



Web Tools for Teachers: Current ICT Trends for Professional Development

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Abstract

In the 21st century classroom, teachers are facilitator of student knowledge and creators of dynamic classroom environment. Teaching in the 21st century is a general different experience; website is an easiest way of sharing and exchanging knowledge and experiences for teachers. In this article the authors will introduce the professional development web tools for teachers. It is creating a professional development for teachers and make learning is easiest way for students.

Keywords: Teaching, Web Tools, Professional Development

Introduction

Teacher learning is an ongoing process that promotes teachers' educational skills, mastering new knowledge; developing new abilities, modernizing development to help improve student's learning. With the present technology, it has become essential part in classroom teachings. Today in many schools, colleges and universities in India technological devices such as projector screen, Smart class screen are being used for replacement of blackboard; and teacher's hand writings are replaced by power point presentation. Students think in many different ways in classroom. Rather than papers and notebooks, gadgets like tablets, laptops and mobile phones are used to write down notes. Animated content and virtual manipulative tools are created on various subjects and in different languages, so that students can have better perceptive of a difficult subject in an easy way. Through this digital learning one may understand the various methods and techniques in education by using the different web tools available for teachers.

In this sense, the current article aims at providing practical ways to teachers to enable them:

- Teaching through Technology
- Web tools for teachers to develop the profession.
- ICT in Teacher Professional development.

Teaching through Technology

Learning is seen as mainly a social process which requires communication among learner, teacher and others. This social process cannot effectively be replaced by technology, even though technology makes it trouble-free. (Bates & Poole, 2003).

"Technology will play a large role in instigating the changes in both our society in general and education in particular," (Lever-Duffy & McDonald, 2008).

On the outlook classrooms will continue to draw on general pedagogic practices but the responsibility of the instructor may change as inductive a new technologies. cautious planning along with continued training and accepting new technologies will help teacher as continue to improve teaching and learning experiences. Teaching through technology can make it quite easy to understand the subject for students.

Web Tools for Teachers to Develop the Profession

The developments of new technologies have given many platforms for teachers to learn and teach without difficulty. In this section, authors explore various opportunities available for professional development of a teacher through ICT.

Online Learning Platforms

Internet provides a vast variety of opportunities for learners and teachers. A number of them give education opportunities by offering complete online courses. There are free as well as paid courses that one can choose from. The online learning podium may provide the reading materials as well as opportunity to place your learning. Here are some examples of these tools:

Coursera

Partnering with more universities like as National Research University Higher school of Economics, Uterchet University, Technical University of Denmark, University of London and other organizations to offer online courses, specializations, and degrees in a variety of subjects. Education course accessed from the website <https://www.coursera.org>.

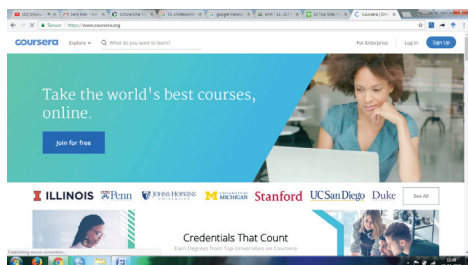


Figure 1: Coursera Home Page

Khan Academy

Offers training exercises, instructional videos, and a modified learning dashboard that make

powerful learners to study at their own pace in and outside of the classroom. Khan Academy tackles mathematics, science, computer programming, history, art history, economics, and 36 languages such as Spanish, French, Portuguese and more. Maths missions guide learners from kindergarten to calculus using state-of-the-art, adaptive technology that identifies strengths and learning gaps. Combined with institution like NASA, The California Academy of Sciences, The Museum of Modern Art and MIT to offer particular content. This Course Access from the <https://www.khanacademy.org>.

Other Free Online Courses are:

- Open Culture Online Course: <http://www.openculture.com/freeonlinecourses>
- Udemy offered free online course such as Building a women's circle, Law practice, Improve your web design how to use online video to Flip the Class Room and More: <https://www.udemy.com>.
- Sailor-<https://learn.saylor.org/>
- edx: <https://www.edx.org>
- EdTech Leaders Online: <http://www.edtechleaders.org/>

Social Media Networks

Social media networks give teachers and students opportunities to connect with people who are functioning in areas related to educational preparation. Most highly valued use of such a network is contributed ideas and thoughts.



