The Eurasia Proceedings of
Educational & Social Sciences (EPESS)
ISSN: 2587-1730

**The Eurasia Proceedings of Educational and Social Sciences (EPESS), 2025**

**Volume 41, Pages 114-125**

**ICETI 2025: International Conference on Education in Technology and Innovation**

# The Mathematics Web Application for Solving Exercises

**Dhurata Valera**
University of Elbasan

**Bederiana Shyti**
University of Elbasan

**Argesta Stergu**
University of Elbasan

**Abstract**: This paper presents the web application ***"Mathematics,"*** structured with multiple pages. The purpose of this work is to explore the use of the application during mathematics lessons, the implementation of real-world problem-solving situations based on Information and Communication Technology. The application is organized using a ***Navigation Bar*** with five main menus, each corresponding to different topics within mathematics. Each menu contains multiple ***dropdown submenus*** that appear when the mouse hovers over the menu title. Users submit requests that the server processes and returns to the browser, providing results to the user.The *"Number"* menu includes submenus such as: "Factors of a Number; Prime Number; Even or Odd Number; Calculator; Fractions; Converting Decimals to Fractions; Maximum Between Three Numbers; Power of Numbers; Arithmetic Progression". The *"Measurement"* menu includes: "Unit Conversion; Pythagorean Theorem; Triangle Area; Square Area; Circle Perimeter; Circle Surface Area; Sphere Volume; Cone Volume".The *"Geometry"* menu focuses on Angle Measures**.**The *"Algebra and Functions"* menu includes: "Linear Equation; Quadratic Equation; System of Equations; Plotting a Point in the Coordinate Plane; Graph of a Linear Function; Graph of a Quadratic Function; Graph of a Cosine Function; Graph of a Sine Function".
The *"Probability and Statistics"* menu offers: "Pie Chart in Statistics; Solved Statistical Exercise; Factorial of a Number; Probability of Rolling Two Dice; Probability of Coin Tossing". The application also includes *links to educational videos* developed during online teaching sessions. The final menu summarizes all *curricular and cross-curricular projects* conducted in secondary education. The exercises and problem-solving situations are designed to different education levels (Grades II to VI in Middle School and High School). The integration of applications makes learning more engaging and fun for students, enhancing the effectiveness of the teaching-learning process**.** Teachers can utilize this application in all three stages of a lesson.

**Keywords:** Web application, Educational technology, Mathematics education

## Introduction

The speed of technological progress is increasing faster and transforming every aspect of our daily lives. Technology impacts the way of communication between people from all over the world. It is changing the way of work, managing our homes remotely to access entertainment and information instantly. The rapid growth of technology influences in precision medicine to tailore the medical treatments of individual patients based on their genetic makeup, lifestyle, and environment. Also, the technology's outcomes are showing in the education filed Harrison, (Teresa & Stephen, 1996).

This paper presents the development of an application that solves mathematical science exercises. Mathematics is the queen of sciences. Students often deal with abstract concepts, that can be hard to grasp without concrete

examples or applications. Many students can lead to frustration when repeat mistakes and they feel pressure to get the right answer. Math builds on previous concepts, so gaps in understanding from earlier lessons can make advanced topics seem overwhelming. The pace of learning in classrooms can sometimes be too fast for some students or too slow for others, leading to disengagement. It may happen that some teaching methods fail to capture interest or connect with students' experiences, consequently mathematics can appear uninteresting and disconnected from reality.

Using this application, students begin to familiarize themselves with mathematical problem situations, be adressed with the real-world connections and overcome the hurdles. In a time when nothing can be done without the use of technology, the integration of Information and Communication Technology (ICT) in the field of teaching plays a crucial role. A teacher proficient in various learning models and adept at leveraging the opportunities offered by ICT grounds their approach in the ***constructivist theory*** of knowledge and learning. This theory delves into the nature of knowledge, the learning process, and how we develop understanding and acquire knowledge. It seeks to explain how individuals interact with information, make sense of it, and internalize it over time. The process typically involves combining existing knowledge with new experiences, reshaping mental structures, and actively participating in learning activities. Additionally, it accounts for the role of external elements such as social interactions, cultural influences, and the availability of tools and resources. Its aim is to uncover the principles behind learning, the methods by which individuals attain knowledge, and how this knowledge is applied across various contexts.

Two types of constructivism are: **cognitive constructivism** (psychological, individual) by Jean Piaget and **social constructivism** by Lev Vygotsky. Based on the theory of cognitive constructivism, students build their understanding of information by changing their mental structures and achieving cognitive balance, relying on prior knowledge as well as interacting with the environment and performing experiential activities. Cognitive constructivism emphasizes the **construction of knowledge**, not reproduction. Two key principles of Jean Piaget's theory are:

1. Learning is an active process (the process of assimilation and accommodation of information).
2. Learning must be holistic, true, and real.

