MOOC

COMPREHENSIVE
GUIDE

MOOC
COMPREHENSIVE
GUIDE

Prepared by:

Universiti Malaysia
KELANTAN
CENTER OF TEACHING & LEARNING

GERIC
GLOBAL ENTTREPRENEURSHIP RESEARCH
& INNOVATION CENTER

UNIVERSITI MALAYSIA KELANTAN (UMK)
2017

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UNIVERSITI MALAYSIA KELANTAN,
PENGKALAN CHEPA, MALAYSIA
2017

FOREWORD FROM UMK'S VICE CHANCELLOR

YBhg. PROFESSOR DATO' DR. MORTAZA BIN MOHAMED

VICE CHANCELLOR
UNIVERSITI MALAYSIA KELANTAN

Assalamualaikum wa Rahmatullahi wa Barakatuh, greetings and Salam 1 Malaysia

Alhamdulillah, we are grateful to ALLAH swt for His blessings that we are still in good health and strong enough to carry out our entrusted tasks. As a Vice chancellor of UMK, 2015 was truly a challenging year in upholding UMK to higher standard. As stated in my mandate early this year, I did mention that "UMK's age that is approaching nine (9) years since its establishment in 2006, UMK supposed to have taken initiatives and is standing on a higher education platform in line with its goal, vision and mission based on "University Strategic Framework".

One that matter, I would like to take this opportunity to take this opportunity to thank and congratulate PPP, SME and those who directly and indirectly involved in development of Massive Open Online Courses (MOOC) UMK. UMK is responding to Ministry of Higher Education by supporting and enabling the implementation of Malaysia Education Blueprint (Higher Education) 2015-2025, Shift 9 : Globalized Online Learning by developing MOOC UMK.

Personally, I am proud on the great effort showed by each team member in these first three MOOC of UMK : Architectural and Heritage, Animal Nutrition and Bio Product Development which will be included on an Open Learning (OL) platform so that it can be access by all students at national and international level. With MOOC, an interactive mode in teaching and learning will propel and in future it will be a culture of new learning environment.

Lastly, it is my hope that via MOOC UMK, we will be able to assist students to understand better on the latest learning and teaching that has fulfilled the criteria of 21st century learning.

FOREWORD FROM UMK DEPUTY VICE CHANCELLOR'S (ACADEMIC AND INTERNATIONAL) OFFICE

PROF. DR. MOHD. HASSAN BIN MOHD. OSMAN

**DEPUTY VICE CHANCELLOR
(ACADEMIC AND INTERNATIONAL)
UNIVERSITI MALAYSIA KELANTAN**

Assalamualaikum w.b.t. and greetings

First and foremost, I would like to congratulate PPP on the initiative to publish UMK MOOC Guideline Book where its role is to ensure all information and processes in MOOC development are clear, effective and systematic.

It is a big hope for this information within the Guidebook to share an important knowledge and act as a reference material for PPP. Dessimination of this information will ensure that we will continue to take a proactive steps relevant to the current demand. Through PPP and other center, UMK will continue to take proactive and responsive steps in ensuring current information will always relevant with current market.

Lastly, I am proud with the publication of the guideline book as one of the proactive approaches in serving latest information. May this book can be benefited in future MOOC planning. Be determined, never give up and do not succumb to challenges as well as resolve yourself in being role model and able to give major contribution to community and thus upraise UMK's name to the whole world.

Wabillahitaufik walhidayah wassalamualaikum warahmatullahi wabarakatuh.

FOREWORD FROM CENTER OF TEACHING AND LEARNING (PPP)

ASSOCIATE PROFESSOR DR. SURIA BINTI BABA
DIRECTOR,
CENTER OF TEACHING AND LEARNING
UNIVERSITY MALAYSIA KELANTAN

Assalamualaikum w.b.t., greetings and Salam 1 UMK.

Alhamdulillah, thanks to Allah for his blessings for PPP for successfully completed a book of MOOC UMK Development. First and foremost, millions of thanks to Universiti Malaysia Kelantan (UMK) top management team, dean of faculty who involved in MOOC UMK development specially and generally in Malaysia. Other than that, thanks also to Ministry of Higher Education (MOHE) for the budget allocated for MOOC and thus as drive for MOOC development. Congratulations to all involved members especially Subject Matter Expert (SME), recording team, involved experts and special wishes to PPP staffs for their great effort in developing and making MOOC UMK Development a success.

For your information, main objective of this book is to be made as reference material. It can be made as reference for MOOC improvement. The handy and informative concept contained in this book is as one effort in increasing MOOC collection.

It is my great hope to have this book as one of the beneficial guidelines and is practical for all in regards of future MOOC development. I hope that may this book will be made as reference by SME in Public Universities (PU) level soon.

Wabillahitaufik walhidayah wassalamualaikum warahmatullahi wabarakatuh.

01
INTRODUCTION

Concurrent with the launch of Malaysia Education Blueprint (Higher Education) 2015 – 2025 [MEB (HE)], Higher Education Providers (HEP) of Malaysia were urged to upgrade its online learning teaching standard to global level MEB 2015-2025 (Shift 9). This decision was made with intention to widen innovative and high quality online teaching access, increase teaching and learning quality, reduce delivery cost and to offer Malaysian's expertise to global community. Besides cultivating life-long learning especially among Malaysian, it also can expose Malaysia's Public Institution of Higher Education (PIHE) especially Public Universities (PU) in international level.

In conjunction with this national agenda, as suggested approach in PPM (PT) via Shift 9, implementation of Massive Open Online Courses (MOOC) in every HEP in Malaysia is a very accurate step. By utilizing MOOC, efficient teaching and learning delivery were able to be prepared, HEP's excellence in niche courses and expertise were increased, and leading to Malaysia transformation as the prime hub in educational world.

Students will be able to gain a lot of benefits from this outstanding cyber infrastructure in utilizing technology. Other than that, local PU's HEP especially will develop MOOC in each expertise field, join international MOOC consortium and establish global Malaysian education branding in international platform.

Main objective of online learning in global stage as blended learning will become main pedagogical approach to all HEP. Methods used by Ministry of Higher Education (MoHE) in realizing this aspiration is by collaborating with HEP in building academic community capability and exploring international e-Learning construction platform to develop MOOC content. This includes several commenced initiatives such as MOOC launching in special fields of expertise in Malaysia, to make online learning as an important component in high education learning and teaching as well as to build an outstanding cyber infrastructure.

02

**MOOC
IN
UMK**

2.1 MOOC'S DEFINITION

MOOC is short form for Massive Open Online Courses where it is a new era learning model. MOOC was inspired from MMORPG (Massively Multiplayer Online Role-Play Game). "Massive" and "Open" picturize that offered courses are open, delivered fully online without any restriction in the number of students who would like to register. Knowledge that can be gained from MOOC started with the ideas which are in the particular courses' curriculum.

As part of effort in mobilizing Shift 9 in all PU, MoHE has encouraged to:

● Develop 60 MOOC courses in 2015 and continue courses' development until 2025.

2.2 OBJECTIVE

i. Blended learning model will become main pedagogical approach for all HEP. Students will be able to gain benefit from this outstanding cyber infrastructure to utilize technology such as video conference, online streaming and MOOC. Local public universities (PU) also will develop MOOC in some certain field of expertise, joining international MOOC and establish Malaysian global educational branding.

ii. This will enable the goal achievement as stated in National e-Learning Policy (DePAN) in 2014. Malaysia also need to shift from big-scale delivery model to knowledge-driven innovation model to keep abreast with educational access and to offer more suitable learning depending on individual tendency.

2.3 PROGRAMME'S TARGET

Universiti Malaysia Kelantan (UMK) has taken initiative in realizing MoHE's desires by developing MOOC. UMK has planned strategies in order to achieve target towards MEB (HE) 2015-2020 by developing 35 courses each year for 2017 until 2020. It makes the whole MOOC UMK in 2020 amounted to 185 courses.

