VIDEO PEDAGOGY – A COLLABORATIVE APPROACH

CASE STUDY FROM ISRAEL

This report is one of a series of three case studies analyzing particular applications of Video Pedagogy (VP) in three of ETF's partner countries. ETF's research into Video Pedagogy reveals that while there is increasing use of Video Pedagogy in Vocational Education and Teacher Professional Development there is relatively little sharing of practice between different phases, sectors and countries. These case studies aim to share best practices and to examine how the development of Video Pedagogy is being supported by policy makers and practitioners in different countries. We hope that these case studies will help to raise awareness of Video Pedagogy across different countries and institutions, encourage learning and assist further development and innovation.

SUMMARY

Israel's innovative How2MOOC (H2M) project places emphasis on the social dimension of digital learning. The project, which has gone from experiment to mainstream, demonstrates how smart pedagogy and digital technology can accelerate learning.

BACKGROUND

Since 2011, Israel's Ministry of Education has been implementing its strategy for National Information and Communication Technology throughout the school system. The strategy addresses jointly new skill demands, new technologies and new pedagogies. Teachers and learners are been supported to raise their digital skills, to exploit advanced technologies and to adapt their teaching and learning to digital environments. Within this strategy, the Ministry is supporting a number of controlled studies which aim to analyze the impact of ICTs in education. How2MOOC is one such study.

WHAT IS HOW2MOOC

How2MOOC is Ministry of Education programme that has emerged from the *Education Cities* project. How2M brings together students with their teachers into learning hubs where they gather to watch a video lecture, discuss and tackle learning tasks together.

H2M is built around both technological and pedagogical axioms:

- 1. MOOCs make it possible that almost everything can be learned, anywhere without payment
- 2. Education Teams are the paradigm for 21st century learning and teaching:
 - Every student is also a teacher. Each student possess a set of strengths that enables him/her to teach and support other team members, while at the same time, benefitting from the strengths of the other team members.
 - The Education Team shares a goal, and this transformsteam members from rivals to allies, making members responsible for one another and accountable for the common goal, as in a sports team.

The teacher adopting this pedagogical model is called "MOOCster", and is regarded as a coach, whose responsibility is to help team members to identify their strengths, to ensure collaboration, and to facilitate the group's search and definition of a shared goal. MOOCsters are trained to deploy a set of pedagogies appropriate to this role: flipping, blending, using social media, facilitating project and community based learning.

Teachers design learning groups of between two and four learners, balancing and complementing strengths and weaknesses. Academic and personal diversity should be celebrated. Students are invited to choose a role in the group, e.g. "the editor", "the networker", "the reflector", "the graphic designer", "the computer guy", "the fun maker". Students are expected to collectively review: after having watched half of the video, they have to pause it and do some collaborative learning. They start by asking each other if they all have understood what they have seen and by writing down what they think to have understood as a team. To facilitate collaborative reflection and knowledge sharing, students use cards with prompts words and pictures, such as: "can you say it again?" or "I have not understood". The "stop" card, and the "let's expand the knowledge" card are the most important ones, since they allow pupils to assess their knowledge, reflect on it and co-create a shared meaning of the learning material.

The learning needs of teachers have also been addressed. Participating teachers are offered a free 6 day training programme in the form of a MOOC that shows them how to organize and succeed at this kind of teaching.



FROM PILOT TO ROLL OUT

In 2014 Education Cities, supported by the Ministry of Education, ran a pilot involving 15 groups of Israeli students between the ages of 13 and 18. Learners enrolled in the Australian Open University's "Introduction to Astronomy" course and Georgia Institute of Technology's "Mobile Robots" course and studied in Education Teams.. Each class competed against the

others, and progress charts showed that high-school students achieved an 83% course completion rate in relation to higher-level MOOCs taught in English.

According to Yoav Weiman, manager of How2MOOC, this achievement demonstrates that educational video needs to part of a collaborative pedagogy and collaboration depends upon the existence of a physical learning hub, equipped with broadband, a digital projector, a laptop and light dimming: a space where learners come together with their teacher to make sense of what they are learning and to share their knowledge.

Also crucial is the choice of MOOC. The chosen MOOC must to be short (no more than five minutes), interactive, and must be embedded in a solid pedagogical design. According to Weiman, a good example <u>Android Basics</u>, an MOOC designed to teach kids how to code. It is a 2-minute video with a quiz that allows learners to self-assess their knowledge and reflect on their skills.

In 2015, the Ministry of Education expanded the programme to 50 classrooms (210 learners) and in 2018 participation was up to 6599 learners across almost all schools in Israel. The project has sustained high levels of completion of higher-level programmes: 90% in 2018. Teachers and learners provide positive feedback.

In 2015, the pilot was launched in India, Bulgaria and Spain where hubs were set upon in libraries and workplaces as well as schools. H2H is available in some schools in Mexico and China and, in the near future, it will be available in China.

H2M is only part of a wider programme to develop the use of ICTs at all levels of education in Israel. The programme is exploring how ICTs relate to the curriculum, social divisions and employment opportunities. A number of schools have been identified as centres of excellence for the implementation of ICTs and a nation-wide assessment of the impact of new programmes is being carried out by the national evaluation agency RAMA.

Yaacov Hecht has summarized the vision of the programme <u>Education Cities</u> as follows: in the past, the education system handed out fish – *transferred knowledge*. Currently, the education system is giving out fishing poles – *teaching students how to study on their own*. In the future, teachers and students will fish together – *forming collaborative learning communities*.

LEARNING POINTS

- 1. The H2M model integrates pedagogical and technological elements
- 2. The model places particular emphasis on collaborative learning in relation to video
- 3. The innovation has spread rapidly in Israel and beyond thanks to clear evidence of accelerated learning, positive feedback and strong Ministerial support within the framework of a national strategy for digital learning
- 4. Pedagogical and technological change have been supported by free professional development for teachers, free instructional materials and investment in the equipment and learning environments necessary.

Watch: https://youtu.be/jqLjZIYP4 0