**Social constructivism**, represented by Lev Vygotsky, emerged as a response to cognitive constructivism. According to him, a child makes a concept their "own" when they use it and connect it with previously introduced ideas. Social constructivism emphasizes the idea that students, and others, can build knowledge through help and interaction with cultural-historical tools, with adults or capable peers, through the **Zone of Proximal Development (ZPD)** and scaffolding. The **Zone of Proximal Development** refers to the distance between a child's current development (solving problems independently) and their potential development level (solving problems under the guidance of adults or capable peers). ZPD defines those functions that are not yet mature but are in the process of maturing. Teachers need to ensure that the child participates in activities within this "scaffold." Furthermore, teachers must create social environments (ZPD) where students can perform tasks independently (Myftiu, 2013). The stages are as follows:

1. In the first stage, the teacher draws the child's attention by bringing memories of information or encouraging the child.
2. In the second stage, the child performs a task (not fully automated) without assistance from others.
3. In the third stage, the task becomes internalized and automated. The child self-monitors their progress, assessing what they have learned without external help or social control.
4. In the fourth stage, a task the child could perform fluently or a problem they could solve independently is now hard to recall in the same way. To remember this knowledge, it only takes a prompt from the teacher, a peer, or incidental information (like flipping through notes or a book).

A key application of Vygotsky's theory is the concept of "scaffolding," referring to various methods the teacher uses to support the student during the learning process. In the initial stages, scaffolding—guidance and support—is crucial. As the child begins to learn, the nature of scaffolding changes. The relationship between Vygotsky's scaffolding and ZPD is essential for the teaching process. An application can act as a "scaffold" by helping students recognize written models, correct mistakes, and solve problem situations. The teacher guides students in using the application's pages and explains problem-solving procedures. Even if the answers are incorrect, the teacher encourages them. Responses can also be verified within the web application.

The use of the internet and applications enables students to engage in more advanced learning activities, employing and developing higher-level mental processes. Students combine prior knowledge with new

information in the application and become ready for further learning. This theoretical background also includes the concept of Discovery Learning (Bruner). All knowledge arises from experience. Concepts must be intertwined with real-life situations to be better understood. Discovery learning forms the "core" of today's learning, based on didactic principles. School learning should imitate the thinking of future scientists and researchers. The teacher introduces questions or issues that aim to stimulate student discussion and inquiry. The teacher's role is to guide the learning process, not to tell students what they should do. The teacher encourages students to develop their ideas, ask further questions based on initial comments, and arrive at conclusions through deductive and inductive reasoning, generalizing and applying them to new situations (Blomert, 2010).

Another theory is John Dewey's Constructivist Theory. This theory presents a positive perspective on the link between knowledge and action. Children learn best when they interact with their environments and actively engage with the school curriculum. Dewey proposed a strategy for the learning process: learn, repeat mentally what you've learned, and rely on examples. Teachers should create a bridge between the knowledge students possess and new knowledge. Teachers should not simply play the role of instructors but act as guides and facilitators, offering students the opportunity to discover on their own.

Another concept closely related to the use of ICT in teaching is Educational Technology (EdTech), the practice of using ICT tools in classrooms (desktop computers, laptops, tablets, or robots that record lessons for sick students). Educational Technology encompasses e-learning, Learning Technologies, ICT in Education, EdTech, Multimedia in Education, Web-Based Learning (WBT), Virtual Learning Environments (VLE), and more. Its goal is to combine texts, audio, videos, animations, hardware devices, and learning tools together. William Grazidit, a professor in the USA, in his 1997 article titled "Asynchronous and Synchronous Teaching Construction through Technology" (Grazade, 1997).

Throughout this theoretical background, there is also a discussion about William Graziadei, a professor in the USA, whose statement remains relevant today. In 1997, he published an article titled "Asynchronous and Synchronous Course Construction Using Technology," where he noted the availability of software applications for managing synchronous and asynchronous web-based courses. According to him, software applications assist in creating new learning environments. Graziadei believed that, in the decade that followed, communication technology would increase its impact on the ways students learn and the methodologies of teaching. Graziadei and other researchers emphasized the creation of virtual classrooms, with the key element being asynchronous interactivity.

The theoretical background also includes the WBT Top Class System, a tool that facilitates creating and managing asynchronous communication on the world wide web (www) and offers a wide range of tools such as: conference systems, online chats, screen sharing, group project organization, self-assessment for students, grading by the teacher, navigation tools, corrected exams by instructors, text editing and conversion, material transfers, material uploads, and image promotion by instructors. The recent trend in e-learning is screen casting, which allows for classroom activities with interactive whiteboards, motivating students. There are two forms of online teaching: mentored learning and **self-**paced learning, where the individual determines their learning pace. Mentored learning can be realized through online test assignments, exercises in various applications, etc. Self-paced learning can be done by the student in class or at home using applications that contain courses. A portion of the course is considered complete when the individual successfully passes a test by selecting all the correct options.

