MANAGING PEDAGOGICAL CHALLENGES TO DIGITAL LEARNING

The outbreak of COVID 19 has shifted our livelihood to go digital. Digital technologies have drastically transformed our way of life, ways of communication, way of thinking, feelings, channels of influence on other people, social skills, and social behavior.

With drastic change comes the need to learn new ways of doing things that bring complex challenges, especially to us teachers. We are suddenly forced to learn new things, to change the way we teach and still to make sure learning happens.

So, what are the challenges to digital learning faced by teachers?

Before we discuss the challenges and recommend strategies to manage the challenges, we need to understand first the elements of a digital learning ecosystem.

**Elements of digital learning ecosystem**

Digital learning exists in an ecosystem of learning.

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| IDS  IDS  IDS Source: Adapated from Anicic, B. (2019), GeoIgnite: Digital Transformation Beyond Buzzwords | Econsystem of digital learning:   1. People: Students, teachers, admin, consultants 2. Process: Pedagogical process and non-pedagogical process 3. Technology and supporting tools and infrastructure: Learning Management System, Server, Internet Connection, learning apps 4. Course contents: Syllabus, e-text, ppt, pictures, video files, assignments, quizzes 5. Instructional Design Strategies: principled-based IDS bind all the elements in the ecosystem. |

**Pedagogical Challenges and Solutions to digital learning**

**Challenge 1: People challenges**

1. Attitudes towards digital learning: fear of the unknown, anxiety (learning new things)
2. Digital literacy and confidence to use main digital devices
3. Communication and interaction: feeling isolated, helpless

Possible Solutions

1. If you cannot change the situation, change your attitude: See the opportunities beyond the obstacles
2. If you cannot change the situation, learn to adapt: arrange collaborative learning (learning partners) - – concentrate on the must learn, and gradually improve to the nice to learn.
3. Create learning community: Use variety of communication platforms (social media – WA, MS Teams, LMS, Facebook, IG) – arrange regular communication time
4. During class communication: Engage students throughout the session
5. Questions for everybody to post answers
6. Questions for some people to answer with camera on
7. Questions for group or pair to answer in breakout room

IS: Bite-size learning – make frequent breaks from your explanation to check understanding – by asking question, ask for opinions (agree or disagree), ask for examples.

1. After class communication: Communicate regularly: build up communication routines (set time when you can be reached and respond to their questions)

**Challenge 2: Course content challenges**

1. Preparing and selecting contents for synchronous and asynchronous sessions
2. Conversion to digital form
3. Variety of course contents
4. Assessments

Possible solutions

1. Make learning objectives the guiding start to select and prepare materials
2. Balance synchronous and asynchronous contents
3. Balance self-developed contents with off-the shelf (ready-made contents)
4. Include timing for delivery of contents
5. Break out contents for bite-size learning

**Challenge 3: Technology and infrastructure contents**

1. Learning and using new teaching/learning apps: biting more than we can chew
2. Internet connection: quota, bandwidth, stability
3. Devices: outdated device, troubleshooting

Possible solutions:

1. Learn the main app and a few supporting ones – get help from IT help desk, learn from fellow teachers, learn from youtube tutorial
2. Don’t be afraid to make mistakes – before trying anything, make sure to back up the course content
3. Learn new thing one step at a time – experiment with it first before trying out in class

**Challenge 4. Process challenge**

1. Short span of concentration
2. Tons of distractions working from home
3. Virtual classroom management
4. Time management

Possible Solutions:

1. Instructional strategy-based decisions
2. Differentiated instructions
3. Bite-size learning activities
4. Allow ‘time-outs’ for digesting learning (reflective questions)

**Solutions from Dr. Tim Clark (2020):**

Dr. Tim Clark, in BYOT (Bring your own Technology, his professional blog, sums up 10 best practices for teaching with digital content.

1. When teaching with digital technology, it is important to **develop a learning community**, not just classroom interaction.
2. For every learning activity, have an **instructional purpose** to back it up to ensure learning to take place.
3. Before publishing, **preview** all digital content
4. Learning virtually is challenging. Thus, **scaffold** understanding to facilitate better comprehension.
5. To ensure learning success, carefully **plan** for interaction with the teacher, the contents, and fellow learners and even other elements of the ecosystem.
6. Don’t just teach the content, but also Incorporate digital age skills: collaboration, information search, digital literacy skills, critical thinking skills, alternative thinking skills.
7. Like designing for conventional classroom learning, digital learning also requires teacher to wisely consider the lesson design and sequencing.
8. Learning with technology is challenging, as you have to physically do it in ‘isolation’, thus, to maintain motivation, utilize a **variety** of content
9. You may have received pre-planned or pre-prepared (off-the=shelf) course content inserted in your moodle account, but you can **personalize** learning experiences
10. When establishing a learning community, encourage communicating through multiple devices.

**A SAMPLE lesson applying SMART model**

To incorporate research-based principles, expert recommendations and personal experiences, the author proposes to implement SMART model when designing a lesson delivered in the digital ecosystem. This model has been implemented since 2018 and improved in 2020 at the start of the COVID 19 outbreaks with many adjustments up to now.

1. **S**etting up the heart, head and the hand before starting the lesson. This will lower the affective filter of the students to actively participate in the lesson.
2. **M**ain materials presentation and discussion need to be scaffolded from easy to more challenging and presented in bite-size chunks to enhance comprehension.
3. **A**ssisted Learning is then encouraged with examples, models, guidance from the facilitator to apply the key principles presented in the main materials discussion.
4. **R**einforce learning by giving them more independence to try out the learned principles independently and innovatively.
5. **T**ransfer to real-life context to help learners see the relevance and meaning of the learned principles to their own personal context.

Below is a sample lesson implementing the SMART model.

Course Title: Business English  
Topic: Making a business call and leaving a message  
Duration: 100’  
Platforms: Moodle and MS Teams

**Set up the heart and mind**

Good evening, all

Below is our plan of activities.

**PRE-STUDY ASSIGNMENT (ON MOODLE)**

**ENTRY QUESTIONS 18.30 - 18.45**

(Write the answers in the meeting chat below before you join the class)

1. Name and Student Number
2. Who was the last person you talked to on the phone today? How are you related to him/her? (Friend, family member, client, colleague, boss, neighbor, ... etc.)
3. What did you talk about? What is the follow up of the talk?

**DISCUSSING THE ANSWERS TO THE ENTRY QUESTION** 18.45 - 19.00

(We will start online face-to-face discussion with Camera on)

**Main Materials Discussion  
  
DISCUSSING THE MAIN MATERIALS** (19.00 - 20.00)

1. Video watching
2. Discussing the communication strategies and language expressions
3. Practicing the communication strategies and language expressions
4. Q&A

**Assisted Learning: GUIDED ROLE PLAY** (20.00 - 20.15)

**Reinforced Learning**

**INDEPENDENT ROLE PLAY** (20.15 – 20.30)

**SUMMARY AND FEEDBACK SESSION**

**Transfer to real life  
  
LESSONS LEARNED (20.30 – 20.45)  
 EXIT QUESTION (20.45 – 21.00)**

**REFERENCES**

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