

Online Module Development Guide

Developing an online programs and module requires integration of technology, and pedagogical practices in way that is that facilitates learning.

At MIC, in collaboration with the Academic Technology Hub, and the Curriculum development Committees, we offer a range of services for our faculties in this regard. We have specific training modules for

1. Module development,
2. Module mapping
3. Instructional design and understanding Learning Management System

Our aim is to provide a high quality learning environment for the students with an optimal learning experience.

Some Myths Decoded

1. An e-learning Module is not of a lower Quality than its parallel face to face module
 - Modality in which a module is offered does not affect the quality of the module. Just a face to face module depends on the pedagogical principles, the preparations, the assessment mechanisms, and the attitude of the lecturer and the students, so does the e-learning module.
 - The success of the e-learning module deliver depends on the technology, the technological principles, the pedagogy, readiness and the attitude of the lecturer the students.
 - It is necessary to decide the best modality that will fit the content to be covered.
 - Ultimately what decides the quality of a module delivery is the instructional principles and the lecturer competencies and not the modality of instruction.
2. An e-learning module is easier to pass than its corresponding Face to face module
 - Both modality of programs go through the same process of program, module, and topics alignment and outcomes mapping, hence modality has no effect on the difficulty level.
 - Ultimately it depends on the delivery of the content and assessments. At MIC we hold to the same level of assessments and delivery, thus, we ensure there is absolutely no difference in either form of delivery.
3. A good e-learning module must replicate its parallel face to face module.
 - We do not attempt to replicate the face to face program. The tools and techniques used for online delivery is different from that of face to face programs. Hence the two modalities will be different in their approach.
 - However, regardless of the way and approach, the outcomes achieved will be the same.

4. E-learning modality deprives the students form practical experience.
 - It is a misrepresentation to expect that face to face programs will provide the practical experience. The practical experience relate to actually about providing the platform to practice what is being delivered as the lesson or the lecture.
 - While a face to face program delivery can be totally monotonous relying on only lecturers, an e-learning module can be designed to mandate the students to be physically present for practical sessions.
 - Hence the opportunity to gain hands-on experience is not an element related to modality, but rather depends on how the learning experience is structured.
 - A fully e-learning module can have a mandatory practical session or sessions to complete the modular requirements.

Laying the Online Program Development Foundation

There are three basic steps that you must follow when developing your online

1. Planning the Program
2. Developing the Program
3. Evaluating the Program

1. Planning the Program

Planning is an essential process for new program development. At this point, building a framework is necessary. As such deciding on the following will help you stay on good course.

- A. Identifying the goals and outcomes for your Program
- B. Identifying range of modules that will help you achieve your program objectives and goals.
- C. Identifying admission requirements
- D. Identifying the assessment models and techniques
- E. Identifying the modality for your modules
- F. Identifying instructional models and resources

A. Identifying the goals and objectives for your Program

The need for a new program may arise for many reasons.

- i. A faculty may want to enrich the academic and skills basket of the faculty.
- ii. Student Support may wish to introduce a new program to cater for student requests.
- iii. The management may want to increase the MICs contribution to national goals development.

When the need for a new program is identified, the interested members shall approach the Principal Dean and the Registrar. Also the interested personnel shall approach the academic technology members of the **Academic Technology Department**, and the **MIC Curriculum Development Department** for support.

An approval for the program development is required from the **Executive Committee**. The following issues must be addressed in the **Proposal for the New Program Development**.

- i. How do the goals and objectives fit in with the institution's Mission and Strategic Plan?
- ii. How does offering this particular program online fit with the goals of department, or the college?
- iii. How do the goals cater for the demand from the labor market and appropriately qualified potential students, and opportunities for graduates?
- iv. What does the department hope to accomplish?
- v. Is this an existing program, a new program, or a modification of an existing program?
- vi. Who will be the target group(s) for prospective students?

If the Exco approves the development of the program, and agrees the program should be offered online, the department should begin planning. The following are some guidelines that the department may follow in the program development process.

