# MOOCS on SWAYAM
# and
# TEZPUR UNIVERSITY

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# Teaching-Learning Co-ordinates

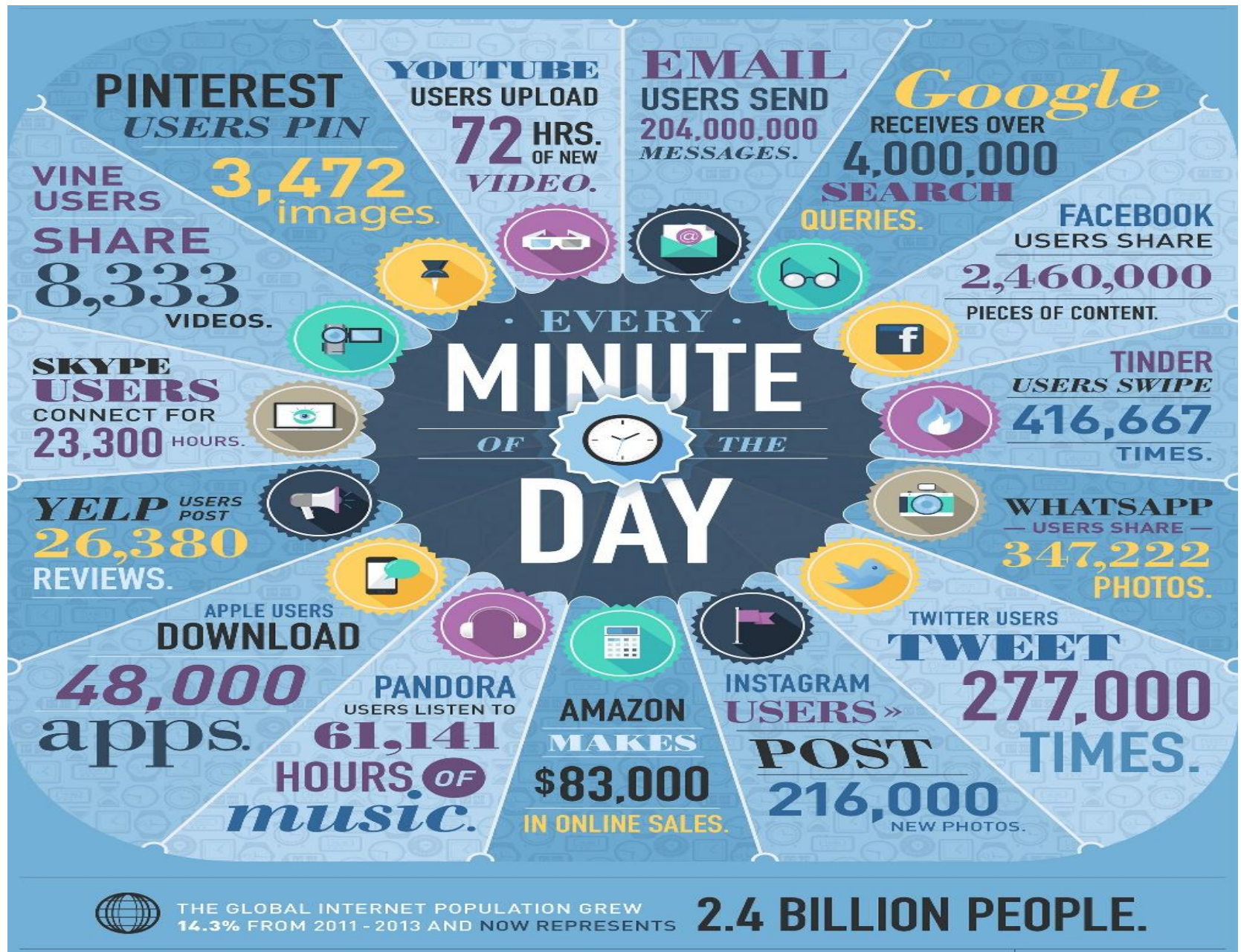| | |
|---|---|
| **(Same Time, Same Place)**<br><br>**Class Room** | **(Same Time, Any Place)**<br><br>**Video Conferencing**<br>**Television**<br>**SWAYAM PRABHA**<br>(Technology enabled )<br>Communication |
| **(Any Time, Same Place)**<br><br>**Tutorial Home**<br>**Multiple batches** | **(Any Time, Any Place)**<br><br>**Digital Learning**<br>**MOOCs on SWAYAM**<br>(Technology enabled )<br>Communication |

