



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Éducation nationale,
de l'Enfance et de la Jeunesse



UNIVERSITY OF LUXEMBOURG
Luxembourg Centre for
Educational Testing (LUCET)



ÉpStan 2023-2024

General information – IPS
for subject teachers

General information on the ÉpStan

The *Épreuves Standardisées* (*ÉpStan*) serve as instruments for school monitoring in Luxembourg and consist of written tests and questionnaires, which record key linguistic and mathematical competences or central aspects of the quality of teaching, the school and classroom climate and motivation to learn. Currently, competences in mathematics, Luxembourgish and German listening comprehension (or French listening comprehension in the scope of the pilot project *Zesumme wuessen!*), as well as precursors of the written language acquired in cycle 1 are tested at the beginning of the second cycle (2.1). Then, at the beginning of the third cycle (3.1), the competences in mathematics, reading and listening comprehension in German acquired in the second cycle are assessed, and at the beginning of the fourth cycle (4.1) the competences in mathematics, reading comprehension in German and reading comprehension in French acquired in the third cycle are assessed. In secondary education, at the beginning of Grade 7 (7^e) and Grade 9 (5^e), competencies in mathematics as well as in German-reading comprehension and French-reading comprehension are assessed. In all participating class levels, questionnaires are used to record learning motivation, aspects of the school and classroom climate and socio-economic background (via parents' educational qualifications and professional activities).

Since the 2022/2023 school year, the Luxembourg School Monitoring Programme *Épreuves Standardisées* (*ÉpStan*) will be gradually extended to the *International Public Schools* (IPS). In line with schools following the Luxembourgish curriculum, academic competencies of all students are assessed in grades P1/Stage 1, P3/Stage 3 and P5/Stage 5 in primary school, and in S1/7^e and S3/5^e in secondary school. While the competencies in mathematics are assessed in all participating grades since 2022/23, the P1/Stage 1 classes of the International Public Schools will participate in the 2023/24 school year for the first time in additional *ÉpStan* competency tests (e.g., listening comprehension in the language of literacy instruction) in the scope of pretests. These pretests are used to evaluate tasks that have been validated in the student population of schools following the Luxembourgish curriculum in terms of content fit, format, and feasibility in the student population of the International Public Schools. In addition to the competency tests in the various domains, the participating grades levels furthermore complete the parent and student questionnaires.

Background

With the international comparative tests of recent years, such as PISA, the awareness of the need for systematic quality development and assurance in the Luxembourgish school system has been raised. National educational standards have been defined and, with their legal anchoring in 2009, set the

course for a results-oriented management of the school system, in which the achievement of these standards is the focus of interest. With the aim of ensuring a quality culture through systematic review of the educational goals defined, Luxembourg has established a national school monitoring programme with the ÉpStan. With the foundation of the *Luxembourg Centre for Educational Testing (LUCET)*, the ÉpStan were integrated into the University of Luxembourg as a structural mandate of the government in 2014.

Selection of competences

A test of a few hours, based on standardised answer formats, can only measure a limited section of all competences provided for in the education system. For this reason, a representative selection of competences that can be recorded in the most economical and standardised way possible is chosen: mathematical competence, listening and reading comprehension competence in German and in French. In the mathematics test, the tasks are assigned to the content areas „Numbers and operations“, „Space and form“ and „Dependence and change“ as well as the process competences „Specific basic skills“ and „Problem solving and modelling“. The global language tests are made up of the sub-competences „Localising and reproducing information immanent in texts and classifying texts globally“ and „Applying reading strategies, analysing and interpreting texts“.

Since the school year 2022/2023, mathematical competences have been assessed in the International Public Schools. Since 2023/24, additional competency tests (e.g., listening comprehension in the language of literacy instruction) are taking place in P1/Stage 1 in the form of a larger pretests to check the content fit, format, and feasibility of the competency tests. These pretests therefore do not (yet) allow any feedback on the students' results.

Development of the test items

The ÉpStan are standardised tests that pass through a large number of qualitative and quantitative test loops. These test loops are necessary to enable performance comparisons between school types and over time. The test tasks used in the ÉpStan (the so-called items) are developed by teachers from Luxembourg in cooperation with staff and researchers affiliated to the MENJE and the LUCET. In addition to a multi-stage revision process, each item goes through a pretest, which specifically checks the quality of the questions. Only items that have been proven suitable are integrated into the main test. A disadvantage of this procedure is that teachers only get a superficial insight into the items. This has two reasons: On the one hand, the items must somehow be related to each other so that the results of the individual years are comparable. The items required for this cannot be published because they will also be used in the upcoming years. This so-called anchoring makes it possible to compare the results over the years. On the other hand, the development of the items as described above is

very costly. If a large number of items were to be published each year, this would mean unmanageable additional work.