After identifying expertise and suitability in UMKs' offered courses, three courses have been selected to be developed into MOOC:

Architectural Heritage	Animal Nutrition	Bio Product Development
FACULTY OF CREATIVE TECHNOLOGY AND HERITAGE	**FACULTY OF VETERINARY AND MEDICINE**	**FACULTY OF AGRO BASE INDUSTRY**
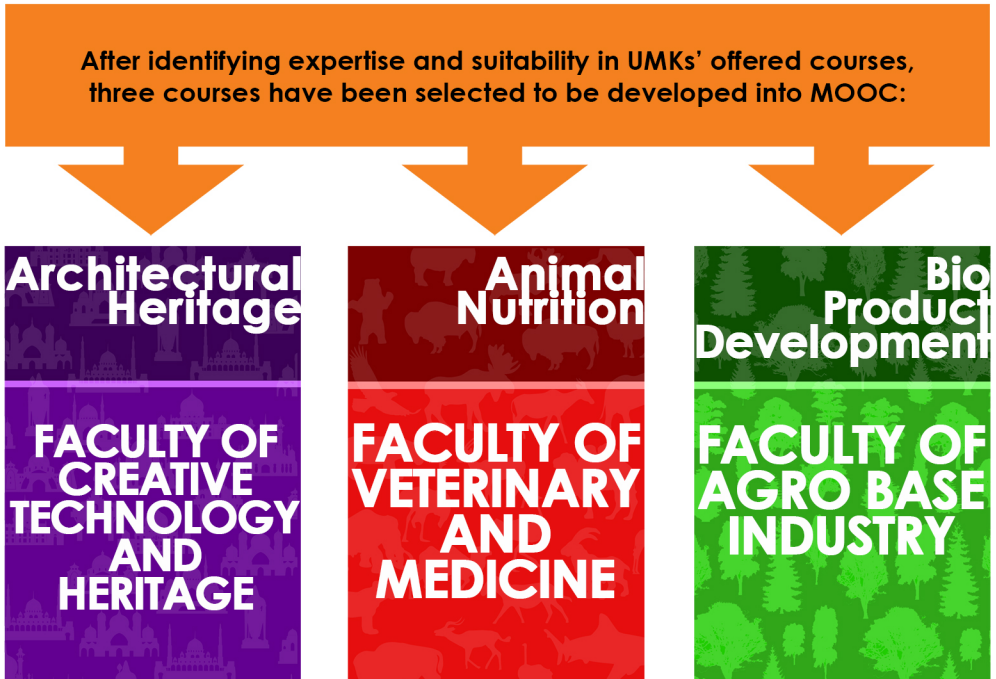
2.4 PURPOSE OF UMK MOOC DEVELOPMENT GUIDE BOOK PUBLICATION

The purpose of UMK MOOC development book is to be made as future reference in MOOC development and courses offered. In the same time, information within it also can provide guidance regarding implementation and development process as well as to increase quality and effectiveness and thus increases the efficiency of MOOC development process in the future.

In order to fulfill the implementation of MOOC in UMK, implementation and development process commenced are made to follow the specifications and elements in Malaysia MOOC Development and Delivery Guideline.

03

MALAYSIA
MOOC DEVELOPMENT
AND DELIVERY
GUIDELINE

Malaysia MOOC Development and Delivery Guideline has stated several statements regarding MOOC implementation process such as :

- **Malaysia MOOC platform**
- **Type of developed courses**
- **Courses timeframe**
- **Public design process**
- **MOOC development practice**
- **Development flow**
- **MOOC design**
    a. **Other aspects of design**
    b. **Other criterion needed in development of every course or subject.**

Each information mentioned in the book will be very beneficial to be utilized.

3.1 MOOC Malaysia Platform

National Platform	International Platform

One national platform will be prepared by MoHE and HEI need to be prepared to handle MOOC Malaysia in that platform.	HEI or PU need to offer MOOC Malaysia in stipulated platform by MoE.	HEI need to plan in offering chosen MOOC Malaysia courses in international platformfor the purpose of transparency and branding.
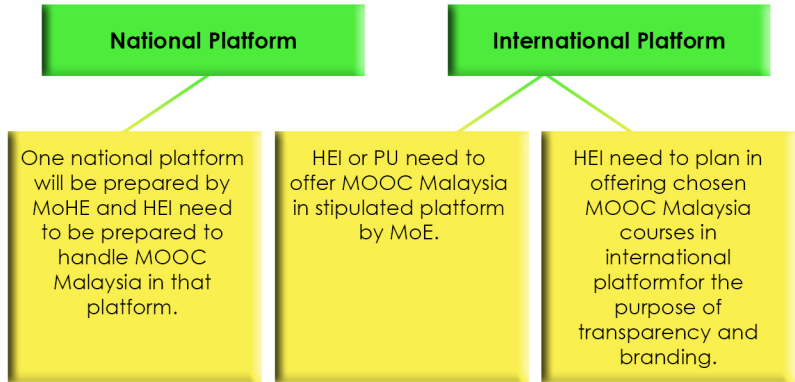
Diagram 1 : MOOC Malaysia Open Learning Platform

3.2 TYPE OF COURSES

1. 1 MOOC Malaysia can be categorized into three (3) types of courses :

Lifelong Learning (Skill)

Public Courses

Niche Courses
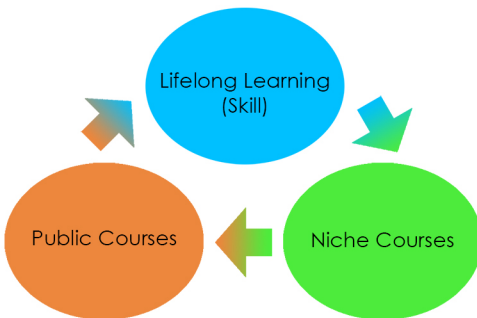
Diagram 2 : Course Categories

2. 2 Each HEP can choose to develop and offer courses in any MOOC according to course categories above.

3. 3 MOOC committee will synchronize topic and course type which will be developed by HEP before they got deployed and then be offered in MOOC Malaysia platform.

3.3 COURSE DURATION

Mean period for one MOOC course will take place between minimum of 5 weeks and maximum of 14 weeks, and this course usually will be based on minimum 2 CLOs).

Involvement period or Student Learning Time (SLT) is 40 national learning hoursand this is equal to one (1) credit hour.

Involvement period for each course needs to be announced in course introduction site.

For courses which have enrollment period, those courses must be accessible to registered students.

Diagram 3 : Course Duration

3.4 DELIVERY LANGUAGE

BI & BM

ENGLISH & MALAY LANGUAGE

for HEP's branding and transparency purpose.

OTHERS LANGUAGE

Subtitle is encouraged.

FIN, JP, DE
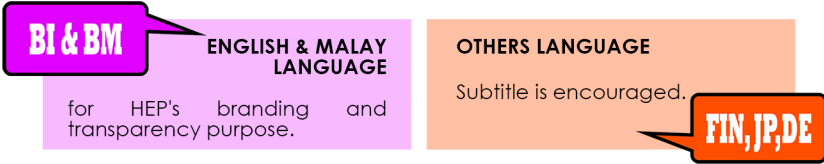
Diagram 4 : Delivery Language

3.5 COURSE DESIGN

Logo
- HEP's Logo
- MoHE's Logo
- MOOC Malaysia's Logo

Courses' Landing Page
- Title and Course Introduction (Video)
- Course Synopsis
- Course Syllabus
- Course Learning Outcome (CLO)
- Prerequisite Knowledge
- Course Handling Format
- Instructor's Information
- Course's Starting and Ending Date
- Frequently Asked Questions (FAQ)
- Announcement
- User ID
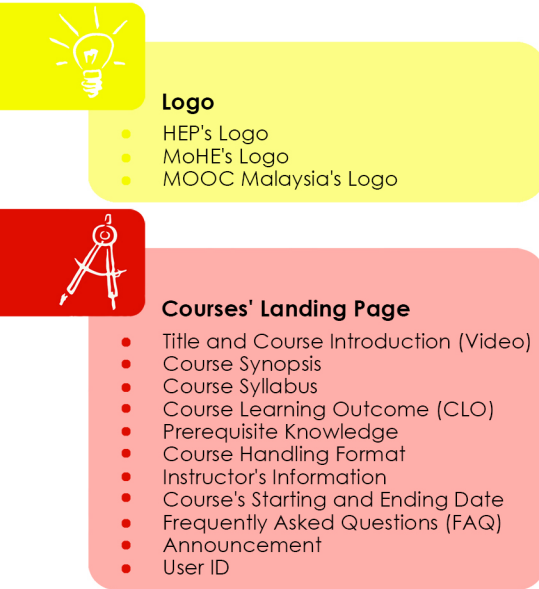
Diagram 5 : Course Design