Communication technologies are categorized as asynchronous and synchronous. For asynchronous communication, individuals use blogs, wikis, emails, etc. One individual sends a message or information to another person on the network and does not receive an immediate response but waits for it. The other individual responds when they find the appropriate time. In synchronous communication, individuals communicate at the same time. One form of e-learning is learning through applications in other environments, such as the home or vehicle. A student, wherever they are, can listen to instructional videos or solve exercises. If an individual works in an application and enters data, they receive immediate feedback (Dunn & Burke, 2006).

The important point is how teaching styles adapt to the technological tools used within the lesson theme. One of the three learning styles that became popular by the researcher Fleming is the Visual, Auditory, Kinesthetic (VAK) model (learning style in the classroom or through physical activity). This style involves engaging students in physical activities, such as listening to a lecture, viewing a demonstration, or actively participating by using various applications (Fleming & Baume, 2006). This model combines how students manipulate and touch material with visual study techniques. Many researchers believe that involving students in activities using real-life situations in the learning process is a form of intelligence. This style helps students absorb lessons more

easily and retain them better. The motto of this strategy is: "Follow me, and I will show you what we can achieve together." Everyone remembers better how to do something if the instructions they receive are accompanied by multiple senses (Gjoci, 2015). The research work is divided into six chapters.

## The Code of the Application

For writing the application code, we have followed these steps. First of all we have chosen the platform (HTML, CSS, JavaScript (React, Angular, Vue.js), secondly we have selected the programming language (JavaScript/TypeScript, Python (Django, Flask), thirdly we have picked the development framework Web (React.js, Vue.js, Django), finally we have determined the key factors (Easy navigation, appealing design). In this code JavaScript interacts with HTML elements, processes user input, and updates the webpage dynamically. We have declared different types of functions. The event-based functions can be triggered by user actions, such as button clicks. The *sup ()* function in JavaScript retrieves values from input fields, calculates their sum, and displays the result. The *ENH ()* function in JavaScript is designed to clear input fields and reset displayed values within an application.

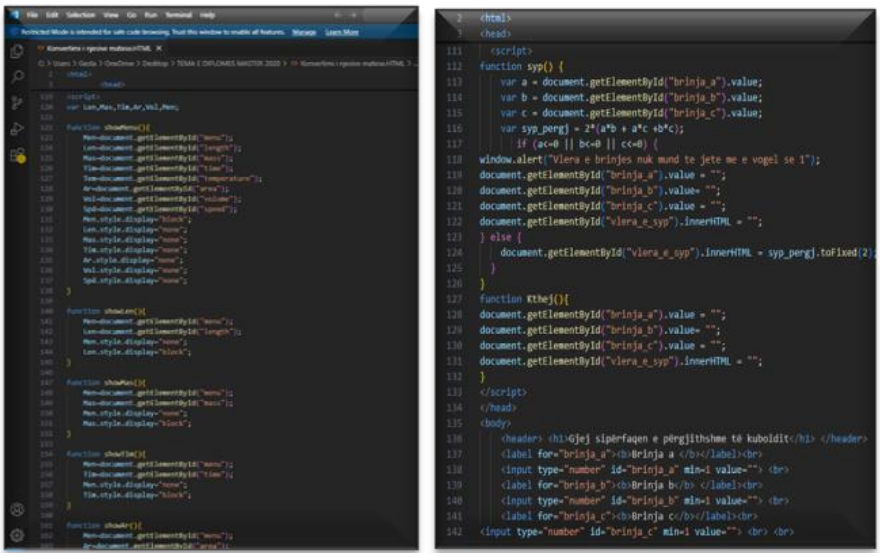

Figure 1. The screenshot for the code of unit converter, the code of total surface of cuboid

## The Structure of the Application

The background features a modern, technology-inspired design with circuit board patterns and a digital aesthetic, creating a strong connection to mathematical and technological themes. The page is well-structured, with a prominent navigation toolbar that helps users move between different sections efficiently and that organizes content into categories and subcategories for easy access. Key features like the *Register* and *Login* buttons are strategically placed in the top-right corner for visibility.

The use of drop-down menus and interactive tools enhances usability, enabling users to dive into specific topics seamlessly and avoid overcrowding menus with too many options. Quick access links provide direct navigation to detailed resources, making the site efficient and user-friendly. The design achieves a good balance by incorporating eye-catching visuals while keeping the text concise and informative. The toolbar includes several essential functions designed for easy navigation and interactivity. Here's what it typically includes: "*Header Navigation; Quick Access Links; Expandable Subtopics; Main Visual Display; Interactive Tools*". Let's explain each of the subcategories.

**Header Navigation** includes menu categories (Home, Number, Measurement, Geometry, Algebra, Probability and Statistics) and interactive menu. When a user hangs over or clicks on each category, a drop-down menu appears, listing subcategories such as:

- **Home -** the homepage or landing page of the application.

