LEARNING RESOURCES IN MATHEMATICS

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ABSTRACT

In today's era, ICT (Information and communication Technology) and WWW (World Wide Web) are playing a key role in the system of education and knowledge. This article provides feasibility to the students and faculty of mathematics in locating the learning resources of interest which are scattered on the web. The definition and importance of learning resources are mentioned.

Keywords: learning resources, online resources, web resources etc

Introduction

The learning resources available on internet are provided at a much greater speed and any one can have access to them at any time and from any part of the world. The combined power of online learning resources and the various internet technologies can make learning collaborative, omnipresent, and on-demand and thus enable learners to be increasingly mobile, connected and interactive. Various learning resources which are of great user to the staff and students of mathematics are given below. According to PC magazine learning resources are defined as "in general, Web pages and documents on the Internet that provide useful information. While an online resource is typically data and educational in nature, any support software available online can also be considered a resource". Some useful online resources useful for staff and students of mathematics are mentioned here.

1.Mathworld: http://mathworld.wolfram.com/

MathWorld™is the web's most extensive free mathematical resource, since 1995 to world's mathematics and internet communities as part of a commitment to education and educational outreach by Wolfram Research, makers of Mathematica. *MathWorld* currently features a number of innovative interactive elements that enhance its usability for a variety of different readers. These features include:

- The *MathWorld* Classroom, which provides a set of pop-up "capsule summaries" for more than 300 mathematical terms.
- Extensive citations to books and journal

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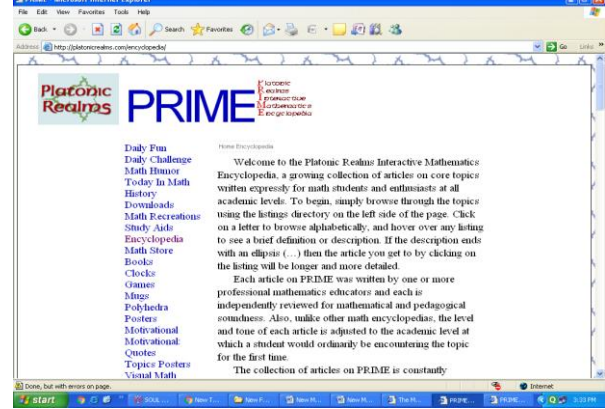
	articles, many of which are active hyperlinks.
	• Thousands of downloadable Mathematica notebooks.
	• Several types of interactive entries, including LiveGraphics3D applets for interactive three-dimensional geometry.
	• A powerful full-text search engine with both basic and advanced searching capabilities.
	• Special information for Mathematical users.

2. Platonic Realms encyclopedia: http://platonicrealms.com/encyclopedia/

Originally with a URL of mathacademy.com, this website came online in 1997 as a project of graduate students at the University of Colorado, Boulder. Maintained and expanded by B. Sidney Smith, Platonic Realms is a destination for math students at the high school and undergraduate levels, offering an encyclopedia, articles, and special downloads. This site is being renewed and expanded using up-to-date technology to serve the interests of all who love mathematics

3. Millemium Mathematics Project: **https://maths.org/webresources**

The Millennium Mathematics Project (MMP) is a maths education and outreach initiative for ages 3 to 19 and the general public. The MMP is collaboration between the Faculties of Mathematics and Education at the University of Cambridge, and is active nationally and internationally. Their focus is on increasing mathematical understanding, confidence and enjoyment, developing problem-solving skills, and promoting creative and imaginative approaches to maths. The project consists of various programmes, such as **NRICH** website **(https://nrich.maths.org/)** which publishes

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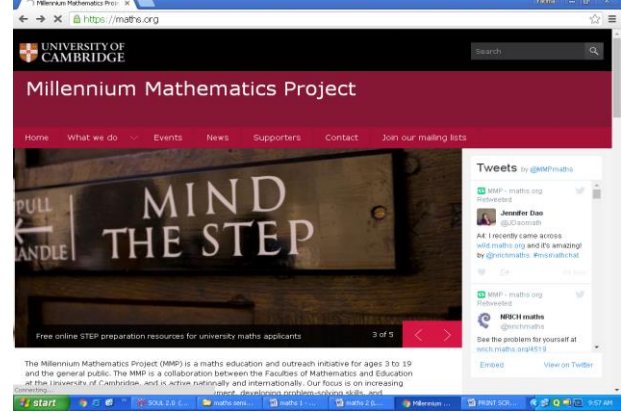
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	thousands of free resources designed to challenge, inspire and engage students and teachers of mathematics, and **Plus** website **(https://plus.maths.org/)**which provides free online mathematics magazine, and face-to-face work with schools and the public.