3.7 COMMON PRACTICE IN MOOC DEVELOPMENT

Curriculum

Material

Copyright

MOOC Development

Activity

Quality

Assessment
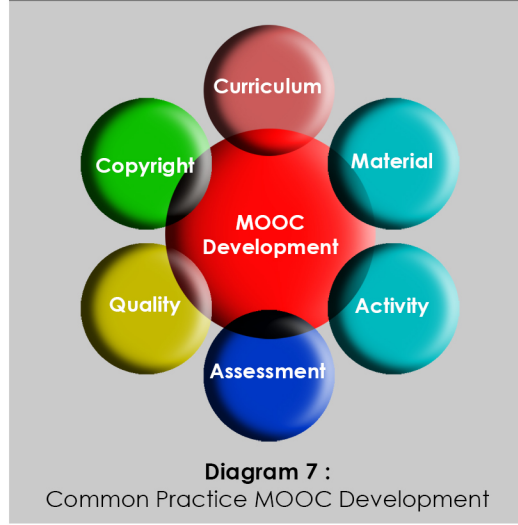
Diagram 7 :
Common Practice MOOC Development

3.6 DESIGN AND ORDER OF COURSE'S CONTENT PAGE

Order of Learning Details

| Subtopic | Topic Learning Outcome (TLO) | Learning Material | Learning Activity | Assessment | Additional Reference Material |
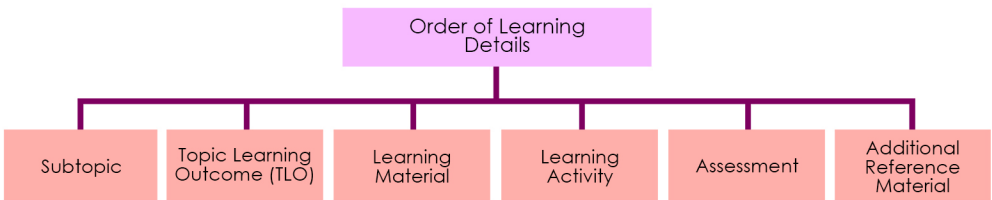
Diagram 6 : Order of Learning Details

3.7.1. DEVELOPMENT FLOW

Each MOOC development need to follow flowchart as given below in Diagram 8. However, the chart is linear and is subjected to the needs of MOOC development.
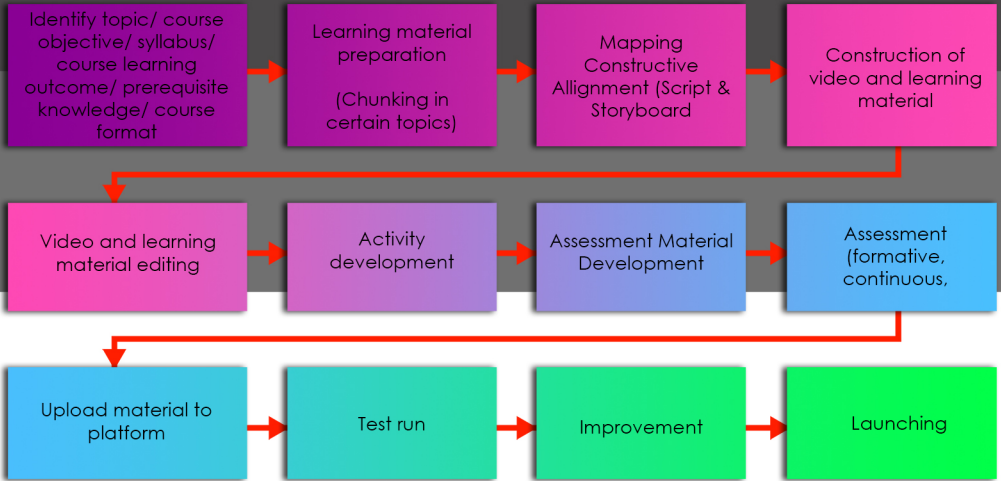
Diagram 8 : MOOC Development Flowchart

3.7.2. INSTRUCTION DESIGN

a. Instruction design for MOOC development need to be based on outstanding teaching and learning principle/model design. For that, development need to follow commonly used instruction principle as shown in Gagne 9 Events of Instruction flowchart :

b. For each topic, teaching flow need to follow Gagne 9 events of instruction as shown above. However, some events may be exempted as seems fit.

c. Each teaching may utilize variation of media attribute.
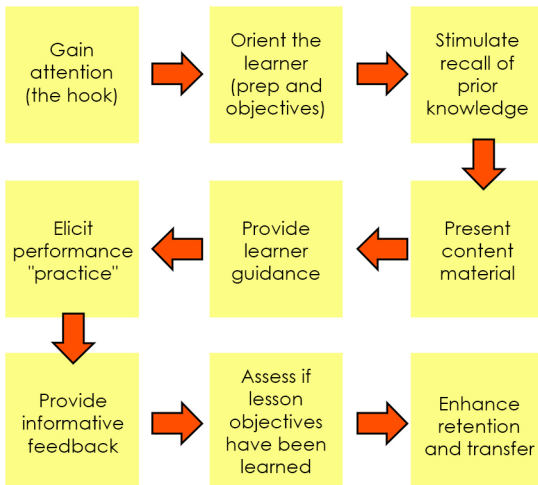
Diagram 9 : Gagne 9 Events of Instruction

3.7.3. OTHER DESIGN ASPECTS

Identify learning outcome (knowledge, skill, attitude)

⬇

Prepare continuous task and activity in building expected knowledge, skill and attitude

⬇

Ensure assessment is in line with learning outcome

⬇

Prepare learning material which promotes active learning

⬇

Build knowledge based on high level thinking skill by including elements of analysis, systhesis and evaluation

⬇

Ensure balance between the presence of course's manager, peer interaction and cognitive challenges

⬇

Align activity with learning outcome for every topic including knowledge, skill and attitude

⬇

Ensure Introduction Unit enables student to know the expected learning outcome for every topic

⬇

Prepare weekly activity mapping for student

Diagram 10: Other design aspects.