- **Numbers -** include topics such as factors of a number, prime numbers, odd or even numbers, decimal, fractions.
- **Measurement –** covers units of measure, time, area, perimeter, volume, length, mass, temperature, etc.
- **Geometry -** includes shapes, angles, geometric theorems.
- **Algebra and Function –** incorporates topics like equations, inequalities, graphs, and function analysis, arithmetic progression
- **Statistics and Probability -** integrates data analysis, charts, mean/median/mode, probability theory, etc.

**Expandable Subtopics:** In some designs, subcategories may have further drop-down menus for more detailed topics or resources to keep content structured and easy to navigate, to prevent overwhelming users with too much information at once, to allow seamless exploration of detailed resources.

**Interactive Tools:** Mathematical Calculators embed tools for performing operations like addition, subtraction, or solving equations and special calculators for topics such as fractions, percentages, or quadratic equations.

*Dynamic Visual Aids* includes graph plotting tools to visualize functions and data plus interactive geometry tools to explore shapes, angles, or transformations.

*Exercise Solvers* involve step-by-step solutions for problems and features to check answers or provide hints.

*Educational Simulations* contain models to simulate real-world applications of mathematics, like probability experiments or statistical data analysis.

**The Construction of the Application and How Students Use It**

Below, we present a screenshot of the application's home page. As the background image, we have placed a view of the University of Elbasan "Aleksandër Xhuvani." We emphasize that the language used in the application is Albanian. This application can be accessed by students and teachers of pre-university education schools. The application is structured according to the competency-based curriculum of education in the Republic of Albania. As the user navigates through the application, the template offers the possibility to display other images as well, such as the Digital Human, which assumes the close connection that every individual has with Technology. This connection consolidates year after year.

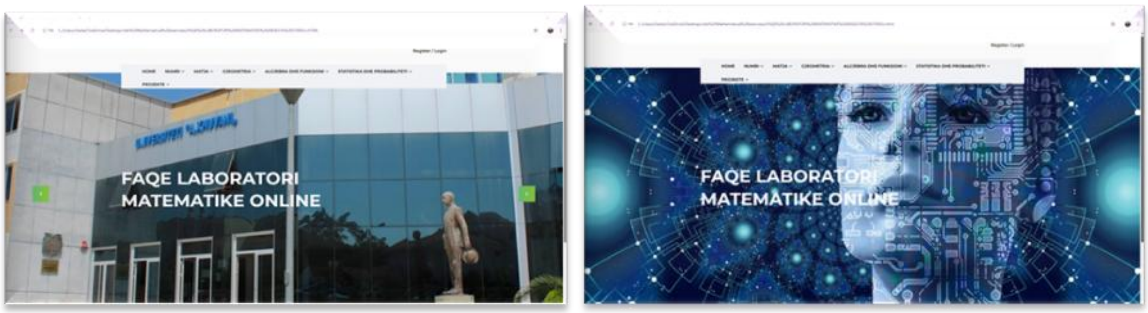


Figure 2.The screenshot of the home page

Let’s demonstrate images of some of the application's pages that show the use of its menus. The menus are organized based on Law No. 69/2012 on the Pre-University Education System in the Republic of Albania, the Curricular Framework of Pre-University Education in the Republic of Albania, and the Subject Program of Pre-University Education in the Republic of Albania. Below are several screenshots of the application's menus, and for each of them are provided the corresponding instructions on how they will be used. From year to year, mathematical concepts expand in a spiral form. In secondary education classes, students become familiar with the fundamental concepts of each topic, while in high school, these concepts deepen and even new concepts are introduced.

**The Menus of the Application**

The connection between mathematics and informatics is inseparable. It is embodied through every page of the application. The goal of every teacher is that, by the end of the teaching process, they equip students with key

competencies and life skills. The teacher must have the ability to master the subject from a scientific perspective. Each page can be used during all three stages of the learning process (Knowledge Prediction, Knowledge Construction, and Knowledge Reinforcement), as defined in the Plan. The teacher must adapt teaching methods and techniques to students' learning styles. The use of exercise pages enables a student-centered learning process. For each menu, we have selected several of the application's submenus, and along with them, we have also outlined their usage method.

**The Menu Number. Find the Factors of a Number and Write the Number as a Product of Factors**


Figure 3. The screenshot of the "Factors of Numbers"**.**

The image contains a yellow and red overlay box displaying text in Albanian, where students can write the number and click the button to take the factors of it. The number **12,560** in its prime factorization form: $2 \times 2 \times 2 \times 2 \times 5 \times 157$ . Prime factorization is the process of breaking down a number into its smallest prime factors.