- i. Visualize the students: who will most likely enroll and the issues they may present, e.g., transfer credit, ability to get some coursework online or by other means from other institutions, possible deficiencies in coursework or other qualifications, variations in background/experience, etc.
- ii. Plan the complete sequence of the curriculum semester by semester
 1. Determine the correct or best sequence of courses. Depending on decisions about delivery method, you may decide to make either minor or major modifications to an existing curriculum. A department may also develop a new program specifically for online delivery
 2. Decide whether to offer one track only or to offer options such as electives.
 3. Think about enrollments
 - a. Maximums and minimums for admission to the program and for enrollment in courses.
 - b. Whether you might start one cohort, finish the program for them, and then start a new cohort OR whether you might develop a rolling curriculum and admit new students each fall or at any point. You may want to start small and build, based on enrollments.
- iii. Plan, at a broad level, the delivery methods for the program and for individual modules
 1. Instructors without broad experience in online education often underestimate what can be taught well or even better online than on ground. Personnel in Virtual Campus and the Curriculum development Committee can help identify what student learning outcomes can and cannot be achieved through online instruction, alternative methods and activities, and alternative approaches to assessment.

2. For many programs, we are finding that we are using hybrid delivery systems, that is, from module to module and within individual modules:
 - a. Online
 - i. Various types of multimedia (Mediated presentations, Video streaming, Voice)
 - ii. Basic communication (Email, Synchronous and asynchronous voice, Discussion forums, Chats)
 - iii. Wide variety of current and emerging technology applications
 - iv. Theoretical aspects covered via e-learning tools and practical aspects in planned face-to-face settings such as laboratories, field and workshops
 - b. Synchronous instruction for remote groups with a stable site such as workplace or Campus
 - c. On ground periodic sessions for hands-on instruction at convenient, non-traditional times, e.g., evening, weekend, etc.
Example: Students in the Bachelor of Multimedia come to MIC for one weekend to learn a hands-on skill that must be carefully taught, supervised, and assessed for skill competency.
 - iv. Identify who will develop and teach each module.
 1. Developers/Instructors may be regular faculty or adjunct faculty. To the extent possible, the program should be planned around a table group of instructors who will take ownership and provide continuity for the program.
 2. Graduate assistants and others may help faculty members develop and teach online modules. However, instructors cannot and should not avoid learning the essential skills for developing, managing, and delivering their online courses.
 3. It is best for the person who develops an online course to be the person who teaches it, at least for the first time it is offered.
 4. Academic Technology Hub will assess faculty members' skills in technology, provide basic training, and provide one-on-one support during online module design and development.
- B. Identifying range of modules that will help you achieve your program objectives and goals.**

This may be considered as one of the most crucial elements of planning your program and this has direct bearing on the Development of your new program as well. It is this practice that will help you align the goals and objectives of the program through a range of modules. It is also this practice that will help identify the set of modules that will ensure the goals and objectives of the program are achieved.

We call this practice as Program Mapping.

The program map help us illustrate the alignment between program objectives, module's expected learning outcomes and the assessments.

What is a Program Map?

A Program Map is the skeletal structure of your program. The Program map identifies each of the program objectives, module outcomes and the assessments that will be used to ensure the students attain the competencies expected.

You may find the Module Mapping Guide helpful in developing standard learning outcomes. It may be helpful if you read that document, if you feel you need more information before you continue with this document.

Essentially the principles used for developing objectives for the program or the expected learning outcomes for the module are the same. A distinctive feature will be that of the scope. The program objectives are wider and will take a long time to be achieved, while the module outcomes will be narrower and hence will take a lessor time to achieve. In this note you must note that we also have topic learning outcomes which are still narrower than the module learning outcomes.

Why Develop a Program Map?

There are number of reasons why should engage in a detailed Program Development exercise.

1. It helps to identify the most appropriate modules that can be incorporated into your over-all program: Unless this exercise is done properly you will never be able to decide what are the core modules that you will need to include and what are the possible electives that can be offered.
2. It helps to provide a roadmap for the management of the development of the program: The program map will provide the skeletal structure for your program. The program map helps to identify what modular outcomes are to be written focusing on the program objectives. The modular outcomes that you right will help you identify the best suited ranges of modules to be incorporated in the program.
3. Often loosely collected sets of modules may either not help cover the range of program objectives, the expected standard of modules fitting the required level descriptors, or may be even divergent from the actual program goals. Developing the program map will help identify such gaps. Conversely the modular outcomes may hint for revision of the program objectives themselves.
4. A properly developed program map will help guide assign the right amount of credits for your modules and the topics. After all, the depth of coverage and consequently the time needed to master the competencies will largely depend on the importance that you assign to the program goals.