3.7.4. CONSTRUCTIVE ALIGNMENT

COURSE LEARNING OUTCOME (CLO)

TOPIC LEARNING OUTCOME (TLO)

MOOC MALAYSIA IMPLEMENTATION PERIOD CALCULATION

MAPPING AND CONSTRUCTIVE ALIGNMENT

MOOC DEVELOPMENT TEAM

MOOC DEVELOPMENT TEAM LEADER

TRAINING
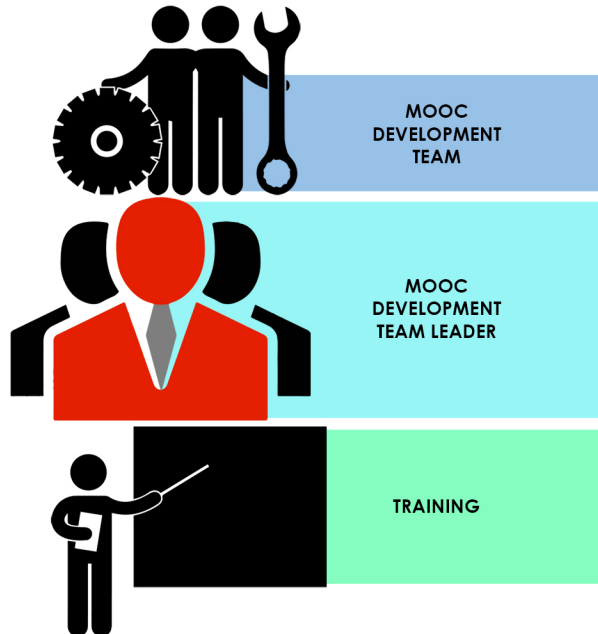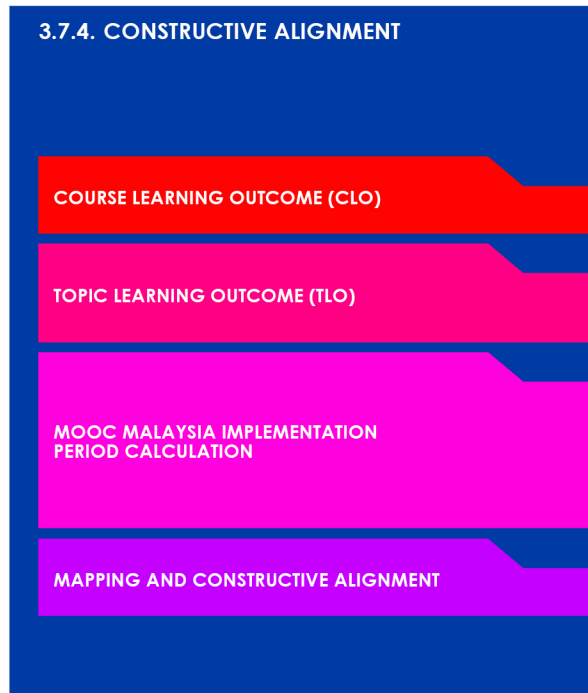
Main aspect in course curriculum development involves CLO and TLO with content, learning activity and assessment. This mapping enables all prepared content, learning activity and assessment to be aligned with TLO and then with CLO. Good alignment enables student to gain the stated TLO and CLO.

- Each course need to have CLO
- Each course needs to have 3-5 CLOs and 3-4 PLOs

- Each course needs to have 5-14 teaching weeks
- Each CLO needs to have 2-4 teaching topic.
- Each topic needs to have its own TLO

- TImplementation for any MOOC Malaysia is subjected to the number of CLO
- Any MOOC contains mean minimum of 3 and a maximum of 5 CLOs
- Each course is divided into 5-14 topics and each topic can be finished in 1 week. This means that 1 MOOC has between 5-14 teaching weeks.
- In counting 40 hours of notional learning hours equals to 1 credit hour, learning period (5-14 weeks) need to be adjusted with the number of SLT

- Each topic TLO needs to be aligned with CLO
- Each TLO needs to contain content, learning activity and assessment

Diagram 11: Constructive Alignment that needs to be implemented

3.7.5. ROLES OF MOOC DEVELOPMENT TEAM

Field Expert	Graphic Designer	Recording Crew	Editor	Illustrator	Animator	Software Development

Need to brief the team before starting the development.	Each team member knows their own role and task.	Hold periodical meeting – and follow the assigned timeline.	Ensure all development cost is in-line with allocated financial planning

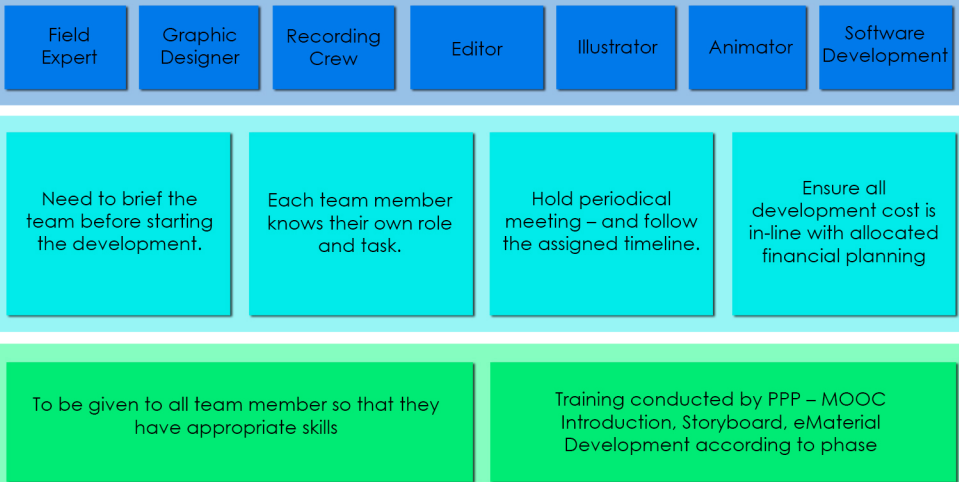| To be given to all team member so that they have appropriate skills	Training conducted by PPP – MOOC Introduction, Storyboard, eMaterial Development according to phase

Diagram 12 : Roles of MOOC Development Team

3.7.6. COURSE MATERIAL DEVELOPMENT

Main course material for MOOC is video. However, other materials such as digital media file (podcast), wiki, interactive content and others also can be used as support materials.

This variety of contents is able to increase student's interest to keep up with the learning material.
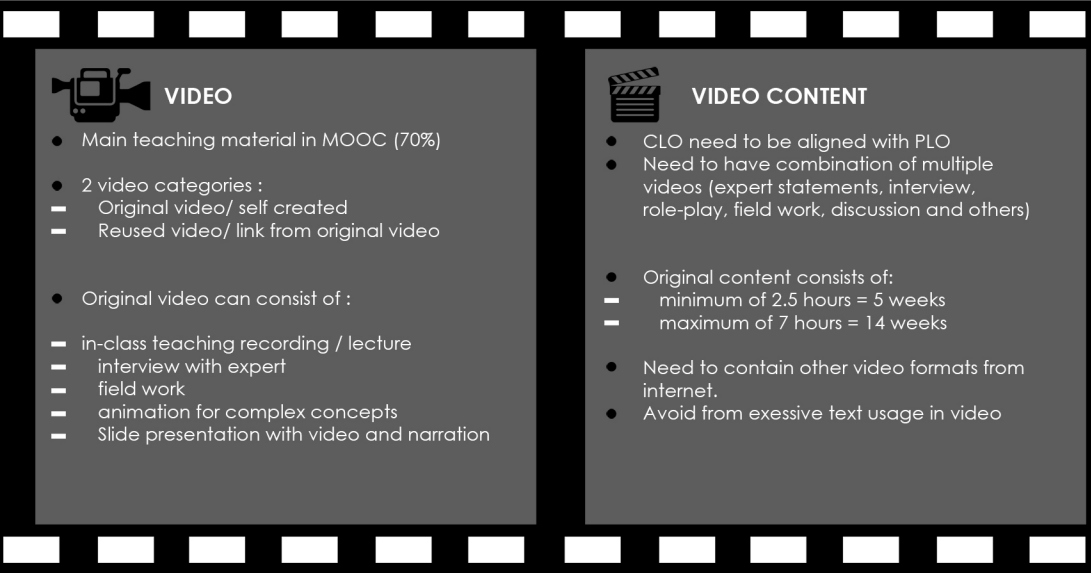
VIDEO

- Main teaching material in MOOC (70%)

- 2 video categories :
  - Original video/ self created
  - Reused video/ link from original video

- Original video can consist of :

- in-class teaching recording / lecture
- interview with expert
- field work
- animation for complex concepts
- Slide presentation with video and narration

VIDEO CONTENT

- CLO need to be aligned with PLO
- Need to have combination of multiple videos (expert statements, interview, role-play, field work, discussion and others)

- Original content consists of:
  - minimum of 2.5 hours = 5 weeks
  - maximum of 7 hours = 14 weeks

- Need to contain other video formats from internet.
- Avoid from exessive text usage in video

