

# Teaching Machines - Deep Learning and Online Education

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## ABSTRACT

We live in a time where people can freely access high quality video lectures, how-tos, journal articles, books with a click of a button. Our education can no longer be said to mostly comprised of what we learned in school. New technologies have pushed us to learn new things we may on the fly and such motivated individuals find themselves online watching lectures about programming, complex systems, neuroscience, deep learning or a how-to in order to write an article or to better understand the world they are living in. But yet, most of what we watch or read on the web, goes unnoticed and

### 0.0.1 Theorems

Theory of the learnable Mutual Information Joint probability RNN / CNN VQA Encoder/Decoder

DIKW framework

## 1. INTRODUCTION

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### 1.1 Part I

E2QA - a theoretical neural network architecture to generate questions and answers from video.

### 1.2 Part II

There are 3 popular concerns that I will attempt to address in this article about online learning in the present and the future. - The first concern is that the learning is often passive, - The second concern is that the information remains untested and therefore doesn't truly make the leap from information to true knowledge. The third concern is that even if the two concerns above were met definitively, it would not be possible to .

I will address each of these concerns by showing that recent deep learning advances could be combined to address all 3 concerns definitively

### 1.3 Part III

I will also present a survey of the current research and how we might approach bringing such a world to life. - Data -

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There are major concerns surrounding online education that I will attempt to address theoretically . Of the billions of video that exist on sites like youtube, the videos are often unstructured,

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## 2. EVALUATION

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### 3. CONCLUSION

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### References

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