and learning standards for each curriculum area can be adjusted to suit the characteristics of the school and students.

The school context

[Arlanzón River public primary school](#) is in the city centre of Burgos. There are around 450 students from pre-school to primary education. Families have a middle socioeconomic level, and most parents have a university degree. There are 26 teachers, one advisor and one social worker. Some organisations also collaborate with the school



to work with a range of students, for example, an association for autism. Unlike other schools in the city, the school has opted for an intensive, continuous day from 08:30 to 13:30 to meet the needs of families for a work-school balance.

In each subject, the curriculum modules are divided into teaching units and each unit is broken down into sub-themes, activities, videos and ICT-based tasks in which students go deeper into the theme they are working on using various digital tools. The school also has a [Moodle](#) classroom environment where teachers can include links to relevant resources that they and students can access. The traditional way of evaluation has been modified to integrate formative assessment. Teachers can follow the progress of each student better and can evaluate the process of teaching and learning to improve it.

The school is a pioneer in self-assessment, constantly assessing areas for improvement and updating every year its school improvement plan to adapt to changing needs. The plan has multiple dimensions related to the operation of the school quality and improvement.

Recent innovations include a bilingual centre in English (with a native language assistant who works with primary students one hour a week with each class), and strategies to take advantage of information and communication technologies in learning. The centre has a [CoDiCe level 5 certification](#) (regional level recognition of schools' integration of ICT), which means that year 5 primary school students have individual laptops. Therefore, there are several subjects where textbooks have been removed and students are now learn from digital resources. In addition, from that year onwards students must bring a mini laptop to school every day to be able to work digitally. In each subject, digital resources are divided into teaching units and each unit is broken down into sub-themes, activities, videos and ICT proposals.

School initiatives have been recognised by national Ministry of Education quality awards. The school develops innovation projects at the regional level such as the ICT Level 5 Certification given by the Department of Education of the Regional Government to certify reaching a defined level of excellence in the application of ICT.

Challenges

Some of the challenges faced when developing this type of practice have been the following:

- Lack of digital infrastructure (computers and internet connection). This was overcome by generating the online quiz codes for students to take the test at



another time or using the computer of the classmate who has finished the quiz first.

- Gaps in students' digital knowledge, difficulties in performing activities with computers. However, they manage with the help of teachers or classmates.
- Helping primary school children reflect on their learning through self-assessment and formative assessment
- Implementing a self-directed and learner-centred pedagogy from an early age
- Harnessing digital technologies for formative assessment.

Enabling factors

The school head believes that success in innovation involves professional development and training, an innovative culture/collaborative environment, resources and financial support.

The bilingual section of the school continuously promotes the use of new technologies in the classroom. Teachers undergo continuous professional development because the school has a CoDiCe ICT certification. One of the training courses performed at school is called "Active Methodologies", where digital tools are shown for their use in the formative assessment of students. As a result, teachers, especially at second level (i.e. ages 9-11) are continuously carrying out this type of practice, always with the support of the management team.

Different teachers do presentations to colleagues at school to show how tools can be used in their lessons. The school staff was also trained in using the SELFIE tool supported by the Spanish National Institute of Educational Technology and of Teacher Training ([INTEF](#)) and is part of the community of educational centres in Europe on the [eTwinning platform](#) organised by INTEF and others. The school is also participating in eTwinning, with the support of INTEF.

Finally, the school runs a project called RIO STEAM, where teachers run workshops with students from year 5 to 7 to develop all the key competences including digital competences.



Digital tools used

Developed by the European Commission, [SELFIE](#) (Self-reflection on Effective Learning by Fostering the use of Innovative Educational Technologies) is a self-assessment tool designed to help schools embed digital technologies into teaching, learning and student assessment. It can highlight what is working well, where improvement is needed and what the priorities should be. The tool is currently available in 24 languages.

SELFIE gathers – anonymously – the views of students, teachers and school leaders on how technology is used in their school. This is done using short statements and questions and a simple 1-5 agreement scale. The statements cover areas such as leadership, infrastructure, teacher training and students' digital competence.

