Teaching and Managing Courses with IVLE

Centre for Development of Teaching and Learning (CDTL)
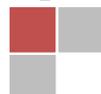
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Learning Management System, the IVLE

A learning management system provides a virtual space for distributing resources, communicating with students, conducting quizzes and tests, and managing students' grades without requiring high-level programming or web-designing skills. These systems have the potential to guide instructors through a module-planning process anchored in effective pedagogy and adapted to diverse student needs.

Integrated Virtual Learning Environment (IVLE) is the learning management system designed to facilitate and support teaching and learning at NUS. IVLE provides a wide range of resources and services, from simple administrative tools to complete online modules. It also enables students to access up-to-date online syllabus, download notes, submit assignments, manage projects, participate in discussion forums and online communities, watch live webcast lectures and take part in online quizzes and surveys.

Using IVLE to manage your modules

Use of IVLE supports the University's emphasis on blended approaches that combine face-to-face and technology enhanced learning. IVLE provides academic staff with a web-based framework in which to situate the course materials for their module and the tools with which to manage communication and interaction with and amongst students.

When you decide to use IVLE for managing your module, it would be a good idea to consider the following principles:

1. **Remember that module websites serve multiple purposes**
   An online module presence can be used for a variety of academic purposes – ranging in complexity – from the simple yet important provision of administrative information and learning resources, to the inclusion of elaborate tools for student collaboration and interactive feedback.

2. **Design your module based on identified academic purposes**
   Academic purpose and not technology should underpin the design of a module's online presence and its use should be assessed on the basis of identified academic purpose, and not merely by availability.

3. **Understand the diversity between modules**
   University modules are diverse and it is important to have this diversity reflected when designing their online presence. Some modules would make extensive use of online assessment, interaction and collaboration while others are relatively simple, including no more than carefully considered course information and resources.

Exploring the IVLE workspace

IVLE Workspace gives you an overview of all your modules and tools with which you can manage your module. You will also be able to create and access various resource banks (e.g., FAQ bank, Multimedia bank, Question bank) or reusable content. Besides the features of IVLE, this space also provides you with various communities that you are enrolled in, resources, events and other services at NUS.
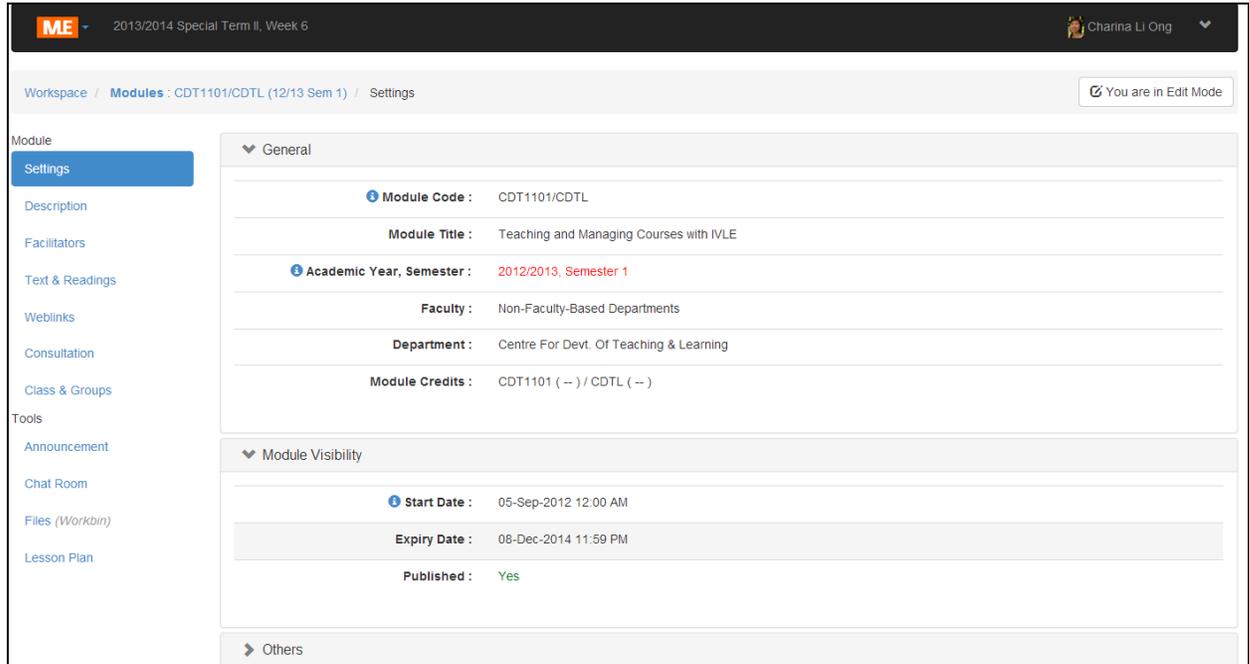
The tool set offered by IVLE can be classified into five broad categories:

Content Management Tools	Modules, Files, Weblinks, Lesson Plan, Multimedia bank
Organisational Tools	Calendar, Syllabus, Search
Communication Tools	Announcements, Chat, Discussion forum, Mail, Distribution List
Activity-based Tools	Assessments, Project, Groups, Poll, Survey
Student Tools	Files – student submissions, Grade book

Creating and managing modules

If you are using IVLE for the first time, it can be time-consuming and requires a degree of commitment on the part of the lecturer.

A module is where you update information related to your course:

- **Description of the module**
    - Include detailed module information (Aims & Objectives, Prerequisites, Teaching modes, Schedule, Synopsis, Syllabus, Practical work and Assessment). If necessary, include information regarding assignment submission processes (e.g. where and/or how to submit assignments).
    - New sections like Preclusion, Workload, or Reflection paper can be created.
    - Provide an overview of the sequence of subject topics to be addressed in classes (e.g. list of lecture and tutorial topics, with sufficient detail to enable students to prepare in advance).
    - Use a "Course Map" to illustrate the relationship(s) between learning objectives, classes, learning activities, assessment, and resources.
    - Provide students with a suggested schedule, e.g., out-of-class learning activities, assignment preparation.

| Aims & Objectives (Learning Outcomes) |
| Prerequisites (What should I know?) |
| Teaching Modes |
| Schedule |
| Synopsis |
| Syllabus |
| Practical Work |
| Assessment |

WHAT DO STUDENTS EXPECT TO SEE ON A COURSE WEBSITE

Module Information
e.g., aims and objectives, the syllabus, grading policy, attendance policy, details regarding practical work, contact information of staff, and important university dates like drop/add and withdraw deadlines.

- This information is useful to students before the term begins.
- Students can get a sense of what is expected of them and plan accordingly.

- **Web links**
    - Provide links to other websites, resources and even online tools external to university – as these can be used to enhance the information provided.
    - Avoids duplication of effort, and streamlines information.

- **Text and readings**
    - Provide ready access to downloadable resources, reading lists, and/or other information sources that will support students' independent study.

- **Staff associated with teaching the module**
    - List the names of individuals to contact for particular purposes and provide all contact details, e.g. office location; email; consultation times.
    - Always keep this information current.

Class & Groups

The Class & Groups tool helps you with class management and allows you to:

- Send email messages to your class
- View your class roster along with the student photographs
- Create and manage guest access accounts/users
- Create and manage groups

Classmates: Provide the current listing of a module's registered students and can be used by instructors, teaching assistants, and students to view your students' personal profile that consists of student names, email IDs and photographs. This promotes networking and fosters community building.

Guests: Can use to assign guest users to access your module or specific tools of your module where in students who are not officially registered for the module or other staff members can be added, be it NUS users or non-NUS users.

Groups: Provide a workspace for a team of students to collaborate on group projects, share files and post joint solutions. Groups can be created to:

- Allow for breakout discussion groups in large classes
- Provide easy, private communication regarding group projects and secure access to specific tools

There are various types of groups available within IVLE – class groups, lecture groups, project groups, tutorial groups, lab groups and sectional groups. Class or Project groups can be assigned by the instructor allowing students to sign up to a group, while the other group types are created from the NUS student management system.

The class/project groups can be used alongside discussion forums and chats where you can begin a session in the main forum, and then assign specific question to groups to discuss in the group discussion board area. At the end of the group conversation, a representative from the group posts the group's conclusions on to the main forum. A key benefit of this approach is that more students directly participate and is helpful in terms of forum management, especially with large classes.