# Digital Learning

- Digital learning is a new paradigm of learning
- Learning at *anytime, anywhere,* by *anybody*
- The vision is to create equilibrium state of knowledge enabling free flow of knowledge beyond boundaries from teachers to learners.
- The enabling technology is Web technology
- Infrastructure is Internet

# Context

- In the last few years we observed how digital evolution ignited a social revolution.
- Evolutionary track of digital technology: Internet, www, Web Service, Cloud computing, Fog computing….What next?
- This evolution of digital technology brought about sea changes in many domains of our life—
- In office and business life, worflows; in consumer life: online shopping, in social life, social networks etc.
- Now in teaching and learning domain today we have digital learning.
- Evolution: Gurukul → School → eGurukul
- We the teachers are on the transition from Guru to eGuru.

**Information flow and Media Consumption Habits**



PINTEREST *USERS PIN*

VINE USERS SHARE **8,333** VIDEOS.

**3,472** images.

YOUTUBE USERS UPLOAD **72** HRS. OF NEW *VIDEO.*

EMAIL USERS SEND **204,000,000** *MESSAGES.*

*Google* RECEIVES OVER **4,000,000** SEARCH QUERIES.

FACEBOOK USERS SHARE **2,460,000** PIECES OF CONTENT.

· EVERY · MINUTE OF THE DAY

SKYPE USERS CONNECT FOR **23,300** HOURS.

TINDER *USERS SWIPE* **416,667** TIMES.

YELP *USERS POST* **26,380** REVIEWS.

WHATSAPP — USERS SHARE — **347,222** PHOTOS.

APPLE USERS DOWNLOAD **48,000** apps.

PANDORA USERS LISTEN TO **61,141** HOURS *OF* music.

AMAZON MAKES **$83,000** IN ONLINE SALES.

INSTAGRAM USERS » POST **216,000** NEW PHOTOS.

TWITTER USERS TWEET **277,000** TIMES.

THE GLOBAL INTERNET POPULATION GREW **14.3%** FROM 2011 - 2013 AND NOW REPRESENTS **2.4 BILLION PEOPLE.**

# SWAYAM
*https://swayam.gov.in/*

- Motivation: Hon'ble Prime Minister Narendra Modi*ji*

- SWAYAM is the indigenous platform of the GoI for Digital learning.

- SWAYAM stands for Study Webs of Active Learning for Young Aspiring Minds.

- Objective is to provide high quality interactive e-Content benefiting lifelong learners, students, teachers, researchers on anytime, anyone, anywhere basis for acquiring knowledge and skills.

**SCOPE: A wide spectrum of online courses from High School to Higher Education and skill sector courses.**

# MOOCs : a vertical of SWAYAM

NME-ICT initiative

MOOC: Massive Open Online Courses

**M**assive:Large enrolment numbers

**O**pen : No mandatory qualifications – Open to all

**O**nline : Fully online. Delivery infrastructure is Internet.

**C**ourse : Structured course content

# National Coordinators for MOOCs

- 8 National Coordinators

| National coordinator | Sectors |
|---|---|
| UGC | Non-Technology Post Graduate Degree Programs |
| NPTEL | Technical/Engineering UG & PG degree programs |
| Consortium for Educational Communication (An IUC of UGC) | Non-Technology Under Graduate degree programs. |
| IGNOU | Diplomas and Certificates |
| NCERT | School Education from Class 9th to 12th |
| NIOS | School Education from Class 9th to 12th. |
| IIM Bangalore | Management programs. |
| NITTR, Chennai | Teacher Training programs |

# E-PG Pathshala
*http://epgp.inflibnet.ac.in/*

- UGC has developed high quality e-content for non-tech e-content for PG MOOCS and delivered on ePG Pathshala website
- E-content is in 4 quadrant:
  - E-text: text, pdf, e-book
  - Video:
  - Self-assessment: MCQ, Problems, Quizzes, Assignments
  - References and further reading
- E-content of e-PG Pathshala is used for developing MOOCs on SWAYAM and for telecasting videos on 10 DTH Channels under Swayam Prabha project.

# Difference between e-content and MOOCs

- E-PG Pathshala provides e-content in four quadrants. It can be accessed as **Open Educational Resource (OER)** where no teacher support/hand-holding for students is available.