Diagram 13 : Course Material Development

3.7.7. SUITABLE TEACHING TOOLS FOR E-MATERIAL DEVELOPMENT VIA ANIMATION

| Render Forest | Video Scribe | Camtasia | iSpring | Padlet | Coggle |

EXAMPLE OF SOFTWARE/TEACHING TOOLS

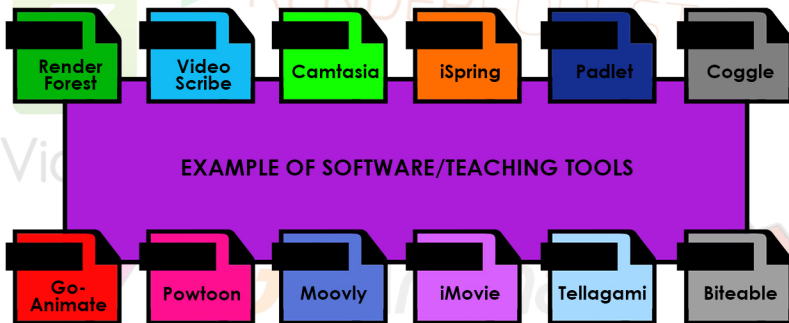| Go-Animate | Powtoon | Moovly | iMovie | Tellagami | Biteable |

Diagram 14 : Software for Development via Animation

VIDEO DURATION

- Need to be broken down into small segments - attention getter & eases students to review the content.

- For each topic:
- 5 minutes duration is recommended in each created video (original content)
- minimum video duration for each course:
    - 150 minutes (2.5 hours) for 5 weeks course
    - 420 minutes (7 hours)for 14 weeks course
- need to be included with other learning activities (such as discussion in forum board and assessment to make student learning time (SLT)
- 1 credit hour for 14 weeks = 40 SLT hours or 40 SLT hours/14 weeks = 2.86 SLT)

VIDEO CREATION ORDER

- Examples of video creation order are as folllowing below :
- use video recorder to record video (studio based, portable-studio such as i-studio), lecture-based using recording crew, self recorded videosuch as "Screenflow", "Camtasia", "Swivl", etc
    put raw videos in shared folder for everyone's accessibility
- edit the video to insert title, music or transition. remove all unnecessary elements (such as coughing, filler, etc.)
- insert transition between segments (if needed)

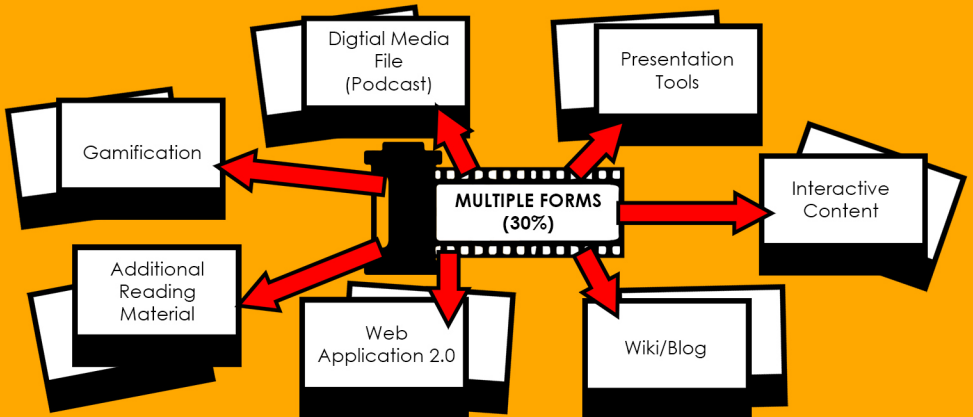## 3.7.8. MOOC CONTENT IN OTHER FORMS

Gamification

Digtial Media File (Podcast)

Presentation Tools

MULTIPLE FORMS (30%)

Interactive Content

Additional Reading Material

Web Application 2.0

Wiki/Blog

Diagram 15 : MOOC Content in Other Forms

3.7.9 MOOC Activity Development

Forum Board Discussion	Each topic needs to prepare discussion board	Discussion may be divided into sub-discussion by using different forum board
Wiki	Each topic may use wiki tools to create work/task for group	
Shared Document	For the purpose of group work/task/shared document such as google doc	

Reading Material	Each topic must have additional reading material	Related with prepared learning activity in content and assessment	Carefully chosen so that it can give different perspective towards students
e-Portfolio	Prepare activity to create e-Portfolio as learning record	Related with prepared learning activity in content and assessment	Prepare reflection activity of learning for each topic

Diagram 16: Activity Development

3.7.10 Assessment

Grade & Report

Formative, Summative & Continuous Assessment

Assessment Mode
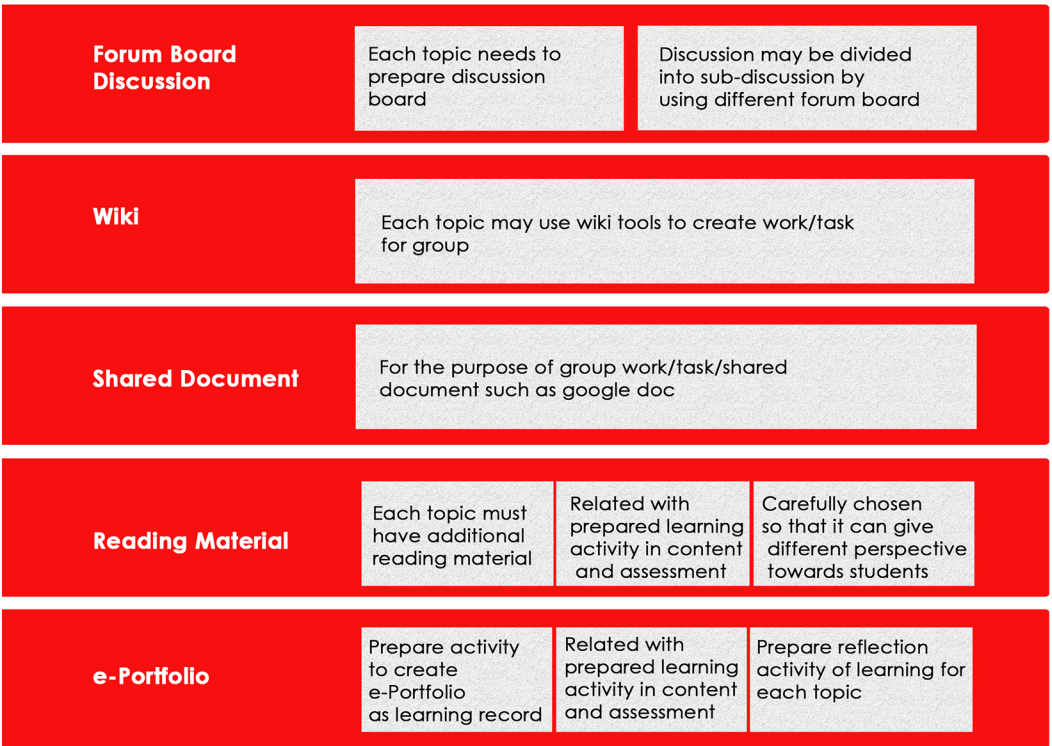
Type of Assessment - MCQ - Online Task - Essay - Project
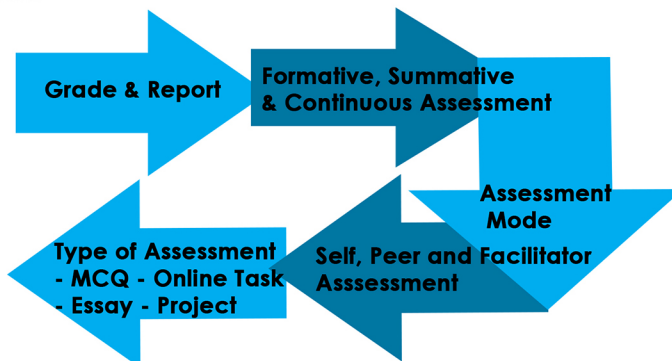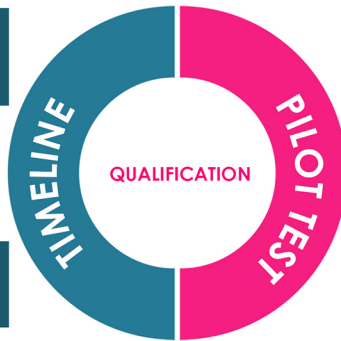
Self, Peer and Facilitator Asssessment

Diagram 17: Types of Assessment

3.7.11 QUALIFICATION

Typically take time around 12 months.