The assessment takes around 30 minutes for each respondent. Questions are tailored to each group. For example, students get questions relating to their learning experience, teachers reflect on training and teaching practices and school leaders address planning and overall strategy.

Based on this input, the tool generates a report, a snapshot of the school's strengths and weaknesses in their use of digital technologies. The results and insights from the SELFIE exercise are for the school only and are not shared unless the school chooses to do so. The findings can help the school develop an action plan. SELFIE can then be used at a later stage to gauge progress.

Example activity

The example activity involves a year 6 social science class of 24 students you can find more information on the teaching scenario "[Keeping track with ICT](#)"). It aims to check students' progress through the teaching unit while using digital tools in a way that is easy to use. It aims to enable students to assess their learning, and to help teachers check to how students are doing and what they need to do next. While general student results are shown on the classroom whiteboard without numerical figures, each student can see their own mistakes on the computer. This way students are less afraid of making mistakes.

The teacher wants to present new content in a simple way; to familiarise students with digital tools, and to encourage in students the eagerness to learn and to improve. By working on computers individually, students should become more autonomous and take responsibility for their work.



During the first session there is a short introduction to the subject to check for prior knowledge, using [pre-prepared digital content and videos with accompanying notes \(in Spanish\)](#). Students can use the digital content to study at their own pace. [Similar resources \(in Spanish\)](#) are used in the following sessions which are done at home. When students finish their task, they take a screenshot of the results and paste them into a text editor (e.g. MS Word). By saving these files, students can check their past work and see their progress, as well as the past feedback provided by the teacher.

In the next session, the teacher runs a review activity using [another online quiz \(e.g. on the modern history of Spain\)](#) that allows working in groups in the classroom. Questions are projected onto the smartboard and the class work together and their answers appear on the board. In this way, both teachers and students can see the right and wrong answers and discuss take why some answers are wrong. The session continues with more videos and online activities, either from the school's digital resource collection or from other websites (links are posted on the virtual classroom of the class).

During the last session of the teaching unit, the teacher makes an assessment based on student answers collected in [another online quiz on Spanish modern history](#). This way, when students make a mistake, they are aware of the correct answer so that they can correct it at the end.

Research - Supporting student autonomy

Implementing formative assessment practices such as self-assessment at primary school can help students to adopt this as a regular practice. [A classroom study](#) in a primary school showed that students performed better in mathematics if they did regular self-assessment compared to students who did not.

Researchers have found that students are most successful at regulating their own learning when they define learning goals that are personally meaningful to them ([Sheldon and Elliot, 1998](#); [Lee, Choi and Kim, 2013](#)). These findings for older students are likely to be true for young students, as well.

Conclusion

Students show a high level of interest when doing this type of practice and gain more confidence by checking everything they have learned and being able to correct their



mistakes on the spot. Thanks to this type of practice, students show a different attitude when faced with assessment and now know how to assess their learning better.

Almost all teachers in the school use these tools, enabling them to see how much students have learnt at home. Students themselves also learnt how to perform this type of activity, and therefore can review lesson content, showing that they can adjust to different situations and contexts.

The school administration and other teachers support this way of working, acknowledging that it is motivating for students. For the school head, sustained whole-school innovation is about changing mindsets. The school believes that teachers must be open to constantly updating their way of working to adapt to the needs of students, because technology advances fast. Changing mindsets can be difficult when there are changes in leadership personnel, weak incentives to change for teachers and families and when schools have little autonomy to create new autonomous school models. The school plans to develop further improvement strategies, promote giving feedback and evaluate the effects of innovation.

This case study illustrates how a simple digital formative assessment practice can be adapted for different subjects and activities. It illustrates some of the elements of best practice in formative assessment. For example, assessing prior learning, setting learning objectives, using different digital tools to serve these objectives, helping learners reflect on their learning and be responsible for it. The case study shows the importance of preparation and some key advantages of digital resources: they can be revised, shared, easily accessed, and presented to students.