**The Menu Number. Find the Value of Numerical Expressions**

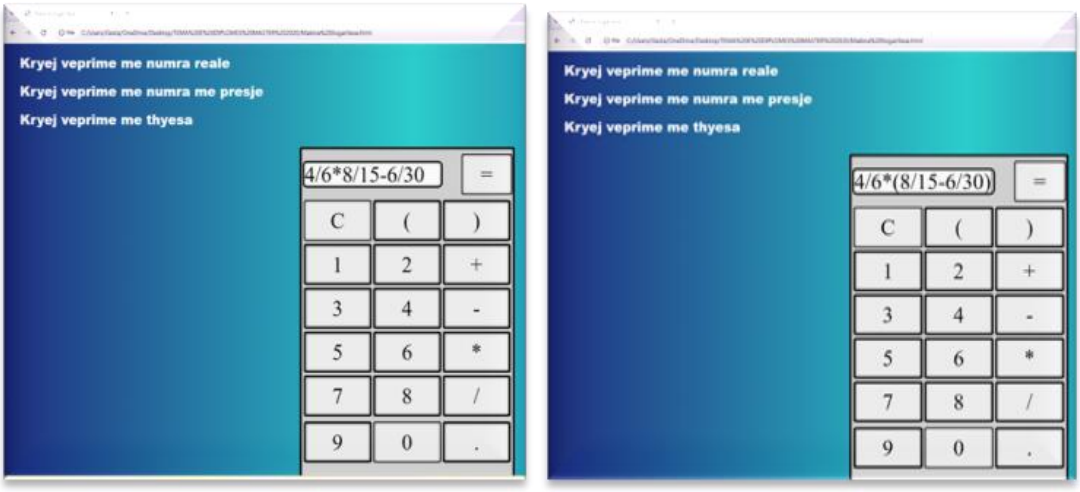


Figure 4.The screenshot of the calculator

The calculator created in the application performs operations (addition, subtraction, multiplication, division) with numerical expressions that include fractions, decimal numbers, and parentheses. Students recall the rules for solving numerical expressions (Programi i fushës / lëndës së matematikës, lënda Matematikë, klasa 6, IZHA, 2015).

**The Menu Measurement. Convert the Unit of Length, Weight, Time, Area, Volume**


Figure 5.The screenshot of the unit converter

Students can convert units of length, weights, area, perimeter, volume, temperature etc. Why do we need to convert measurement units in everyday life? We convert measurement units in everyday life because different contexts and regions use different systems of measurement. Here are a few key reasons why it's essential:

- **Global communication** – Different countries use different units (e.g., miles vs. kilometers), so converting measurements allows for clear understanding in international travel, business, and science.
- **Cooking and recipes** – Ingredients are often listed in different units (cups, grams, ounces), and conversion ensures accurate measurements for successful cooking.
- **Trades and construction** – Builders, engineers, and mechanics work with different unit standards, and conversions help maintain accuracy in measurements.
- **Health and fitness** – Tracking weight, height, and nutritional values requires conversions between different units (pounds to kilograms, calories to joules).
- **Shopping and finance** – Currency exchange rates and unit conversions (e.g., liters to gallons for fuel) affect purchasing decisions.

As a result, mathematics helps us understand the rules used to perform these unit conversions. Students learn these rules faster when using visual techniques. This menu provides students with the opportunity to apply formulas for calculating area and volume.

**The third menu is called "Geometry", and it includes all geometric shapes such as:** 2D shapes: triangle, square, rectangle, circle, parallelogram, trapezoid**,** 3D shapes: cube, cylinder, sphere, cone, pyramid. Students can study the properties of shapes, sides, angles, symmetry, congruence and similarity, regular vs. irregular shapes, angle relationships (complementary, supplementary, adjacent, vertical)