Organising course materials using "Files (Workbin)"

Adding content or course materials such as handouts and presentations to a module is usually one of the first activities that instructors would plan to use IVLE. It is important to ponder on how you are going to organise the piles of lecture notes and other resources to present to your students online.

Before adding course materials, it is a good idea to "storyboard" or layout your course on paper. By determining ahead how you want to organise and structure the course, you will save hours of moving documents around inside IVLE. Course structure might vary according to discipline and faculty preference.

The **IVLE Files** is a tool that allows instructors and students to store, manage, and share content where a variety of content can be added, often in Microsoft Office formats or PDF formats, and can easily be organised into folders.

You can structure your material within the **IVLE Files** as follows:

- **Linear:** A folder for each week with a description of the contents of the folder at the folder level. This enables students to easily see how their course is progressing and to find more details/information.
- **Topic:** Course materials can be structured by grouping the resources into topics and giving each topic a description.

WHAT DO STUDENTS EXPECT TO SEE ON A COURSE WEBSITE
Course Materials   e.g., Lecture outlines or notes, copies of handouts, overhead transparencies, PowerPoint presentations, podcasts, and supplementary materials.   • Making course material available online does not mean students should not or will not come to class.   • Posting lecture notes as background reading may mean you can go deeper in class.   • Posting a lecture outline that students can print and bring to class gives them a guide to important information.   • Electronic copies of handouts, overheads and presentations act as study material after the lectures.

Carefully consider whether a forced linear approach is best for your students – the module as a rigid path of materials and activities may deny students opportunities to learn in the best ways for them. On the other hand, too much choice/user control can mediate against effective engagement with course content – in that students may skip important material or just not find it; or they may find the amount of choice or the number of links overwhelming. However, it is usually best to put up as much of the course material as you can before students begin the course.

Files (Workbin) contain two **folder options** by default – **Lecture Notes and Student Submission**. These folder names are completely arbitrary. You can further organise the materials you add to **IVLE Files** depending on your course structure by creating new folders like module documents, supplementary materials, tutorials, or laboratory. For example, module documents folder can contain general items like course rubrics, rules, guidelines, or glossary (including common terms and definitions) regarding the module. Lecture notes can further be organised based on weeks for easy reference.

Assignments can be used for quizzes, exams and work to be completed, and can generally divided by unit or week.

WHAT DO STUDENTS EXPECT TO SEE ON A COURSE WEBSITE
Assignments
e.g., examples, instructions, practice tools, rubrics, worksheets, and grades
• Access to this information online can help students better understand and prepare to meet assignment criteria and course objectives.

Various reports like "most downloaded documents" report, a "download/upload summary" report or a "submission report" can be easily generated within the Files (workbin).

Communicating using "IVLE Announcement"

The IVLE Announcement tool can be used to communicate important time-sensitive information to students such as assessment task reminders, time-table or room changes, corrections or clarifications of materials and exam schedules. Announcement is IVLE's core communication tool and acts an alternative/supplement to the University email.

By default, the Announcements tab (blinking Tab) is placed on your main workspace and can be seen prominently. Encouraging your students to check announcements for the latest course-related information is a good alternative to using email.

1. **Post important news items as announcements in IVLE**
   The "IVLE Announcement" tool is ideal for facilitating communication to students about time-sensitive material such as reminders about upcoming due dates, changes in the syllabus, and corrections or clarifications of material.

2. **Include links when notifying students of new course resources or assignments**
   When posting an announcement to notify students of availability of a new resource or assignment, include a web link (URL) to that particular item enabling students to access the resources with just a single click.

3. **Compose announcements in word processor and save for future reuse**
   Draft announcements in a word processor and save in a folder on your computer so that you can reuse them in future courses.

Set an expiry date to ensure that old announcements are archived, thereby only featuring the recent announcements though students can continue to access these past announcements. Urgent announcements can also be sent via SMS to those students who have opted to receive SMS announcements.

Preparing a Lesson Plan

The Lesson Plan helps you to organise IVLE weekly lecture schedules. You can include week-by-week or topic-by-topic tasks; assignments, readings and other learning activities that you want students in your class to review before and after your lectures and tutorials.

