

It is very unlikely to see at Czech high school in mathematics classes teaching the hyperbolic functions and their inverses. It's a pity, this could be a great opportunity to review and refresh the polynomial, rational, trigonometric and exponential function methods and skills.

These functions even set an implicit connection between the exponential and goniometric functions, too.

The aim of this thesis is to offer an alternative to the usual practice at the ordinary high schools and it is adopted to a limited schooling time available. Our approach has been successfully tested with a group of students at a small high school in the Czech borderland. The thesis also indicates the potential to expand this approach if more schooling time should have been available or more talented students should have been involved.