Consisting multiple development activities.

QUALIFICATION

TIMELINE

PILOT TEST

Need to be done to ensure no flaw during offering stage.

During the test, appropriate survey need to be done to detect any flaw in MOOC offering.

Any disting
uished flaw need to be

Diagram 18 : Types of MOOC Qualification

3.7.12 COPYRIGHT

COPYRIGHT

Frequent rising issue

Permission to use currently available material.

Developed original copyright.

Picture
Text
Video
Powerpoi

Each used used content and have copyright need to abide to copyright law

Diagram 19 : MOOC Content Copyright

3.7.13 RECOGNITION (E-CONTENT MATERIAL AS A NEW FORM OF PUBLICATION)

- MOOC e-content development may be put into consideration to be recognized so that it is on par with publication.

MOOC **UMK**
DEVELOPMENT
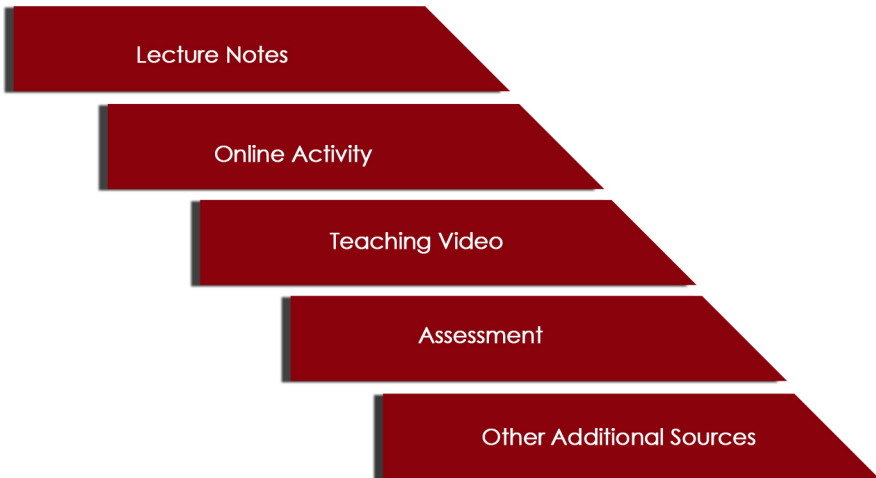04

4.1 FIVE (5) ELEMENTS IN MOOC DEVELOPMENT

Lecture Notes

Online Activity

Teaching Video

Assessment

Other Additional Sources

Diagram 20 : Elements in MOOC

MOOC UMK
IMPLEMENTATION
PHASE

05

01	AWARENESS PHASE	02	BENCHMARKING PHASE	03	DEVELOPMENT PHASE

04	POST-DEVELOPMENT PHASE	05	DEBUGGING, RUNTEST, AND EVALUATION PHASE
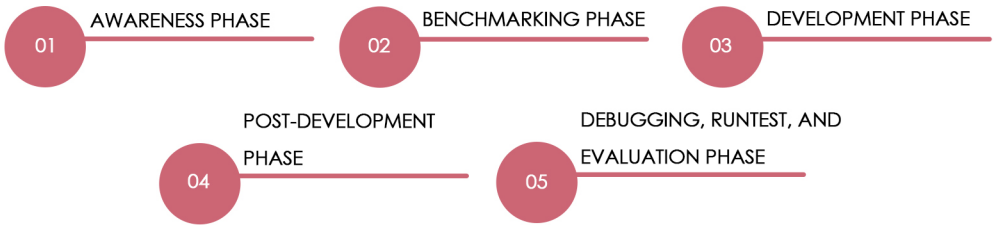
Diagram 21 : MOOC UMK Launching Phase

5.1 MOOC UMK IMPLEMENTATION PROCESS

Receives MOOC Implementation letter from MoE	1.Conduct Benchmarking Visitation	2.Suitable course nomination to be included in MOOC
5.Conduct coordination meeting for MOOC e-material development	4.Do brainstorming and discussion regarding UMK MOOC development	3.Conduct MOOC workshop. UMK Moce Forward (MOOC introduction to UMK)
6.Conduct MOOC e-Material Development Storyboard Workshop	7.Conduct MOOC e-Material Development Consultation Workshop	8.Video shooting process and picture compiling for e-material collection
11.Conduct supervision and evaluation of MOOC development from time to time	10.Conduct MOOC Development nhancement Workshop.	9.Conduct meeting for MOOC development updates

Diagram 22: MOOC UMK Implementation Process

06

MOOC UMK DEVELOPMENT PHASE

FAKULTI TEKNOLOGI KREATIF DAN WARISAN

1. Material Compiling

- Material compiling process consists of 4 inportant elements which are needed in MOOC
  - Lecture notes
  - Teaching video
  - Online activity
  - Other additional sources

2. Storyboard Making

- Storyboard making is based on lecture notes and sources from the collected materials
- Storyboard is a story line/in-depth explanation about particular topic
- A complete and clear storyboard is needed to help developer to understand the delivered story without causing misinterpretation about a particular subject

3. Recording Process

- Each SME will decide on the needed location for shooting
- Recording process involves shooting of subject introduction, topic introduction, voice over recording and selected location panorama recording

Diagram 23 : Development Process of MOOC UMK 2015

07 MOOC UMK TEAM

7.1 Subject Matter Expert (SME)

SME consists of lecturers and the team member for each subject will be determined by the leader
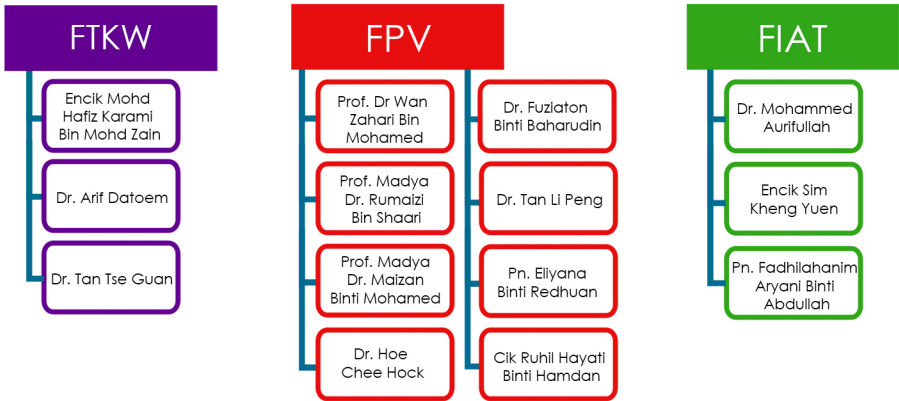(Subject coordinator). Among involved SMEs are :

FTKW
- Encik Mohd Hafiz Karami Bin Mohd Zain
- Dr. Arif Datoem
- Dr. Tan Tse Guan

FPV
- Prof. Dr Wan Zahari Bin Mohamed
- Prof. Madya Dr. Rumaizi Bin Shaari
- Prof. Madya Dr. Maizan Binti Mohamed
- Dr. Hoe Chee Hock
- Dr. Fuziaton Binti Baharudin
- Dr. Tan Li Peng
- Pn. Eliyana Binti Redhuan
- Cik Ruhil Hayati Binti Hamdan

FIAT
- Dr. Mohammed Aurifullah
- Encik Sim Kheng Yuen
- Pn. Fadhilahanim Aryani Binti Abdullah

