The Global Classroom

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Abstract
In this paper VUC Storstrom presents the philosophy and the technology in the development of 3 learning elements with the use of video conferences and recording/streaming facilities:

Distance learning and preparatory language training with video recordings and communication between teacher and students via a professional video conference system. The objective is not least to improve the oral communicative skills of the students. One of the problems learning foreign languages is that the vocabulary and conceptual apparatus in the native tongue is too small and limited, and if students do not know the terms and expressions and are unable to express these differentiated in their native language, they will not be able to learn it in foreign languages.

Global Classroom. In the upper secondary classes VUC Storstrom has developed the Global Classroom – a video based learning system - that can link teachers and individual students and/or classes together across geographical distances but symmetric in time. Global Classroom also uses the Flipped Classroom concept with video recording and streaming of teaching and introductions. Video conferencing increases the students’ opportunities to understand the substance regardless of their literacy.

Global Guest Teacher. VUC Storstrom facilitates an international network of teachers joined in the Global Guest Teacher. This video conference facility connects classes with teachers in other other schools and countries. We get the individual learner into a positive spiral where the understanding of the context promotes their development of language skills, which in turn is a prerequisite for a deeper understanding of, for example, the societal context.

It has been said that words create the world. We want to help people create words. In a global, transnational world that has never been more essential and with this abstract we try to offer ICT solutions – our Distance Learning Program and our Global Classroom Program – to this end.

1. Global Classroom – background and setup

1.1 Who are we?
In Denmark adult education programmes are offered at Adult Education Centres - in Danish VoksenUddannelsesCenter or, in short, VUC. Our institution is thus called VUC Storstrom.

The target group of VUC – mostly adults between 18 and 30 years of age - is certainly heterogeneous: Some need help to build an entirely new basis, either to get back on the track of education or to enhance their position on the labour market.

The programmes are provided as complete units within lower secondary education upper secondary education, preparatory education for adults and courses for dyslectics but also as single-subject courses/exams, thus permitting students to piece together a full programme step by step.

All the teachers have an academic education.

1.2 The new ICT learning platform
The new ICT learning platform is developed with support from the European Social Fund to enhance educational opportunities and raise the educational level in Region Zealand using ICT-based teaching. The ambition is to develop new ways of thinking about teaching and learning with the implications on economic resources and pedagogical skills. The method for this development lies in the model we have developed for the project - Global Classroom - where we combine the traditional classroom teaching with 2 other teaching methods: Parallel classes and distance learning. The three elements are good individually and in combination they creating a unique flexibility and opportunity to rethink teaching methods. We all know traditional teaching, but here's a short introduction to the other combinations of educations: Parallel classes, Global Guest Teacher, distance learning and The Flipped Classroom.
In parallel classes two or more classrooms on different locations are connected. Students can follow the teaching from each classroom while there is only one teacher teaching in and managing both rooms from his position. It is important to emphasize that all students can see and hear each other, and they are sharing the same content on the interactive whiteboards. There is thus a real extended classroom regardless of geographic location. Furthermore, students can also connect to the teaching through their own PC – the so called CMA-solution - which means that they can participate actively in the teaching wherever they are in the world, provided they have access to the Internet. The platform also allows you to include teachers from other geographical positions as long as they have a broadband connection. We call this feature the Global Guest Teacher.

In the usual distance learning concepts students receive instructions and returns their tasks via e-mail or web based learning management systems. To this we add recordings of instructions and teaching, we allow the students to solve their tasks using oral presentations using video and provide the possibility for guidance and training via video conference. We integrate digital materials from distance learning in the classroom teaching in the concept The Flipped Classroom, so students see video lessons at home and work on projects and assignments at school with guidance from teachers.

2. Pedagogical developments in Global Classroom

2.1 Vocabulary – a basis for language learning
When trying to learn languages – whether it be a foreign language or your native tongue – special emphasis should be put on the vocabulary. Without a differentiated and diverse language you will never rise above mediocrity and consequently a limited vocabulary will restrict your free communication and hence your experience of the world. Therefore it poses specific obstacles to learn a foreign language to excellence if your vocabulary in your native language is just average, as it will be impossible to understand and use a word in a foreign language, if it doesn't give you any connotations.

Therefore, we have proceeded to record the explanation of words. This explanation includes some basic grammatical information as well as examples of the word used in different contexts. The student may connect to this programme wherever he is.

2.2 Adjustment to the students’ needs
One of the key issues of the Global Classroom is to draw attention to the students’ needs and thereby to facilitate the students’ daily work. Thus learning styles and flexibility have gained the main focus and below follows a review of the pedagogical progress that has been made on the various platforms of the Global Classroom.

Distance Learning. It is evident that the traditional distance learning is not sufficient, as there is only a written communication between teacher and student. Language learning without the use of verbal communication does not live up to modern standards. Consequently, we have given the students the
opportunity to use video conferences when interacting with the teacher. Likewise we have developed videos where teachers go through major linguistic, grammatical and textual issues. By giving students the opportunity to see and hear the teacher we also oblige the students who are visually oriented.