Figure 2: Social Media Connecting People

Facebook

Facebook network use online groups to develop student's communication and commitment in education. Some Facebook groups for teachers such as Mobile Learning Group and Educational

Technology, Educators Network, Facebook in Education Group, Scholastic teachers, K12 INC, The cornet Stone for Educators, ISTE, Simple K12, TED , Edutopia and more. Access more from www.facebook.com

Twitter

Twitter is one of the most accessible and practical one of all social media platforms. Twitter enables people to access information quickly and, it allows joining with students, academics, industry followers and Scholastic interest persons. Some Twitter groups for education development are:

- Vicki Davis // @coolcatteacher
- Fran Simon // @FSSimon
- Margaret Powers // @mpowers3
- MattGomez // @mattBgomez
- Deborah // QTeach_Preschool
- Karen // @TachersView
- Tonya Wright // @LiteracyCounts
- United States Department of Education // @usedgov
- The National Association for the Education of Young Children // @NAEYC

Access more from: www.Twitter.com

WhatsApp

WhatsApp application allows sending and receiving text messages, similes and voice calls, as well as video calls, images and other media, documents, and user location. The application runs from mobile, Laptops and Computers. Some whatsApp group for education are:

- chat.whatsapp.com/invite/JrBil1u5Qwa67of4QN6ziL
- chat.whatsapp.com/invite/1XqjnWJNjO5CFTjLLaS7TI
- chat.whatsapp.com/invite/1T9RtcezgiVIZVy4Wgb5Nm
- chat.whatsapp.com/invite/DzwdphBRRp62VeRdCSKd1w
- chat.whatsapp.com/invite/0SpLICnMiAUD7cWtz1zK5A
- chat.whatsapp.com/invite/7NLuxu512FJ4FPheD6CgXA
- chat.whatsapp.com/invite/4O4SxnF9BdSG2dfVNzRjSg

- chat.whatsapp.com/invite/0vUlX63vOtLD7NebcIihu7
- chat.whatsapp.com/invite/8Sjem2XEUuS77kacfjtvZU

In Tamilnadu most of educational institutions are sending assignments and information about educational news or other things to WhatsApp groups, for example Research Education forum WhatsApp Groups sharing information about research questions, Upcoming Seminars, workshops, conference and Job recruitments.

ICT in Teachers' Professional Development

ICT combination refers to the use of the Internet and Communication Technologies to support teaching and learning across the national curriculum. The use of technology may involve students working with computer efficiency tools to complete education tasks or through the internet for learning, but it is always fixed directly to student mastery of their school subjects.

According to Adeya (2002) ICTs are implemented in networks and services that affect the local and global gathering and flows of public and private knowledge. Moreover, Adeya (2002) mentions about a more simplified definition as an 'electronic means of capturing, processing, storing and disseminating information'. Here are some examples of ICT tools for teachers' professional development:

EDMODO

Edmodo is a useful website for educators that takes the information of a social network and filter them and makes it exact for a classroom. Using Edmodo, students and teachers can connect to one another and link by sharing information, struggle, and helpful tips. A teacher can assign and detect the homework on Edmodo; students can get support from the whole class on Edmodo. It is a secure environment. There is no harassment or unsuitable content, because the teacher can monitor everything that is posted on Edmodo. Also parents can connect the class to convey the level of intelligibility that is difficult to achieve without technology. The access link for Edmodo is: new.edmodo.com. The Picture 4 below shows the intro page for teachers:



Figure 4: Getting Started for Teachers

Starting with this page is quite easy for the new users. First choose a teacher or student profile. At the homepage just click the ribbon I'm a Teacher. Figure 5 shows teacher sign up page. Just fill in the information and click sign up.

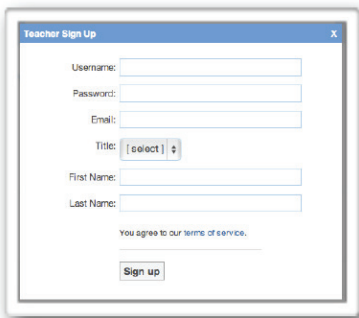


Figure 5: Sign Up Page for Teacher

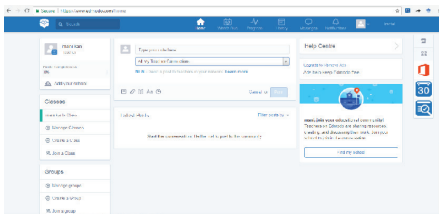


Figure 6: Edmodo Home Page

The above Figure 6 shows the home page of Edmodo. From the home page, groups are basically classes for students to join. To do this, click on create a group in the groups of Edmodo and name the group, then assign it a grade level and define the subject that is to be studied. A new window will be opened for the group has been created, and the code to connect the group will appear. This code can be distributed to students as they sign up. Picture 7 shows the invitation link page of Edmodo.

