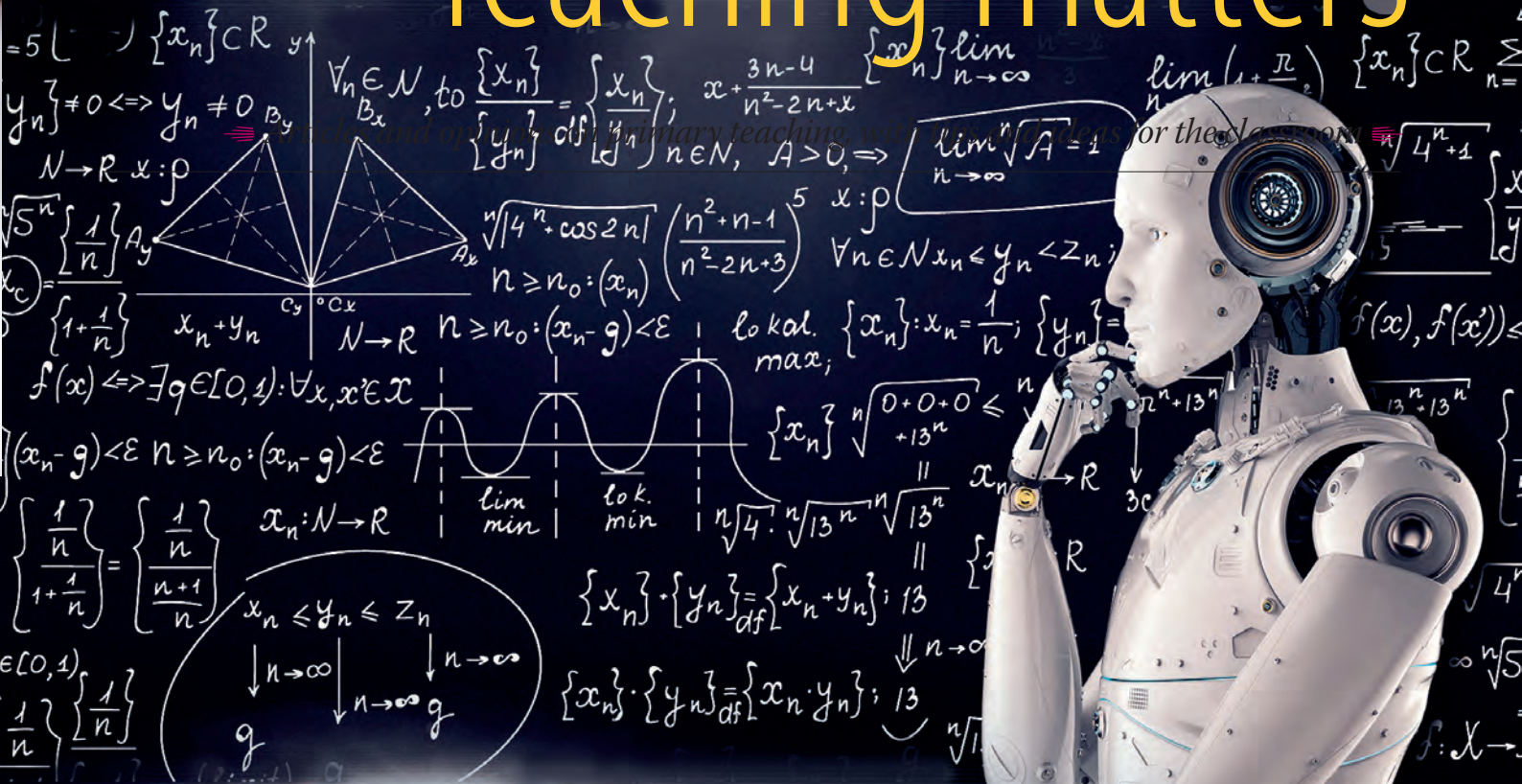


# Teaching matters



## Introducing artificial intelligence and machine learning through Scratch

In a 2016 report, the World Economic Forum stated that by one popular estimation "65% of children entering primary school today will ultimately end up working in completely new job types that don't yet exist." While some may argue that this statistic is a bit far-fetched or over exaggerated, it can't be denied that future technologies will play a huge role in the workforce of tomorrow. One way that primary school teachers can prepare the pupils of the present for the jobs of the future is to introduce them to the concept of artificial intelligence (AI) and machine learning.

### AI in teaching and learning

AI and machine learning may sound like foreign concepts to most educators however the reality is that they are already an integral part of our lives. If you've ever used Netflix, Google Maps or eBay, chances are that those sites used AI and machine learning to deliver viewing suggestions, the fastest route home or products you may like.

Teachers may wonder how they can

integrate AI and machine learning into lessons and their school's digital learning plan and there is a simple solution. Scratch is a simple and fun coding tool that teachers will already be familiar with and can be used to develop simple AI and machine learning programmes that pupils will find challenging, engaging and enjoyable. Building and developing AI and machine learning programmes through Scratch helps pupils to develop the skills of critical thinking, creativity, problem solving, groupwork and communication.

### Where to begin

Trying to figure out where to begin integrating AI and machine learning into a school's digital learning plan may feel like a mammoth task, however there are a myriad of sites such as [machinelearningforkids.co.uk](http://machinelearningforkids.co.uk) that provide step-by-step instructions/lessons for both teachers and pupils. The lessons have three stages of difficulty – beginner, intermediate and advanced. The whole process is accessible, intuitive and easy to follow. Each lesson is approximately an

hour long and pupils can pick from projects such as Make Me Happy (create a character that smiles if you say nice things to it and cries if you insult it) or more advanced ones like Headlines (train a computer to recognise headlines from national newspapers). There are explanations of the process of each step and what will happen in the next step.

### What next?

If you wish to include AI and machine learning or digital technologies in your school's digital learning plan, you can consult [DLPlanning.ie](http://DLPlanning.ie) or contact your nearest education centre for information on Digital Learning Framework seminars.

If you are new to Scratch or want to brush up on your Scratch skills, the 'Scratch for Learning' course will be open for enrolment at the end of January 2019 on [teachercpd.ie](http://teachercpd.ie)

DAVE O'MAHONY, Project Officer, Scoilnet.

