Learning Innovation through *Blended Learning* and *Flipped Learning*

Why *Blended Learning & Flipped Learning*?

The Industrial Revolution 4.0 has encouraged the birth of Education 4.0 and reinforced the need for innovation in learning methods by utilizing Information and Communication Technology. The development of technology that becomes increasingly smarter makes "learning anywhere and anytime" even more convenient.

In addition, the characteristics of present-day students as a post-millennial generation that is very familiar with the technology, visual-based learning, and have the ability to quickly find learning sources is a potential that needs to be managed in learning. Therefore, efforts and strategies are needed to utilize the potential and the existing system to encourage students to possess the 21st-century competence and become lifelong learners by employing various internal and external learning resources in the learning process.

Universitas Gadjah Mada (UGM) has a strong commitment to innovate both in learning and education as well as in research and community service. Several programs have been carried out by UGM such as developing the content of the Knowledge Channel and the Knowledge Portal which can be utilized as a resource for learning and dissemination. It is also supported by the Rector’s Decree Number 825/UN.1 P/SK/HUKOR/2018 on the Implementation of the Blended Learning Method in Universitas Gadjah Mada Environment. Besides blended learning, UGM also innovates through flipped learning as an effort to provide chances, opportunities, and challenges in exploring new and innovative things by utilizing relevant learning sources. The experience from the new things is then reflected, evaluated, and strengthened on the side of the students, facilitators, media/systems, materials, and the learning process.
Blended Learning at UGM

The blended learning method is an enrichment method that is carried out by combining the implementation of face-to-face learning in the class with interactive learning in the network (online) and supported by Learning Management System (LMS) (such as eLisa/eLOK).

The principle of blended learning implementation at UGM:

a. Face-to-face or online activities must be included in the Semester Learning Activity Plan (RPKPS).

b. Courses are available and can be accessed by students through eLisa and eLOK Learning Management Systems (LMS), or LMS at the Faculties and Departments.

c. The implementation of interactive learning in the network (online) is carried out with a maximum load of 30% (thirty percent) of the number of meetings scheduled in the RPKPS or a maximum of 4 times online face-to-face meetings of the 14 scheduled meetings.

d. The implementation of the blended learning method is evaluated periodically every year as part of the learning cycle.

e. Blended learning evaluation includes: evaluation of courses’ learning achievement, evaluation of learning activities, and proper online documentation.

The presence of eLisa/eLOK at UGM is very helpful in managing the learning process so far. Students are very enthusiastic and active in the discussions in the system. The presence of the Rector’s Decree on Blended Learning will encourage the use of eLisa/eLOK and prepare students to become lifelong learners.
Flipped Learning at UGM

Flipped learning is one of the active learning methods that is conducted by providing chances/opportunities for students to learn material before the meeting in class guided by the facilitator (for example: students can follow a relevant video lecture/Knowledge channel, read a relevant learning resource/Knowledge Portal, etc.) and during the meeting in class, discussion using the SCL method is conducted by referring to the previously set learning achievement and receive feedback from the facilitator. Consolidation of learning material can be done at the end of the meeting, and after that, students are given the next learning challenges.

The principle of flipped learning implementation at UGM:

Five steps of flipped learning implementation at UGM:

1. **STEP 01**
   - Determine at which meeting the flipped-learning method can be applied.

2. **STEP 02**
   - Design online activities and activities in class.

3. **STEP 03**
   - Describe the relationship between activities outside the classroom and in the classroom.

4. **STEP 04**
   - Adjust learning material so students can use it as preparation for the face-to-face meeting in class.

5. **STEP 05**
   - Expand learning outside the classroom through individual assignments and collaborative assignments.
Learning Ecosystem Strategy through the implementation of Blended Learning and Flipped Learning

1. Strengthening HR
The strategy of strengthening human resources is conducted through training/workshops on ICT utilization in the learning process for lecturers and for education personnel to support the learning process through blended learning and flipped learning.

2. Strengthening Student Capacity
Strengthening student capacity in the implementation of learning through blended learning and flipped learning include: the ability to implement the proper communication ethics both in class and online, learning independence, the ability to find relevant learning resources, play an active and creative role in the assignments, as well as hone critical thinking skills and encourage them to be a problem solver of real issues in the field.

3. Strengthening Support Infrastructure
Strengthening the supporting infrastructure that provides open spaces for networking purpose and cooperating with each other (co-working space) needs to be done in stages.

4. Sustainable Learning Content Development
Visual-Based Learning content needs to be continuously developed, adjusted, and strengthened. Learning Management Systems (LMS) owned by UGM (eLisa and eLOK) must be used optimally as a supporting media for the learning process. Mini studios and Academic Production House are the primary needs in the development of the audio visual-based content.

5. Strengthening Learning Resources acquired from the Results of Research and Community Service
The results of research and community service are strived to be accessible to the broader community and at the same time can be used as a learning resource for students, which is accommodated in the Knowledge Channel and Knowledge Portal (KPMI).

In the future, the limitation of space and time are no longer an obstacle to learning. The future that increasingly virtual and without limits requires UGM's ingenuity to enrich its learning methods and service to the broader community. UGM's global reach gives birth to the maturity of the community of practices-based (CoP) knowledge sharing process, namely groups of practitioners who utilize knowledge from UGM in various corners of Indonesia and around the world. The maturity of the knowledge sharing process will make UGM become the "Knowledge Portal" and "Knowledge Channels" for all corners of the Archipelago and around the world. And to achieve this characteristic, the socio-entrepreneurial spirit is the foundation in every process that runs at UGM.

One of the efforts currently being pursued by UGM is to integrate the knowledge sharing method through KPMI (Knowledge Channel and Knowledge Tower) of UGM with Government Program through Village Academy 4.0 in collaboration with the Ministry of Village, Development of Disadvantaged Regions and Transmigration of the Republic of Indonesia. Teaching materials for the development of village business entities, rural technology, village administration, social entrepreneurship, and village socio-economic institutions, as well as other knowledge and innovations needed by the community. Therefore, the knowledge from UGM can be utilized by the Indonesian citizens from all corners of the country and the world community, to build Indonesian sovereignty towards a prosperous and advanced Indonesian society.