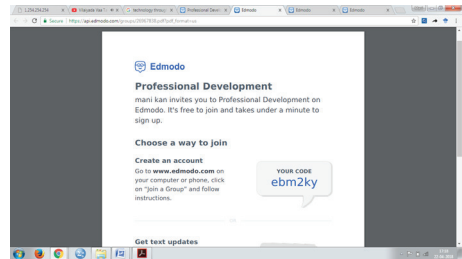


Figure 7: Inviting Way and Code of Edmodo

Figure 8, shows the home page of teacher's login page. Here you can see how to invite the students.

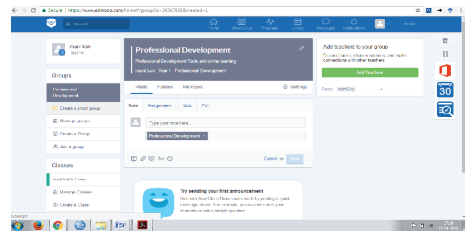


Figure 8: Teachers Home Page

From the home page teachers can give the assignments, attach the notes and study materials, ask the quiz questions and Poll the questions. Table 1, shows the professional development web tools for teachers. The following table is categorized by name, website address and uses of the websites for teachers.

Table 1: Professional Development Websites

Name	Websites	Uses
Teachers Domain	https://www.pbslearningmedia.org	This is a without charge digital media service for educational use from communal broadcasting and its partners. Teacher's domain has Thousands of media assets, support materials, and tools for classroom programme, and teacher professional knowledge communities.
Teacher Vision	https://www.teachervision.com/teaching-strategies/professional-development	Teacher Vision provides a broad range of professional development resources for educators such as articles, lesson plans, Teaching models, acquaintances and many more.
Teachers Network	http://www.teachersnetwork.org	Teachers Network provide huge resources on professional development such as lesson plans, how-to-articles, without charge videos and many more.
Ed Week	https://www.edweek.org/tsb/index.html	Ed Week is an also one of the most important websites in education. It helps teachers and educators grow professionally by providing every kind of resources for free.
Staff Develop	http://staffdevelop.org	Staff develop provides high quality of articles and very useful books to everyone be it a teacher, an administrator, student or even parents.
Education World	http://www.educationworld.com	This is an enormous website that others all the resources you need to nurture professionally. It has altered sections with each one full of PDFs, books, articles and many more.
Better Lesson	https://betterlesson.com	very good Common Core-aligned lessons from rock star peers at large
Common Curriculum	http://www.commoncurriculum.com	Common curriculum having the features of Lesson planning, Standards Tracking, Unit planning, Team-planning and Month Planning.
Read Write Think	http://www.readwritethink.org	Exceptional without charge resource for all things reading and writing
Smithsonian Science Education Centre	http://www.ssec.si.edu	Science Education Centre to make over and develop the learning and teaching of science for pre K-8 students. SSEC dedicated to the institution of effective science programs for all students.
Learn Zillion	http://learnzillion.com	Learn zillion accesses to a high superiority of digital curricular resources that helps them respond to the needs of each of their students.
Teaching Channel	https://www.teachingchannel.org	Teaching channel is a successful online community where teachers can look at, share and learn various techniques to help every student grow.
KQED Education	https://www.kqed.org/education	Great news and classroom resources support both teachers and students
Edutopia	https://www.edutopia.org/topics	Edutopia is dedicated to transform the K-12 education, so that all the students can obtain and efficiently apply the acquaintance, attitudes, and skills necessary to succeed in their studies, careers, and adult lives. Core concepts of Edutopia such as comprehensive assessment, Integrated studies, Project based learning, Social and emotional learning, teacher development, integrated studies and technology integration.