Standardisation and Task Formats

Standardised tests such as the ÉpStan are necessary to enable a synchronical and diachronical comparisons of the performances between different school types. Standardised tests, unlike non-standardised tests, are able to guarantee objectively comparable criteria for each student in each year.

Both the test structure/content and its execution and evaluation are subject to strict specifications. This prevents subjective distortion, which can arise in the case of class tests, for example. An objective evaluation is simplified by the use of multiple-choice questions or items with only very limited answer options, such as numbers or individual words. These so-called closed and semi-open items ensure a uniform evaluation, which can usually only be guaranteed with great effort in the case of open questions that are answered by free text. The closed answer format also facilitates computer-assisted data collection. This has the advantage that the evaluation and thus the feedback can be carried out more quickly. For this reason, ÉpStan is carried out in secondary schools in a digital form on tablets and computers; in the primary schools, teachers enter the results through the newly developed coding mask application according to a precisely defined evaluation scheme. Open response formats have the advantage of providing diagnostically useful information and are therefore rightly very popular with teachers. However, they are difficult to reconcile with the goal of achieving the most standardised and objective assessment of performance possible: they require a high level of correction by specially trained coders and are therefore time-consuming and costly. Since closed and semi-open response formats developed on a scientific basis also allow a wide range of complex competences to be recorded, as defined in the educational standards and the *Socles de Compétences*, the ÉpStan are based exclusively on these.

Questionnaires

The student questionnaires serve to gather important information on family background, school career, motivation to learn and the school and classroom climate. At the primary school level, there is also a parent questionnaire, which serves to collect additional information on the socio-economic family background that we cannot reliably collect via the student questionnaire. All information is evaluated pseudonymised. At no time can neither the MENJE nor the LUCET attribute the information from the questionnaires to students or parents by name. The information on family background is needed to be able to carry out the statistical analysis of the „fair comparison“ in the class report. The influence of different student characteristics is considered in the „fair comparison“. The question to what extent the differences between classes go beyond what would have been statistically expected due to the different student population is answered. By placing the performance profile of one's own class in

relation to classes with a comparable socio-cultural and socio-economic composition, teachers who work very effectively under difficult conditions, for example, can also receive positive and scientifically proven performance feedback on the respective class.

Final feedback on the results

Evaluations of the collected data are published in a series of reports at different levels. At class level, class or subject teachers receive feedback on the performance of their class and of individual students (*individual level*). At primary school level, the school presidents and the *direction de région* receive a summary of the results of all their schools in comparison with all other schools in Luxembourg (*school level*). For the secondary schools, the results at school level are made available to the school directorates. The school results are also made available to the *Division du traitement de données sur la qualité de l'encadrement et de l'offre scolaire et éducative* of the MENJE. Finally, a specially created *ÉpStan Dashboard* summarises the results at national level (*national level*). This is made available to all interested parties via the website <https://dashboard.epstan.lu>. Under no circumstances is it possible to draw conclusions at subordinate levels; for example, the national report does not identify the results of individual schools, the school reports do not allow conclusions to be drawn about the results of individual classes, and it is at no time possible to identify individual students.

In summary, the ÉpStan contribute to a far-reaching evaluation of the Luxembourgish education system. In order to achieve this, the ÉpStan are characterised by:

- focusing on the Luxembourgish education system and its specificities,
- applying a broad content: mathematics, German and French, as well as questions about the school climate and motivation to learn,
- providing feedback of results by means of nationwide representative statistics at student, class, school and national level.

Data protection

According to the guidelines of the European General Data Protection Regulation, data protection is guaranteed by a pseudonymisation procedure. For each test, all students receive a unique numerical or letter code which cannot be used to draw any conclusions about their identity. Only this code is used by the university when evaluating the test and questionnaire data. In order to be able to examine the development of the students over the years without violating their anonymity towards the university, each student also receives a constant, unique identification number. The companyitrust consulting s.à.r.l., a so-called *Trusted Third Party* (TTP), has been commissioned with the secure storage of the „keys“ by which the identification numbers can be assigned to the students. This ensures that neither the LUCET, nor the Ministry of Education can draw conclusions on the identity of the students

or access their individual test results. In order to enable the class or subject teachers to assign the students' results to their class, a list is provided before the ÉpStan, which allows the students to be assigned to the respective numerical or alphabetical codes. Neither the LUCET nor the Ministry of Education have access to this list, as it is also only accessible via itrust to the respective school/cycle coordinators.

Thank you for your support!



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