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first name and surname of the evaluator

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school/centre

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position

Evaluation questionnaire **PlatMat LOW VISION STUDENT Tool**

The survey aims to help us determine a set of functions in the EuroMath tools.

Brief description: The application supports the low vision student in working on math problems, in a classroom and at home, as well as in communication with the teacher. It is used by the student to create, edit, collect, send and search for available multimedia mathematic educational resources. The student has the possibility of voice and text communication with the teacher via the Internet and document exchange, both via the Internet and the WiFi network in the classroom.

The application creates opportunities for low vision students in integrated classes to be more able to keep pace with their classmates who are not visually impaired. Thanks to the extensive configurability, the application can satisfy students' needs resulting from different degree (level) and type of visual impairment.

We would like to ask you to read the following content.

Possibilities of the LOW VISION STUDENT Tool:

1. Working on a document (work card) by using application's keyboard shortcuts and touch gestures, with no need for a mouse.
2. Editing a document only in a dedicated result or response field, which prevents the solution from being inserted in the wrong place or having the content of the exercise accidentally changed (through deleting, overwriting) by the student.
3. Arithmetic calculations in the exercises supported by the CUBARITHM tool.
4. Arithmetic calculations in the exercises supported by the CALCULATOR tool with a voice reading of the expression and the result.
5. Creating and modifying (editing) mathematical formulas using the structural editor (similar to the equation editor in MS Word).
6. Creating and modifying (editing) mathematical formulas using hand editor on the laptop's touch screen (handwritten formula).
7. Creating and modifying (editing) mathematical formulas using the editor in the AsciiMath linear notation.
8. Entering and modifying units of measurement in mathematical formulas.
9. Reading with synthetic speech of selected fragments of a mathematical document (text and formulas).
10. Inserting text comments by a student into a mathematical document (explanations of calculations, questions, remarks).
11. Inserting sound comments by a student into a mathematical document (explanations of calculations, questions, remarks).
12. Creating drawings using the graphics editor (flat figures and functions).
13. Sound navigation through graphics with touch gestures - normal mode.

14. Sound navigation through function graphs with touch gestures – function mode (type of function and its parameters are read out).
15. Sending a mathematical document to a teacher, or receiving it from a teacher by WiFi wireless communication in the classroom.
16. Sending a mathematical document to a teacher/tutor outside the classroom via the Internet.
17. Communication with the teacher via the Internet using the text chat option.
18. Communication with the teacher via the Internet using the text-voice chat option.
19. Remote access to the student's desktop on the teacher's computer (in the classroom or via the Internet)
20. Student's access to additional multimedia exercises (epub documents) published by teachers on the PlatMat www.platmat.org.pl portal, with the possibility of downloading and solving them locally for student's self-study.
21. Printing of mathematical documents in black print.

Please select the numbers from the above listing of the PlatMat LOW VISION STUDENT Tool functions, which, in your opinion, will not be useful for teachers in inclusive mathematics education in your country. We also ask for comments on how to increase usability in cases where it would be possible.

Function number	Justification of the lack of usability	Suggestions on how to improve usability

Additional remarks concerning on assistive ICT needs:

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Usability of the PlatMat LOW VISION STUDENT Tool

Please cross out the points with which you do not agree.

What does the PlatMat LOW VISION STUDENT Tool offer to student and teacher?

1. **Increased student's self-reliance in solving mathematical problems in a classroom and at home through:**
 - a) digitizing exercises and providing the possibility of learning their content on one's own – the formulas (also those read) and graphics in the manner adopted to student's needs (magnification, magnifier, contrast-colours, keyboard shortcuts, semantic synthetic speech),
 - b) the possibility of an on-going teacher's corrections at the time when student is solving the problem, thanks to visual monitoring of student's screen on the teacher's computer (in the classroom or via the Internet),
 - c) quick transfer of the results of student's work to a teacher in a classroom via WiFi communication and via the Internet,

- d) the possibility of editing formulas on one's own using the preferred method,
- e) the possibility of audio reading of the selected document's contents and recorded teacher's explanations,
- f) the possibility for the student to print documents on his/her own
- g) the possibility for the students to search and download exercises published by teachers on www.platmat.pl portal.

Summary of the usefulness of the PlatMat Low Vision Student application

In the following summary, please cross out the points with which you do not agree:

- h) increased possibility of student's greater involvement and better concentration during the lesson,
- i) better learning outcomes,
- j) better social position in (an integrated) class,
- k) greater efficiency and effectiveness of teaching,
- l) facilitating self-learning.

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date and signature