Teach HUB Education Blog	http://teachhub.blogspot.in	Teach HUB education blog covered Technology, teaching strategies, and classroom management. Publishing content a small number of times each week, it teaches about using technology and practical teaching strategies. It also lets learn how to make use of classroom resources to construct stronger relationships with students.
Education Week	https://www.edweek.org	Education Week web tool offers a group of daily news and fantastic advice on addressing on a daily basis classroom scenarios. Browsing this blog will let you have simple access to lots of e-books, professional development kits, and associates to follow-worthy blogs related to education.
eSchool News	https://www.eschoolnews.com	Apart from brilliant featured articles, they also feature a lot of teacher resources, classroom improvement information and professional development tools for enthusiastic educators, whether in written or video format.
The Hechinger Report	http://hechingerreport.org	The Hechinger Report deals with the freshest modernism and each day issues on education and academics. The website tackles a excess of timely topics including blended learning, early education, higher education, high school reform, teacher preparation, and so to a great extent.
Teacher Toolkit	https://www.teachertoolkit.co.uk	Teacher's Toolkit blog provided real-world tips on teaching, training-resources, books, articles, and creating lesson plans. Stay modernized with the latest education news and policies throughout this site.
Crayola for Educators	http://crayola.com/for-educators.aspx	Crayola is dedicated to educators and students everywhere. Educator resources such as Marker recycling, grant programme, Articles and resources, Lesson plans and Art techniques. Crayola website worked as combined partners with teachers and administrators to support superiority in teaching and learning. Offered a blended professional learning opportunity designed to make creativeness, create instructor capacity, support collaboration and accelerates change.
National Library Virtual Manipulative	http://nlvm.usu.edu/en/nav/vlibrary.html	Best Math Games: At the National Library of Virtual Manipulative is used to find the activities for every area of math at every grade level such as Geometry, Measurement, Probability and Algebra. Require to teach shapes to preschoolers.
Google Earth	https://www.google.com/earth	Google earth is used to teach geography very easy in 3D and 2D outlook. Zoom over the Sahara desert. Take a travel around of the Eiffel Tower. Google Earth, the tool that makes the world feels a little bit small with its map-generating capabilities.
EDSITEment	https://edsitement.neh.gov	EDSITEment is a extraordinary site, developed by the National Endowment for the Humanities and the National Trust for the Humanities. In this site offered lesson plans as well as primary sources, videos, and photos for a wide range of humanities topics.

National Science Teacher Association	http://www.nsta.org	The National Science Teachers Association site is promoting excellence and innovation in science teaching and learning for all. This classroom resources such as 600 lesson plans, book articles, videos, simulations, and more.
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Conclusion

This article was devoted to discuss the most current and recent ICT tools for teachers' professional development. The issue was discussed under three main themes: Social media networks, ICT in teacher professional development and Professional development websites. The article should be regarded as both an analytical review of current ICT technologies as well as a report for teachers to be informed on the technologies that can be used for professional development.

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Common Curriculum, www.commoncurriculum.com

Coursera, <https://www.coursera.org>

Crayola for Educators, <http://www.crayola.com/for-educators.aspx>

Edmodo, new.edmodo.com

EDSITEment, <https://edsitement.neh.gov>

EdTech Leaders Online, www.edtechleaders.org

Education World, <http://www.educationworld.com>

Edutopia, <https://www.edutopia.org/topics>

Edweek, <https://www.edweek.org>

Edweek, <https://www.edweek.org/tsb/index.html>

Edx Free Online Course, <https://www.edx.org>

ESchool News, <https://www.eschoolnews.com>

Facebook, <https://www.facebook.com>

Free Online Course, <https://www.udemy.com>

Google Earth, <https://www.google.com/earth>

Hechinger Report, <http://hechingerreport.org>

Khan Academy Free Online Course, <https://www.khanacademy.org>

KQED Education, <https://www.kqed.org/education>

Learn Zillion, <http://learnzillion.com>

Lever-Duffy, Judy, and Jean McDonald. *Teaching and Learning with Technology*. Pearson, 2008.

National Library of Virtual Manipulative, <http://nlvm.usu.edu/en/nav/vlibrary.html>

National Science Teacher Association, <http://www.nsta.org>

Open Culture Online Course, <http://www.openculture.com/freeonlinecourses>

Read Write Think, <http://www.readwritethink.org>

Saylor Free Online Course, <https://learn.saylor.org>

Smithsonian Science Education Centre, <http://www.ssec.si.edu>

Staff Develop, <http://staffdevelop.org>

Teachers Domain, <https://www.pbslearningmedia.org>

Teachers Network, <http://www.teachersnetwork.org>

Teachers Toolkit, <https://www.teachertoolkit.co.uk>

Teacher Vision, <https://www.teachervision.com/teaching-strategies/professional-development>

Teach HUB Education Blog, <http://teachhub.blogspot.in>

Teaching Channel, <https://www.teachingchannel.org>

Twitter, www.twitter.com

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