A lesson plan is a road map of what your students need to learn and how it will be done effectively before, during and after the face-to-face class time. To do this, the first and most important step is to identify the learning objectives for each class or topic keeping in mind your learning outcomes for the module. An effective lesson plan will need to tightly integrate the following three key components:

- Student learning outcomes
- Teaching/learning activities
- Assessment activities to check on student understanding

Specifying concrete student learning outcomes will help you determine the kinds of teaching and learning activities you will use, while those activities will define how you will check whether the learning outcomes have been accomplished. Keeping students informed of what they will be learning and doing in class will help keep them more engaged and on track.

Asynchronous discussions using "IVLE Discussion Forum"

Online discussion forums assist staff and students communicate effectively. These forums can provide an alternative form of communication to in-class, verbal discussion – whether simply to provide variety in the subject, to meet the different needs and preferences of individuals, or to allow students time to reflect on the debate and consider their response before contributing. Student participation in online discussion forums develops students' skills in using online communication tools.

Examples of Discussion Forum Usage

Depending upon the purpose, online discussion might be used to:

- Extend discussions that commenced in class
- Allow students to discuss in different groups on different topics
- Be triggered/led by either staff or students
- Be more or less structured; and
- Involve mandatory or optional participation

WHAT DO STUDENTS EXPECT TO SEE ON A COURSE WEBSITE

Communication

e.g. discussion features for group projects, contact with the instructor and discussion leaders

- The ability to ask questions, get feedback, make plans, brainstorm at any time or place

- Provides increased flexibility as it allows for asynchronous, time-independent communication between learners, and between learners and the instructor

- Guidelines for communication, including netiquette guidelines

- Samples of what constitutes a substantive post to the discussion and also by modeling good communication when making posts

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Designing activities for an effective discussion

1. **Use structured discussion topics**
    The use of structured discussion topics allows for a focused development of discussion threads led by the facilitator or appointed moderator and facilitates instructor-learner communication. This type of discussion presents a standard format with established boundaries of (a) presence of a weekly discussion question, (b) prescribed participation, and (c) presence of a moderator. In structured discussions, the instructor provides the topic for discussion, linked to what was happening in the course and effectively setting the agenda on what would be discussed and the parameters of how broad the discussion would be.

2. **Use questions that stimulate higher order thinking skills**
    Use clear, open-ended questions that tap into the higher-order thinking levels of application, analysis, synthesis, and evaluation to start conversation threads. In order to support a deep and meaningful dialogue, the initial discussion questions need to be interesting – perhaps even controversial – and allow for multiple perspectives that your students can provide from their own experience. When students have responded to the initial posts and are familiar with the environment, then encourage them to move into more challenging discussions by adding challenging follow-up questions, scenarios and examples.

3. **Use groups**
    Divide your students into small groups of 4-6, using the class groups, tutorial groups, project groups or section groups. The small size makes it easier for all students to participate. Such groups can conduct their own in-depth discussion as a part of a class-wide topic or a topic in its entirety. They could then post their response(s) to the discussion forum which is open to the whole class. Assigning students to a specific workgroup for the duration of the course and giving them the opportunity to participate in various roles during the term — coordinator, time manager, and reporter, for instance, would give the students a good learning experience.

4. **Encourage student-generated discussion topics**
    Encourage student-generated topics as they will increase motivation and support a learner-centered environment. Depending on your classroom dynamics, you might consider providing an alternative space for very informal discussion/conversation of general questions – a virtual coffee shop, for example.

5. **Achieve social interaction and community building**
    Create discussion threads that will allow students get to know each other personally and intellectually.

Recommended practices when using a discussion forum

1. **Create forums for specific topics**
   Create separate forums for specific topics to reduce cognitive overload and to keep online discussions focused. For example, you could create a general discussion forum (titled "Questions & Answers" or "Help!") for students to post general questions that they may have about the course to this forum or even a social forum for off-topic discussions. If students submit such general course questions via email, you can ask them to post their questions in the designated forum. Answering the questions in this public discussion forum allows other students to benefit from the responses, eliminates the duplication of email responses, and makes it possible for students to help one another. Make discussion forums available as needed rather than making them all available at the beginning of the course.