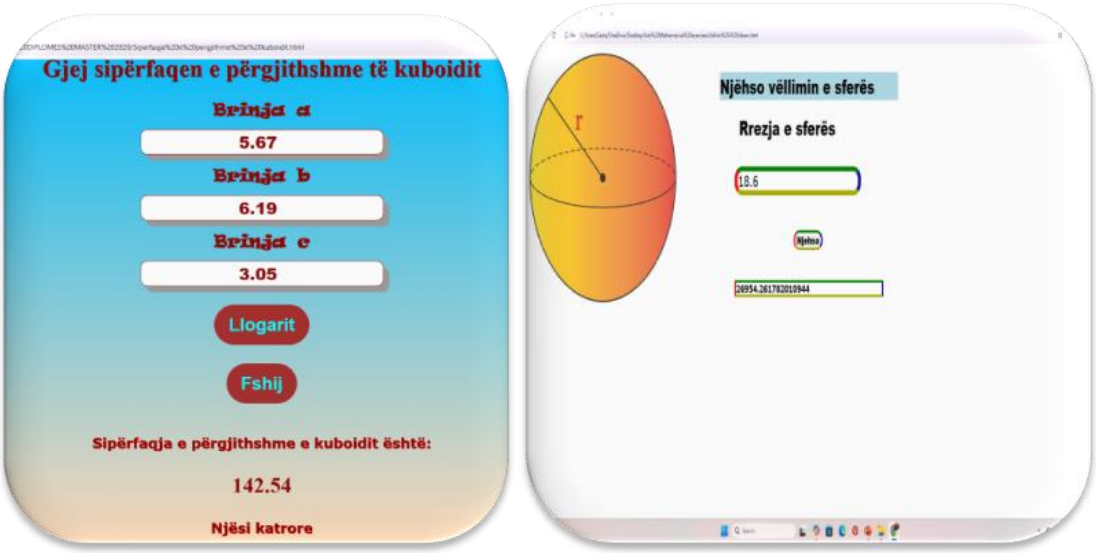


Figure 6. The screenshot show the formula of total surface of cuboid and the volume of sphere

The image shows a webpage with a blue gradient background. The page is designed to calculate the total surface area of a cuboid. It includes labeled input fields for the dimensions of the cuboid:

**The Other Menu is "Algebra"**

Once the teacher has explained the concept of the "quadratic function graph," students are given time and opportunity to practice constructing the graph using this application. The students assess their work by comparing the graph created in their classroom notebook with the one generated in the application. They solve a problem-solving situation by constructing the line of a direct proportionality function and another problem-solving situation involving the line of a linear function (Programi i fushës / lëndës së matematikës, lënda Matematikë, klasa 9, IZHA, 2015). Also, students make the difference between the graph line of a linear function and the graph line of a direct proportionality function (the relationship between two variables, the equation)

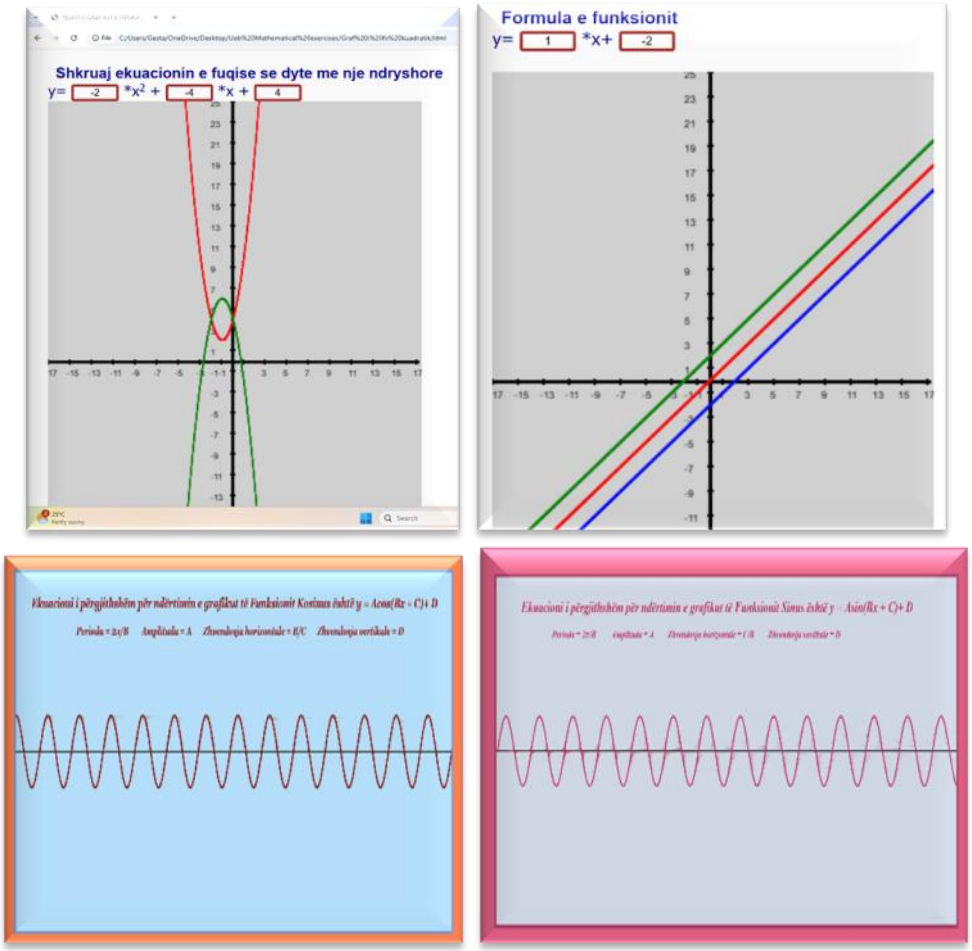


Figure 7. The screenshot of the different function graph

A fundamental concept that students can practice in the application is solving first-degree equations with one variable and solving second-degree equations with one variable. Equations are essential in everyday life because they allow us to model, solve, and understand various practical situations. Here's why they matter:

- **Problem-solving** – Many real-world challenges, such as financial planning and engineering designs, require mathematical equations to find effective solutions.
- **Science and Technology** – Fields like physics, chemistry, and biology depend on equations to explain natural phenomena, including motion, chemical reactions, and population dynamics.
- **Engineering and Construction** – Equations help architects and engineers calculate forces, measurements, and ensure the structural integrity of buildings, bridges, and machinery.
- **Medicine and Health** – Healthcare professionals use equations to determine medication dosages, predict patient outcomes, and analyze medical data.