- MOOCs has teacher-student groups where MOOC coordinator/teacher interacts with the learner. A learner can earn certificate/credit on successful completion of MOOCs course on SWAYAM

# UGC (Credit Framework for Online Learning Courses through SWAYAM) Regulation, 2016

- Learning Courses: Online learning courses to be available on  SWAYAM

- Notification: SWAYAM to notify courses on June 1 &  Nov 1, every year

- Credit Transfer: Courses on SWAYAM   permitted for credit transfer

- Choice of Courses: Up to 20% courses in a         Program can be   on SWAYAM

# MOOCs in TU

- In Tezpur University we are in the process of moving from the CONSUMERS to PROSUMERS of MOOCS

- As of today, we are basically consumers of MOOCs.

- CSE started offering MOOCs courses from Spring, 2017

- Our students consume MOOCs provided in SWAYAM/ NPTEL by registering

- We just started to play the role of producer by the first course offered by Prof. S. Sarkar on Direct Tax: Laws and Practice          (vide letter no F.I -6/2018/AAC/MOOCS dt May 2018)

- To be in the prosumer role we started in 2018 a new centre, DIGITAL LEARNING CENTRE, in Tezpur University.

- So long our approach to digital learning was reactive to GoI initiatives. Now our approach is proactive.

# Present status
# MOOCs on SWAYAM

- Autumn Semester (Aug-Dec), 2018
  - No of courses offered : 16
  - No of students registered: 70
  - No of courses accepted : 01 (Prof. S. Sarkar)
- Course List for Spring (Jan-July), 2019 already offered in SWAYAM/NPTEL web site.

# MOOCs adoption Procedure
## (followed in CSE Dept)

- **Step1:** As soon as SWAYAM/NPTEL publishes the list of MOOCs courses, the department selects some of the courses suitable for CSE students. The selected courses are offered as elective courses complementary to the courses offered by the department in a semester.

- At present, department approves only those MOOCs courses which are not offered by any of the CSE faculty members. This avoids any issue related to credit mismatch.

- **Step 2:** DAC decides the course code (CS xxx) for the selected MOOCs course, assigns total credit to the course based on total contact hour details of the course provided in the SWAYAM/NPTEL portal and notify to the students for enrollment (subject to approval of AC). The notification includes TU course codes, credits, last date of enrolment, starting date, ending date and duration in weeks etc.

- **Step 3:** Students enroll for the courses from the approved list online and report to the department at the time of semester course registration.

# MOOCs adoption Procedure

(followed in CSE Dept)

- **Step 4:** Students follow the instructions provided by the host faculty of the concerned MOOCs course and appear for the final examination at the designated nodal centres. The students must pay the exam fee before the due dates.
- **Step 5:** Students may withdraw from a course and report to the department in the normal procedure followed in the University.
- **Step 6:** At the end of course, students submit the score card provided by SWAYAM/NPTEL portal in the department. The scores are converted to equivalent letter grade by a departmental committee and send it to CoE for credit transfer. If letter grade is given and the grading system is matching with ours, we adopt the grade directly.

# MOOCs DEVELOPMENT PROCEDURE
### (SWAYAM guideline)

- Todays workshop is mainly focused on MOOCs development for SWAYAM.

- New MOOCs may be developed for the courses high in demand but expertise not available in majority of the universities (eg Electives).

  ‣ For development of a MOOC a faculty member submits

    ‣ an Expression of Interest (link available in SWAYAM)

    ‣ followed by detailed proposal along with a consent letter from the host institute

    ‣ Introductory video

# MOOCs Development

- Approx 13.5 lakh is granted for each course. (Detail break up)in the SWAYAM Guideline)-

- Benefits of developing MOOCs

    - Financial benefits

    - MOOCs development is now linked with CAS, API etc.

    - Course content is prepared in 4 quadrants (TEXT, Video, MCQ etc, Reference and further reading)

- Content development under the framework of Outcome Based Education.

- Pedagogy: BLOOMS taxonomy is followed

- OUTCOME: specific, measurable and achievable

- UG: Lower order thinking skill: Knowledge, Comprehension, Application

- UG: Higher order thinking skills: Analysis, Synthesis, Evaluation etc.

- Psychomotor Domain: Imitation, Maniputation, Precision, Articulation, Naturalisation

# DIGITAL LEARNING CENTRE Tezpur University

- To keep pace with the global changing scenario in digital learning Tezpur University started a Digital Learning Centre in 2018

- It is a proactive measure towards digital learning paradigm.

- We plan to follow prosumer model.

- We may offer CBCS and other interesting courses training in MOOCs

# Social Impact Estimation

- No of Universities (including University level Institutions) = 951

- No of affiliated colleges = 42322

- If such a huge HE institutions participate in this digital learning initiative of GoI then we can imagine what will be the social impact in India.

-  Present status: 18,000+videos, 33lakh+ visitors

- (Figures as on January 2018)

# THANK YOU