How Do We Develop a Program Map?

At MIC we opt a popular approach called Backward Design. Backward Design is a learning experience plan, where the development of program begins with end product; that is what the students should know or have achieved by the end of the program. The same applies when developing the individual modules as well.

By this approach we divide the program development into three steps:

1. Identifying the expected outcomes: What should the students know or be able to do by the time they complete the program?
2. Establishing the learning indicators and the sources of evidence: What are the indicators that we can observe to establish that the students have achieved what they were expected to achieve and what will be the products or evidences that can be accepted as evidence of learning?
3. Planning the learning experience. What modules, topics, reading materials should the students be engaging with in order to achieve the expected competencies and demonstrate them?

Proper use of program mapping using the backward design will help ensure there is good alignment between goals, and objectives of the program and outcomes of the modules.

Step 1: Identifying the objectives of the program:

The Learning Objectives of the Program is the base of your whole program and that supporting modules you include to form your program. When developing the learning objectives for the program, and the expected learning outcomes for the modules, it will be helpful if you initially make a proper distinction between the two sets; the learning objectives, and the learning outcomes.

The learning objectives of the program: These are the broader expectations that you create for the students to achieve.

The Expected learning outcomes are the more focused and narrower expectations that you create for the purpose of achieving learning objectives of the program.

For each learning objective you shall create a set of expected learning outcomes. The expected set of learning outcomes will help you

- i. Identify a module name
- ii. Identify the time needed to dedicate for the achievement of the learning objective

- iii. The credits that you will need to assign for the module (the set of expected learning outcomes)

You will find more detailed explanation on developing a module in the module mapping guide.

An Example:

Suppose your team has decided to develop a program for Bachelor of Teaching Primary. For this program, through research, brain storming, identifying the competencies a teacher should have, taking into account the expected teacher competencies that the teacher licensing body will demand, such as catering for the teacher standards, and probably by considering other aspects as well, you may have decided that one of the program objectives will be:

By the end of the program:

The students will design and develop their own classroom management plans based on theory and good practices.

Now, as you will see, this is a broad objective that will take quite some time for the students to develop the competencies needed to achieve this objective.

So the next task will be to identify what modular level expected learning outcomes can breakdown this broader objective, so that the students can ultimately develop the skills and competencies required.

Here are some expected learning outcomes that you may find will cover the required basic skills and competencies.

- i. Define classroom management
- ii. Compare and contrast various theories of classroom management
- iii. Identify the components of a classroom management plan
- iv. Compare and contrast styles of classroom management
- v. Critique an instructor's classroom management strategy

Here is a template that you may use for Module mapping Purpose.

#	Program Objectives	Expected learning Outcomes	Suggested Module Name
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1	Design and develop their own classroom management plans based on theory and good practices.	<ul style="list-style-type: none"> i. Define classroom management ii. Compare and contrast various theories of classroom management iii. Identify the components of a classroom management plan iv. Compare and contrast styles of classroom management v. Critique an instructor's classroom management strategy 	Classroom Management and Practice
2			
3			
4			

Step 2: Deciding on your Assessments:

Once your expected learning outcomes have been finalized, you are now ready to establish how the students will prove their progress. This is where you have to be very careful in identifying your assessment schemes and methods. For more details on this section, please read the Module Mapping Guide.

Step 3: Identifying the Instructional Materials:

You may have developed a very concise set of objectives and outcomes. In order to ensure that the students are provided the write input, choosing the right instructional materials are necessary and this will basically complete the program map. . For more details on this section, please read the Module Mapping Guide.

Finally it is important to know that the and the Module Development Guide is complimentary to Program Development Guide.

There are 2 possible points at which you may start your academic developmental work.

- a. You may already have an approved program outline and you are required to develop the online modular plans. In this case you may not have the need to read this Program Development Guide. The Module development Guide will provide all that you need.
- b. You may be initiating the development of a whole new program, in which case, you will have to read through the both documents; the program development guide and the module development guide.