4. MIT Online Courses: https://ocw.mit.edu/courses/mathematics/
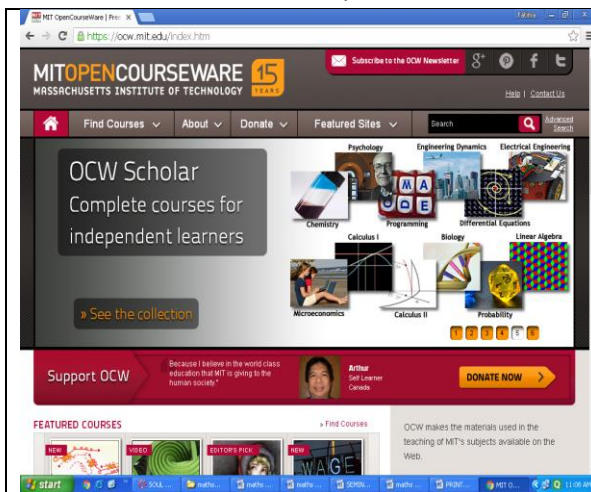
	MIT Open Course Ware (OCW) is a web-based publication of virtually all MIT course content. OCW is open and available to the world and is a permanent MIT activity. It provides free lecture notes, video courses , exams etc. There are three undergraduate programs that lead to the degree Bachelor's of Science in Mathematics: a General Mathematics Option, an Applied Mathematics Option for those who wish to specialize in that aspect of mathematics, and a Theoretical Mathematics Option for those who expect to pursue graduate work in pure mathematics. A fourth undergraduate program leads to the degree Bachelor's of Science in Mathematics with Computer Science; it is intended for students seriously interested in theoretical computer science. In addition to courses, supplementary mathematics resources are also available. Various MIT faculty are openly sharing these resources as a service to OCW users. The resources include calculus textbooks by Professors Gilbert Strang and Daniel Kleitman.

5. MacTutor History of Mathematics archive: http://www-history.mcs.st-and.ac.uk/
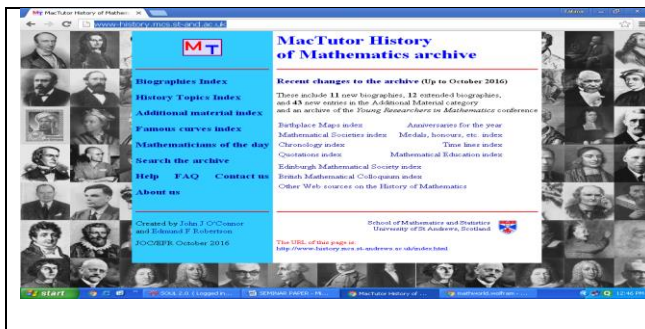
	It is a very useful resource for students and staff of mathematics and provides information on biography index of mathematicians, history topic index, additional material index, famous curve index, mathematicians of the day, chronology index, quotation index, medals, honours etc.

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6. Ask expert: http://www.ask-math.com/

Ask-maths is a website that concentrates on mathematics and provides content on it. It starts from basic maths i.e. numbers sense , symmetry and goes tillsets , Algebra , business mathematics ,geometry, statistics and trigonometry . It also explores the interesting side of mathematics by including topics like unique numbers, Chinese numbers, Dictionaryetc. So, in a way it is bliss for mathematics lovers. It focuses on teaching students the subject in an interactive way, and makes it interesting for those who are not fond of the subject. For making the learning interactive, they have created audios and videos on various topics for better understanding for the students

7. Interactive mathematics: http://www.intmath.com/
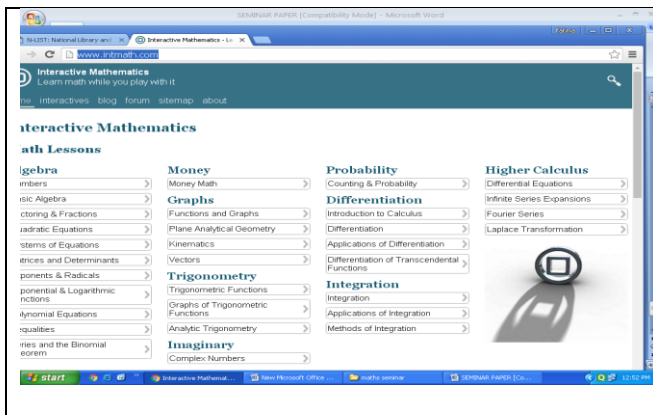
IntMath aims to interest and educate people in the joys of mathematics. It does so by providing clear examples, relating things to the "real world" and providing interactive applets that allow the user to explore mathematical concepts. IntMath started in 1997, and now attracts over 10,000 unique visitors per day, with over 1/2 million page views per month.

Conclusion

Hence, online learning resources are of great importance and use to the academicians, to study on their own, and do their research activities and can have access to information and knowledge 24/7 from any part of the world with great speed that saves the time of user by going to the relevant sources.

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6. http://www.ask-math.com/
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