**Parallel classes.** Parallel classes can - as mentioned – take place between two classrooms or between a classroom and several students who are connected from wherever they wish. In addition to that the students can also communicate with each other without teacher’s participation, thereby helping and supporting each other professionally. Furthermore, there is the opportunity to speak a foreign language to someone outside school hours. The more you practice the better the outcome. The teacher’s participation in parallel classes is streamed, and key sequences are selected and saved. It gives the students the opportunity to either view the lessons again at their own pace or to catch the up if they have been absent or to use it preparing for the exam.

It is important to emphasize that the development of material, which is pedagogically and didactically suitable for distance learning and parallel classes is made by the teachers and that on the basis of their own and the students’ evaluation they bring requests for changes and improvements to the developers.

### 2.3 The planning of further programmes

In the future we plan to facilitate the students’ access to the student counselors: The students may approach the counselors with a variety of study-related, personal, social and economic problems. Up until now all communication has taken place at the counselor’s office. In the future we'll expand the availability of the counselors by using the CMA client, thus making it possible for the student to get in touch with a counselor outside ordinary opening hours, as unsolvable problems primarily occur when being outside school. With this arrangement we hope to minimize the number of drop outs.

### 3. Pedagogical challenges

**3.1 Teaching changes**

Technology or not, the quality of teaching and relationships in the learning environment remains central to students’ learning outcomes. We are very confident that the introduction of the new ICT learning platform kindly pushes the teachers into further development of their teaching. The question is, what elements of teaching is being challenged, and how the teacher deals with the challenge, so the quality is at least as good as before and the students have a positive experience of the relationship. It is our experience that teachers almost never can implement ICT-based teaching in the same way as they conduct traditional training. For example it is obvious that students who use video conferencing must be actively included and prioritized to feel the teacher's presence – without this having a negative effect on the relations between the teacher and the student physically present.

**3.2 The School in the ICT community**

Students, as other young people, use the technological platforms to aquire knowledge and entertainment and to participate in social life - probably in reverse order of priority. It is some years since the school was the only source or path to knowledge, and the technological facilities that support learning seem to follow the same exponential development laws as other hardware development. The question is thus how as an educational institution we can ensure the quality of basic skills in society. In short, the challenge is that we must stick to the core of our educational to give the students the academic, social and methodical competences, while contributing to students' application-oriented technical skills. To achieve this, we have to look at our own school's ICT use and reflect if our practice gives students the skills society needs? Will students be better to grasp the new technology, and find the applications that are relevant for learning purposes while they are in school, or is it all something going on in their spare time?

**3.3 Teachers' skills**

At VUC Storstrom we as part of the project ”The new learning platform” have had the opportunity to make very much out of teachers’ competence in relation to the educational challenges associated with the new learning platform. We use supervision and training of teachers in relation to the development of materials and processes through “learning by doing”. It has been absolutely necessary because experience within the unique combination of teaching methods in the new learning platform is missing,
and because teachers’ competence development is crucial for the quality of teaching. This means that you cannot boost the use of video learning without investing in teachers’ skills, but there are also good opportunities for competence development to take place while teachers prepare for teaching.

3.4 Towards a new role for teachers
The new learning platform also actualizes the question of the teacher’s role and authority. Current and future children and young people are not motivated by formal authority, and they will increasingly question teachers’ professional authority. Even in the early grades of school children know from other sources that professional truths are time dependent and that there are alternatives to the teachers’ choice of sources. Teachers must therefore have the skills and opportunities to use ICT and media at a level so the teacher gets the role as leader of the process rather than “the one with the final truth”. And that is exactly the direction the teaching needs, and is expected from our students.

4. Global Guest Teacher

4.1 Internationalisation
Bandwidth and server equipment is now at a level so that we can establish video learning real time with partners around the world. Real time communication is a challenge but as the last lesson in Denmark is the first lesson in Texas, and last lesson in Bangkok is the first lesson in Denmark, we can if we will. Frankly, it’s hard to imagine a greater internationalization of education without the use of technology, unless we can get students to pay even larger sums to study abroad, and that is not an option for most of our students. Parallel classes with classes abroad are a relatively inexpensive alternative to make our educations more international. At the same time Global Classroom increases students’ ICT skills and making them more attractive to the surrounding community – even in an international perspective.

4.2 Global Guest Teacher
VUC Storstroem develops a network of teachers around the world interested in using the Global Classroom ICT platform and teaching students in other parts of the world. The advantages are obviously that the international counterpart can use the teaching related to his or her specific part of the world more current, case oriented and contextual. This will turn on the “receivers” in the students, it rises their attention and motivation and furthermore they will have to make themselves understood in the foreign language spoken by the Global Guest Teacher.

Fig. 2: Global Guest Teacher

We are looking for schools interested in building up the Global Guest Teacher network with us. The network will work on the basis of common interest thus there is no economy involved. Make your interest visible on the blog globalguestteacher.wordpress.com.