- **Business and Economics** – Financial analysts, economists, and business professionals rely on equations to calculate profits, interest rates, and economic trends.
- **Everyday Applications** – Whether estimating fuel consumption, adjusting recipe measurements, or managing loan payments, equations simplify complex calculations.

Without equations, it would be difficult to quantify relationships, make predictions, and solve problems efficiently. They are fundamental to logical reasoning and decision-making across multiple fields. The application display the math problem solution step by step.


Figure 8. The screenshot show the equations solved in the application

**The Construction of Statistics and Probability Menu**

Students can organize data in tables, bar charts, line graphs, pie charts, pictographs, and histograms. They can make data representations. The application offers the opportunity to calculate the Mean, the mode, the Median and the range of dataset. Students can also practice with problem-solving situations flipping a coin, rolling dice. They can learn the concept of chance and likelihood, events: certain, likely, unlikely, impossible.

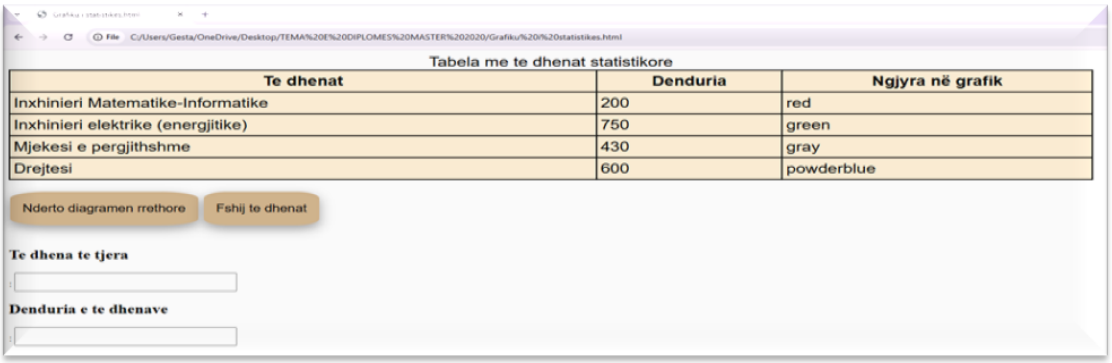


Figure 9. The screenshot shows the density table

Students can add data to the table, and the columns will automatically be filled with the organized information. The image features a **statistical data table** with multiple columns and rows. Here are its main components:

1. Title - Table with statistical data
2. Columns include data with the different fields of study, the density with numerical values the color in the graph with colors corresponding to each data entry for visualization.
3. Rows incorporate data entries (density 200, color red, density 750, color green. density 430, color gray, density 600, color powder blue).
4. **Buttons** of the pie chart, which generates a visual representation, and the button delete data which clear the entries.
5. **Input Fields** that allow users to enter new categories and the density of the data where users can input density values.

The image represents a structured statistical tool designed to **organize, analyze, and visualize data efficiently**, likely assisting students in learning how to interpret and work with statistical information. Would you like me to explain how such tables are used in data visualization?

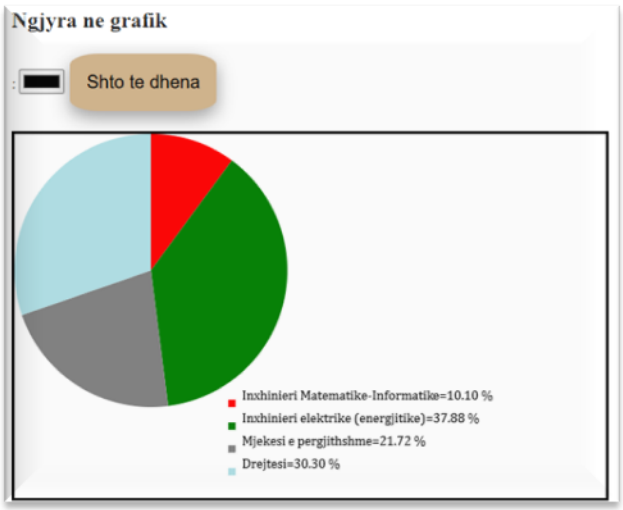


Figure 10. The screenshot shows the pie chart

The probability of rolling two dice and the steps that students need to follow. If we click the plus button, the sum of the points when rolling two dice will increase and on the other hand if we click the button minus, the sum of the points will decrease. The combinations for the selected sum are displayed below the buttons. The students can also express the combinations as ordered pairs of numbers. The fraction which represents the probability, calculated by the application, is provided at the end (IZHA, 2015).