Diagram 24 : Subject Matter Expert (SME) Team

7.2 Technical Team

Main task for technical team (Center of Teaching and Learning (PPP) staff) is to assist in term of program movement where they will setup, manage and launch every program which is related with MOOC. Technical team consists of :

EXPERT (LECTURER)
- Prof. Madya Dr. Suria binti Baba (Pedagogy) - PPP Director
- Dr. Arif Datoem (Audio Video
- Dr. Hafizie bin Suhaimi (Teaching Tools and Web 2.0)
- Dr. Tan Tse Guan (3D Multimedia and Cyberlogy)

DESIGNER STAFF
- Encik Muhamad Fariz bin Muhammad Zain (Corporate Development and Quality Management)
- Encik Mohd Amirul Hasrie bin Zakaria (Faculty of Creative Technology & Heritage)

MOOC COMMITEE
- Encik Wan Ahmad Ridhwan bin Wan Musa (Technology Officer
- Puan Siti Najwa Binti Che Hasim
- Puan Nurul Nadirah Binti Nasir

Diagram 25 : Technical Team

08 CHALLENGES & FOLLOW UP ACTIONS DURING MOOC DEVELOPMENT

In implementing MOOC in UMK, there are several challenges which can be made as guidance, they are:
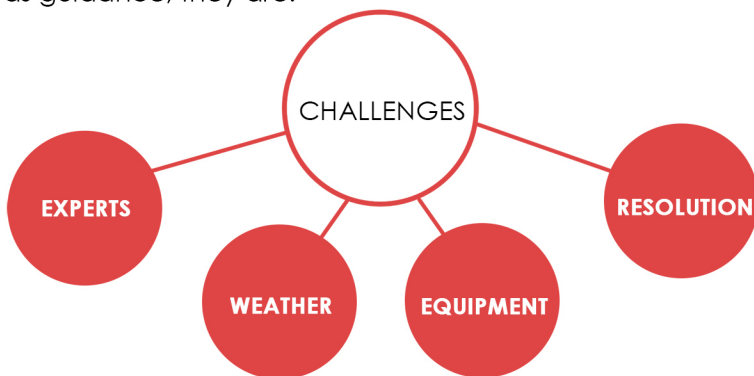

Diagram 26: Challenges along MOOC UMK Development

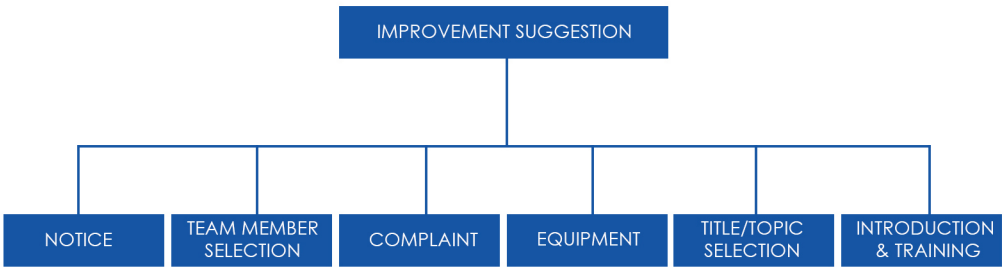| ISSUES & CHALLENGES	ACTIONS TO BE TAKEN
The needs of expert (SME) in MOOC development	Requests SME to select a few lecturers to assist (collecting material, storyboard and activity) for MOOC subject such as: 1.Lecturers who teach the subject 2.Audio/video experts 3.Language experts
Weather	During on site, frequent issue faced is weather. Scorching sun and rain will affect the recordings and pictures taken. Hence, another recording will be made to replace any affected recordings.
Equipment	Due to lack of equipment for recording and editing, Center of Teaching and Learning took an initiative of designing two (2) designers (from Faculty of Creative Technology & Heritage and Corporate Development and Quality Management). Equipment used along the recording process belong to Faculty of Creative Technology & Heritage. Other than that, unavailability of special studio for MOOC development has somehow been disrupted the work flow of editing process.
Resolution, ratio and embed video	The video resolution during presentation is vary due to projectors' resolution

Table 1 : Issues & Challanges

09

IMPROVEMENT SUGGESTIONS
FROM SUBJECT MATTER EXPERT (SME)

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                    ┌─────────────────────────────┐
                    │  IMPROVEMENT SUGGESTION      │
                    └─────────────────────────────┘
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NOTICE	TEAM MEMBER SELECTION	COMPLAINT	EQUIPMENT	TITLE/TOPIC SELECTION	INTRODUCTION & TRAINING

Diagram 27: Improvement Suggestions from SME

CATEGORY	IMPROVEMENT SUGGESTIONS	ACTIONS TAKEN BY CTL
NOTICE	- Reduce any abrupt emergency order for team action due to task commitment in faculty - Avoid frequent changes in task order - Avoid from over-pressuring SME because they also have other main task. It is also hoped that all discussions for improvement are to be taken seriously by involved parties to avoid repeated mistakes. - Early planning is very important to ensure project's success.	- PPP has constructed a Gantt chart (timeline) to assist SME
COMPLAINTS TO VENDOR	- Suggestions for improvement were not fully countered and has caused repetition of the same things. - Choose a vendor that is already expert in video recording and content development to reduce SME's load.	- CTL has promptly informed all complaints to vendor prior to receiving the dissatisfactions so that the vendor will take immediate action. - CTL has decided to self-develop MOOC UMK by utilizing internal staf's expertise.
EQUIPMENT	- Shooting equipment including room for dubbing/shooting activities in UMK need to be upgraded.	
INTRODUCTION & TRAINING	- Initiate the development of a specific subject by providing a detailed work outline so that the person in charge have idea and time to arrange subject content to be delivered. - Provide training to lecturers to be more efficient even working alone compared to working in group (to ensure all members understand their job scope) - Provide training via apps. - Provide workshop/program at the right and suitable time during semester break. - To make MOOC development preparation term as a one-off session to ease progress and discussion among group.	- CTL has promptly informed all complaints to vendor prior to receiving the report for immediate action by vendor - CTL also has conducted consultation workshop with SME to assist them along the development process.
TEAM MEMBER SELECTION	- To identify team member who are suitable and committed with MOOC development and ready to push their limit. - Refrain from selecting team member who are adept in his or her filed but prone to abandon teamwork to avoid communication gap.	- Team member selection is the team leader's responsibility and CTL will monitor to ensure all team member play their roles in e-material MOOC development.
TITLE/TOPIC SELECTION	- Only choose topic that is really suitable for MOOC	

Table 2: Improvement Suggestions from SME

GREEN SCREEN TECHNIQUE 10

This section describes the use of green screen techniques as a tool in MOOC. For this purpose, this part will be divided into 3 phases which is pre-production, production and post-production.

10.1 Pre-Production

Figure 1: Sample of storyboard format

- Generating ideas.
- Build up the storyline.
- Storyboards sketches
- Screen play.
- Camera movement.
- Lighting.
- Background video.
- Audio.
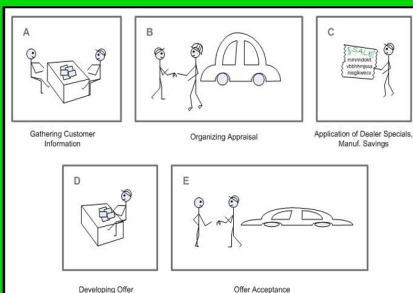
Figure 2 : Sample of storyboards sketches

Figure 3 : Sample of background video

10.2 Production

The Shooting process includes:

- Recording audio visual
- Acting in green screen studio or outside
- Realize all the pre-production planning

Figure 4 : An example of shooting process on the green screen

Figure 6 : Adobe Premiere CS6 Software
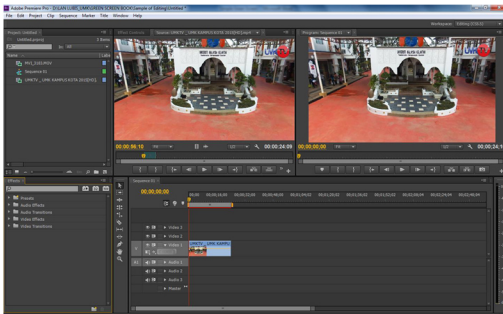

Figure 8 : Import the green screen video

Figure 7 : Import the background video

Figure 9 : Using the chroma key effect

Figure 5 : Setup for green screen studio

10.3 Post-Production

The editing process includes:

