

The importance of PISA data for policy-making processes and improving the quality of school practice

International Student Assessment (PISA) Conference: Using PISA evidence to inform education policies and practices.

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INTRODUCTION

The presentation is about:

- how the PISA data was used in Slovenia to develop the National education programme for the next ten-year period and
- how pre-service teachers are familiarised with the PISA data and where they see the value of this data for improving the quality of teaching practice

National education programme for 2023-2033

Six working groups:

- Social development and the role of education.
- Providing a safe and stimulating environment for the optimal development of the individual.
- Teaching, learning, monitoring progress and assessing knowledge.
- Professional and career development of education staff.
- Quality assurance system.
- The education system.

Directions for development

- High quality teaching and learning.
- An improved quality assurance system through self-evaluation.
- Well educated, trained and satisfied professional and management staff.
- Promotion of reading literacy and reading culture.

Promotion of reading literacy and reading culture

- Promote **the development of language** and other pre-reading skills **in pre-school**: develop reading literacy and a **reading culture in the family** and in the kindergarten environment.
- Involve **parents and children in family literacy programmes** and provide resources to implement these programmes.
- **Raise literacy and a reading culture** at all levels of primary and secondary education.
- **A task for all subjects.**
- **Strengthen the role of writing and text production** in the classroom.
- Updated textbooks, workbooks and other materials that develop **comprehension and writing of complete sentences and longer compositions.**
- Compensatory programmes for adults.

Sources of data for policy-making processes

- The relevance of PISA data for policy-making processes
- How PISA data is linked to the national survey of student knowledge
- Example of a note from the Slovenian subject committee for the national survey of student knowledge (2019)
- Pupils continue to have great difficulty in writing linguistically correct texts independently, whether in (shorter) answers to open questions or in writing (longer) rounded texts. Problems with reading and reading comprehension are often also the reason for lower success in solving tasks in other subjects, not only in Slovenian.

METHODOLOGY

- **Participants:** 85 Master's students enrolled in the pre-service teacher programs at the Faculty of Education, University of Ljubljana, in the 2024/2025 academic year.
- **Instruments:** An online questionnaire developed and pilot tested with the [1KA online survey tool](#). This questionnaire was designed to assess students' familiarity with various national and international surveys of knowledge.
- The online questionnaire was distributed to all students, who were informed of the purpose of the study, the confidentiality of their responses, and the voluntary nature of their participation.

RESULTS

How well do you know the national and international knowledge surveys listed below?

Items	Don't know	Poor	Moderately Well	Good
PISA	17 (20%)	27 (32%)	23 (27%)	18 (21%)
TIMSS	32 (38%)	21 (25%)	21 (25%)	11 (13%)
PIRLS	75 (88%)	9 (11%)	1 (1%)	0 (0%)
TALIS	77 (91%)	7 (9%)	1 (1%)	0 (0%)
NAK	0 (0%)	2 (2%)	19 (22%)	64 (75%)

RESULTS

Which of the following international knowledge surveys measures the reading, maths and science literacy of 15-year-olds?

Items	Frequency (%)
TIMSS	15 (18%)
PISA	37 (44%)
PIRLS	0 (0%)
TALIS	0 (0%)
I don't know	32 (38%)

RESULTS

What did the results of the 2022 international PISA survey show in the following areas of literacy compared to the previous measurement?

Items	Don't know	Decline	Unchanged	Improvement
Math literacy	55 (66%)	17 (20%)	6 (7%)	5 (6%)
Science literacy	57 (68%)	15 (18%)	6 (7%)	6 (7%)
Reading literacy	43 (51%)	39 (46%)	1 (1%)	1 (1%)

RESULTS

To what extent do you agree or disagree with the following statements about the international knowledge survey?

Items	Disagree	Cannot decide	Agree
The results of the international knowledge survey are an important source of information for improving the quality of the Slovenian school system.	4 (5%)	7 (8%)	74 (87%)
Taking the results of the international knowledge survey into account in the further planning of teaching lessons can contribute to improving the quality of students' knowledge.	3 (4%)	5 (6%)	76 (90%)
I believe that I have acquired enough knowledge during my studies to be able to take the findings of the international knowledge survey into account when planning lessons.	22 (26%)	24 (28%)	39 (46%)
During our study, we familiarised ourselves with the international knowledge surveys.	53 (63%)	17 (20%)	15 (17%)
The ranking of Slovenian students in the international knowledge survey says nothing about the quality of the Slovenian school system.	60 (71%)	18 (21%)	7 (8%)
The results of the international knowledge survey should be taken into account when defining and ensuring the quality of school work.	2 (2%)	7 (8%)	76 (90%)

Conclusion

PISA Data Integration

- Crucial for Slovenia's National Education Programme (2023-2033).
- Focus on high-quality teaching, quality assurance, and professional development.

Pre-Service Teachers' Awareness

- 44% are familiar with PISA.
- Low awareness of TIMSS (18%), PIRLS & TALIS (0%).
- 38% unaware of international knowledge surveys.
- 87% believe that the survey improves school quality.
- 90% agree that the survey should guide lesson planning.

Conclusion

Challenges Identified

- 46% are unsure about applying research findings in teaching.
- 71% feel rankings do not fully reflect the quality of the school system.

Recommendations

- Increase awareness of various international knowledge surveys.
- Improve training for the effective use of research data.
- Integrate knowledge surveys insights into teacher education programs.



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