TITLE

Professional development in the global classroom

VISION (ASPIRATION AND AIMS)

- To connect teachers and classrooms through the use of innovative technology practices
- To help teachers grow from passive to active participants in online communities
- To support teachers to share innovative practice and co-develop resources

BACKGROUND MOTIVATION STATEMENT

Legislative and economic pressures mean that certain methods used to teach difficult science, mathematics or technology topics are no longer possible or practical. Teachers need inspiring ideas to cover these gaps. There are pockets of innovation in classrooms around the world. Social media and online collaboration tools can help teachers get connected with each other and share innovative teaching practice and resources between schools in the same community or across the globe.

NARRATIVE

I am considered by my peers to be a "connected teacher." I often know how to find answers to hard teaching problems through being well connected to teaching communities and online resources.

I was not always like this. In the past I was more of an observer on an online community of teachers but I would certainly never post anything online or talk with teachers outside my school about what I do in the classroom. I learned to become a follower on Twitter and had a few colleagues as friends on Facebook but I often struggled on my own to find answers to hard teaching problems.

One day, I was struggling to find a new approach to teaching a difficult topic (gravity) and I wrote about it in my Facebook status. One of my Facebook friends put my status message on Twitter, and one of her followers then let me know about a TeachMeet (self-organized blended professional development workshop) for physics and science teachers held at a school nearby.

I attended and was inspired by the five-minute presentations, in particular a presentation given remotely by Ms Maria Gonzales, who got her students to create simulations of the motion of the Earth and Moon using the Scratch programming environment. I contacted her through her Facebook profile.

I prefer to try things out on my own and so am experimented with Scratch myself, using the online resources available. I also asked Maria on Facebook for help. We also use Skype to give one-to-one support to each other. We recently worked together to perfect a lesson activity where students worked in pairs to create Scratch simulations of the motion of comets around the Sun. We often share resources between each other, adapting them for use with our own curriculum.

Maria and I also arrange for our two classes to meet online with Skype and get our students to present their simulations and share their Scratch programming experiences with each other. Other teachers in the science department sometimes attend and recently the principal of my school asked us to give a short talk about our use of Scratch and how we came to learn to use it at a professional development forum for secondary schools in my local authority.

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TREND/S

Enhanced professional development

There is a trend of increased emphasis on teacher professional development, in which the use of technology plays an important part. For example, technology is used to create collaborative platforms and communities of practice to bring life to the "hard to teach" and "hard to understand" areas of the curriculum, like MST (Mathematics, Science and Technology), thus engaging students with such crucial subjects.

KEY CONCEPTS

Professional development, blended learning, co-development, social media, online collaboration.

ENVIRONMENT

- at home, on the road, or in the classroom outside of class - teachers are connected asynchronously via social media and synchronously via online collaboration tools
- at a public venue - teachers connect synchronously remotely or face-to-face
- in the classroom, during class - teachers and students connect for blended learning

PEOPLE & ROLES

- teachers who develop innovations in practice and share them with their peers
- self-organizing communities of teachers who meet to talk about practice and share ideas
- students who are the centre of innovative learning activities

INTERACTIONS (INCL. PEDAGOGIES)

- teachers meet each other virtually or face-to-face to share their experiences or co-develop resources
- teachers stay connected asynchronously using social media
- students do innovative lesson activities to learn difficult concepts
- teachers observe and learn from what others do
- head teachers, principals and local authorities learn about innovation in their classrooms and propagate this beyond the classroom

ACTIVITIES

- blended learning, streaming and pre-recorded
- accessing online communities of practice
- co-develop learning resources
- use computer animations and programming environments to explore difficult concepts
- use social media to locate people, events and resources
- use online collaboration tools

RESOURCES (INCL. TECHNOLOGIES)

- online communities of practice: wikis, forums, mailing lists, blogs
- social media: Twitter, Facebook
- online collaboration tools: Skype, Flash Meetings
- programming/simulation environments: Scratch, Alice, etc.