- Cutting the audio visual by software
- Use the chroma key effect
- Audio visual arrangement
- Export as a product

Figure 10 : The chroma key effect

Figure 11 : Finishing the chroma key effect

Figure 12 : Final product

MASSIVE OPEN ONLINE COURSES

APPRECIATION

MASSIVE OPEN ONLINE COURSES
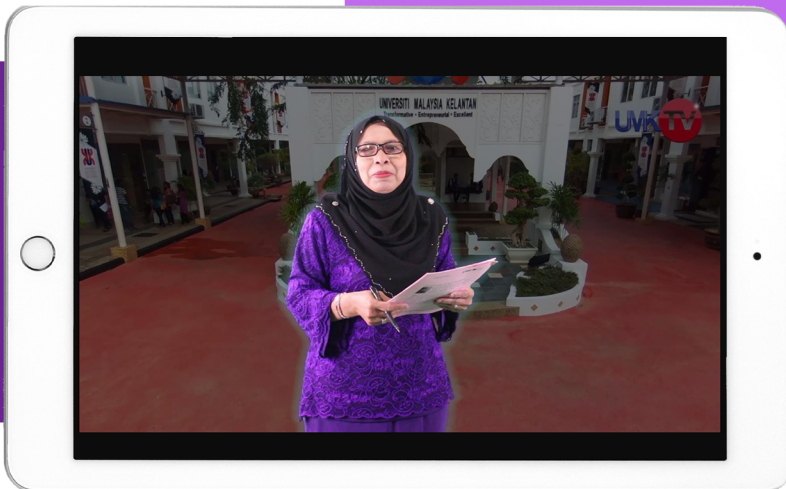
EDITOR
Assc. Prof. Dr. Suria Binti Baba (Ketua)
Mrs. Siti Najwa Binti Che Hasim
Mrs. Siti Hajar Binti Hassan
Mrs. Nurul Nadirah Binti Mat Nasir
Mr. Ahmad Muzakhir Bin Yusof

BOOK IDEA CONCEPT & DESIGNER
Mr. Muhamad Izham Bin Zainulabidin

TECHNICAL TEAM
Mr. Wan Ahmad Ridhwan Bin Wan Musa
Mr. Amirul Hasrie Bin Zakaria
Mr. Fairuladilan Bin Hamadun

SUBJECT MATTER EXPERT (SME)

Prof. Dr. Wan Zahari Bin Mohamed **(Ketua)**
Faculty of Veterinary Medicine

Assc.Prof. Dr. Rumaizi Bin Shaari
Faculty of Veterinary Medicine

Assc. Prof. Dr. Maizan Binti Mohamed
Faculty of Veterinary Medicine

Dr. Fuziaton binti Baharudin
Faculty of Veterinary Medicine

Dr. Hoe Chee Hock
Faculty of Veterinary Medicine

Dr. Tan Li Peng
Faculty of Veterinary Medicine

Dr. Arif Datoem
Faculty of Creative Technology & Heritage

Dr. Tan Tse Guan
Faculty of Creative Technology & Heritage

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Faculty of Agro Based Industry

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Faculty of Architecture Ekistics

Mr. Kim Sheng Yuan
Faculty of Agro Based Industry

Mrs. Nur Eliyana Bt Mohd Redhuan
**Center for Language Studies &
Generic Development**

Miss Ruhil Hayati Binti Hamdan
**Center for Language Studies &
Generic Development**

Dr. Siti Marziah Binti Zakaria
**Center for Language Studies &
Generic Development**

Mr. Mohd Hafizie Bin Suhaimi
Faculty of Entrepreneurship & Business

Dr. Anuar Bin Mohd Yusof
Faculty of Creative Technology & Heritage

Mr. Mohamad Shahfik Afendi Bin Abdul
Ghani
Faculty of Creative Technology & Heritage

Mr. Mohammad Dzulsyafiq Bin Mohammad
Yusoff
Faculty of Creative Technology & Heritage

Mr. Mohammad Syukran Bin Kamal
Ruzzaman
Faculty of Creative Technology & Heritage

Mr. Tenh Hock Kuan
Faculty of Creative Technology & Heritage

Mr. Muhamad Izham Bin Zainulabidin
Faculty of Creative Technology & Heritage

Mr. Fairuladilan Bin Hamadun
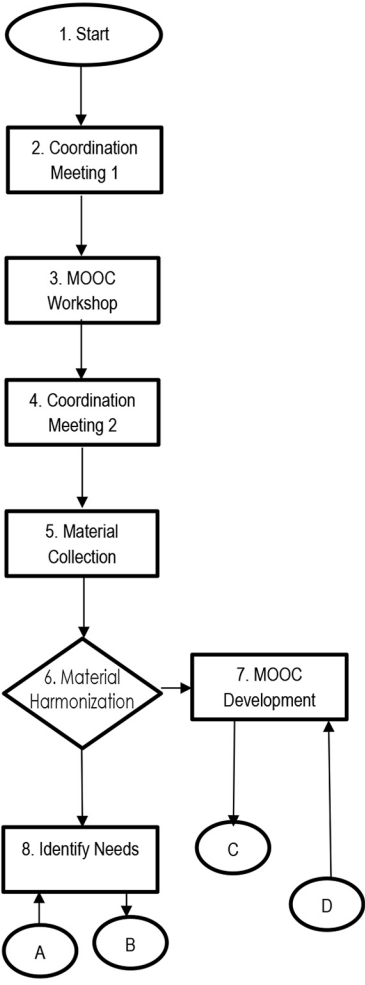**Faculty of Creative Technology & Heritage**

Mr. Burhan Bin Che Daud
**Center for Language Studies &
Generic Development**

Mr. Ruzaini Bin Ijon
**Center for Language Studies &
Generic Development**

Mr. Marwan Bin Ismail
**Center for Language Studies &
Generic Development**

Mrs. Zuriati Binti Mohd Rashid
**Center for Language Studies &
Generic Development**

APPENDICES

	CENTER OF TEACHING AND LEARNING	Page:
UNIVERSITI MALAYSIA KELANTAN		Reference No: 00
	E-LEARNING UNIT UMK/TNCA/SPKA/PPP/SOP01	Issue No: 01
	6.2. IMPLEMENTATION OF MASSIVE OPEN ONLINE COURSES (MOOC) DEVELOPMENT WORK ORDER	Enforce Date:

Aim	To ensure massive open online courses (MOOC) is organized, systematic and proceed smoothly

Flow Chart	Support Document	Timeline	Responsibility of
1. Start			
2. Coordination Meeting 1	1. List/identify MOOC subject. 2. MOOC paperwork	1 week	IT Assistant Registrar Officer (CTL)
3. MOOC Workshop		1 day	CTL
4. Coordination Meeting 2	1. Meeting minutes 2. Gantt Chart of MOOC development 3. Needs of MOOC e-material development	1 day	IT Assistant Registrar Officer (CTL)
5. Material Collection	1. Storyboard 2. MOOC Materials	2 weeks	SME's CTL
6. Material Harmonization **7. MOOC Development**	1. Gantt chart of MOOC development 2. Needs of MOOC e-material development 3. Storyboard 4. MOOC Materials		CTL
8. Identify Needs **C** **D**	1. Gantt chart of MOOC development 2. Needs of MOOC e-material development 3. Storyboard 4. MOOC Materials	2 weeks	CTL Technical support team
A **B**			

A B C D			
9. Run test and Debugging	1. Run test Report	7 days	CTL
10. Success (decision)			CTL
11. Documentation and uploading to platform	1. User Manual 2. Final Development Report	7 days	CTL
12. End			