Figure 11. The screeshot of the rolling dice probability


Figure 12. The screenshot of toss coin

When students enter a number in the input field and click the button, the system will display all possible outcomes for tossing a coin. This process helps students understand the fundamental principles of probability, sample space, and how different possibilities grow as the number of tosses increases (IZHA, 2015).

## Conclusion

In conclusion the interactive mathematics learning websites often provide a range of features designed to make understanding math easier and more engaging. Users can visualize mathematical functions with dynamic graphs and improve self-assessment features and reinforce learning. The interactive explanations help users grasp concepts like algebra, calculus, and geometry. Mistakes are instantly identified, helping learners correct errors in real time. Gamification techniques (badges, challenges, rewards) make learning fun.

## Recommendations

We will make changes to the application by adding new exercises that align with the curriculum, some problem situations for gift and talented students and some workout specifically designed for students with disabilities. We will launch it online in English so that teachers and students from other countries can access it. This application will be available online and as a downloadable app for computers and tablets, ensuring ease of access across various devices. We think to add educational videos to the app, making it versatile for learning scenarios, including remote education. The application can also be used for online and distance learning, for example for pandemic preparedness:

*Disadvantages of using an application*

- **Over-reliance on Technology**: Students might become too dependent on these apps, which could affect their ability to solve problems without digital assistance.
- **Access Inequality**: Not all students have equal access to devices or the internet, creating disparities in learning opportunities.
- **Privacy and Security Issues**: Apps may collect personal data, raising concerns about how this information is stored and used.

## Scientific Ethics Declaration

* The authors declare that the scientific ethical and legal responsibility of this article published in EPESS Journal belongs to the authors.

## Conflict of Interest

* The authors declare that they have no conflicts of interest

## Acknowledgements or Notes

* This article was presented as an oral presentation at the International Conference on Education in Technology and Innovation ( www.iceti.net ) held in Trabzon/Türkiye on May 01-04, 2025

## Reference

Barton, G., & Garvis, S. (2023). *Kinaesthetic learning in early childhood* (pp. 10–12). Routledge.

Blomert, L., & Froyen, D. (2010). Multi-sensory learning and learning to read. *International Journal of Psychophysiol*, *77*(3), 195-204.

Bouchrika, I. (2021). *TalentLMS review 2025: Pricing, features, pros & cons, ratings & more*. Retrieved from https://research.com/

Bruckner, M. (2015). *Educational technology.* (pp. 6–15). Retrieved https://bluemarbleuniversity.com/wp-content/uploads/2016/08/brucknereducationaltechnology.pdf

Dunn, R., & Burke, K. (2006). Learning style: The clue to you. *LSCY: Research and Implementation Manual*, *50*, 47.

Fleming, N., & Baume, D. (2006). Learning styles again: VARKing up the right tree!. *Educational Developments*, *7*(4), 4.

Gjoci, P. (2015). *Metodologji e mësimdhënies* (p.100). Rama-Graf.

Grazadei, W. D. (1997). *Building asynchronous & synchronous teaching-learning environments: Exploring a course/classroom management system solution* (pp.3–15). ERIC.

Grizioti, M., & Kynigos, C. (2020). Computer-based learning, computational thinking, and constructionist approaches. In *Encyclopedia of education and information technologies* (pp. 1-17). Cham: Springer.

Harrison, T. M., & Stephen, T. (1996). *Computer networking and scholarly communication* (pp.257-258). Century University.

Haverbeke, M. (2018). *Eloquent JavaScript* (3rd ed., p.6). MIT License.

Myftiu, J. (2013). *Psikologji edukimi.* Elbasan: Dija-Poradeci (pp. 227–240, 422).

IZHA. (2015). *Programi i fushës/lëndës së matematikës, lënda Matematikë, klasa 6–9*. Retrieved from https://ascap.edu.al.pdf

Putten, M., Svekis, L., & Percival, R. (2021). *JavaScript from beginner to professional* (p. 315). Packt Publishing.

UDHUdhëzuesi me situata të të nxënit në me TIK-un. (2015). Retrieved from https://www.ascap.edu.al/udhezuesi-me-situata-te-te-nxenit-me-tik-un/

## Author(s) Information

**Dhurata Valera**
University of Elbasan
Elbasan, Albania

**Bederiana Shyti**
University of Elbasan
Elbasan, Albania

**Argesta Stergu**
University of Elbasan
Elbasan, Albania
Contact e-mail:*argesta.stergu@uniel.edu.al*

**To cite this article:**

Valera, D., Shyti, B., & Stergu, A. (2025). The mathematics web application for solving exercises. *The Eurasia Proceedings of Educational and Social Sciences (EPESS), 41,* 114-125.