2. **Create a schedule of when you will monitor/ respond to the postings**
   Helps you to plan how much time you will take to respond to posts. Logging in more than once a day can be ineffective as there may not be any new contributions to read while waiting several days may result in an overwhelming number of discussion contributions to read. Responding where necessary within 24 hours is one way to demonstrate instructor presence in the module.

3. **Don't plan to respond to all postings**
   Only respond to those posts that are directed to you, or if your response will contribute to the quality of the discussion.

4. **Model expectations when writing your responses**
   Ensure that the quality and length of your posts are those you expect of your students.

5. **Post a summary/feedback comment**
   Consider posting a summary or feedback comment when the discussion has been going for a few days. You could also rephrase the question if the discussion goes off the topic.

6. **Specify due dates for required contributions**
   If participation or student contributions in an online discussion are required, include the due dates for initial posts and responses in the description.

7. **Don't remove past discussion forums**
   Students may want to review past discussions as they proceed through the course. Rather than removing a discussion forum that is no longer active, simply reorder the forums so that current forums are near the top.

8. **Save discussion threads for viewing offline**
   You could save all discussion threads or specific topics in a forum to read student contributions offline. These can then be printed or saved for offline viewing.

Synchronous discussions using "IVLE Chat room"

Synchronous text chat allows for information to be transmitted in real time where users are able to communicate almost instantly, replicating a face-to-face discussion. In an online environment, creating a sense of community is necessary. Synchronous text chats, when used correctly, can be powerful tools to create effective learning situations. They bring in that human element which can often be missing in an online classroom.

Examples of chat room usage

Here are some ways that an online environment could be enhanced through the use of synchronous chats:

1. **Working in group projects**
   When participants in a class are not able to meet in person, synchronous text chats are an excellent way to allow for communication between group members.

2. **For idea generation**
   When students participate to share knowledge on a particular subject, it will enable them to create new or improved ideas. The stimulus through direct communication between the participants may be different from and additional to the stimulus received by seeing other people's ideas.

3. **5-minute chats before class or at the start of a class**
   A five-minute chat before or at the start of a class gets EVERYONE talking right away and gives the instructor a quick sense of students' understanding of a topic. The chat could be done based on groups with the instructor joining in different chats, and could make references to a specific assignment due that day. Each group would then email a transcript of their chat enabling the instructor to use these comments to launch a discussion right then in class.

4. **Tracking out-of-class communications**
   Having students save logs of synchronous chats provides teachers with evidence of participation that occurs outside of the class setting. Teachers can assign partners to discuss a reading, or other topic, and have the log of the chat turned in as evidence of the work.

5. **Online office hours**
   Teachers can use chat rooms as a means of having online office hours. Instead of giving out personal phone numbers, the teacher is able to provide students with instantaneous feedback via instant messages and it allows the student to save the chat in a log to refer back to later on.

Here are some general guidelines that you as an instructor should follow when using synchronous chats:

1. **Establish ground rules**
   Provide guidelines for etiquette and discussion flow. For example, to keep the conversation focused, inform all students that the session is being recorded.

2. **State objectives clearly**
   State your objectives to establish common goals amongst the class or group. Always try to keep the chat relevant to the topic being discussed in class. Sometimes, you will have to be flexible enough to be able to follow where the discussion may lead, even if it is not exactly what you planned! Let a good discussion have a chance!

3. **Encourage interaction**
   Promote interaction while keeping everyone on track and do not let one person dominate the conversation. It would also be good to send gentle reminders to engage those you have not participated. Tag is a great engaging strategy- an individual makes a comment or poses a question and then says "tag"... with a person's name for the next person to speak.

4. **Address questions/comments to the intended recipient**
   When responding, use the names of other participants where possible

5. **Be mindful of the time**
   Set a time for how long the discussion will last and keep to that time frame. Always begin and end the session on time and be respectful of everyone's time, do not enter into a session late as students' will lose focus. Allowing for some "think time" or "wait time" on the part of the participants would be a good option but you must also be mindful that too much "dead air" is not good either.

6. **Give periodic summaries**
   Regularly summarise the progress of the session that can be done either by you or by other student participants. This will give an update to other students who arrive late. It would be a good idea to bring a closure to the discussion by reviewing what was discussed.

7. **Keep a record/transcript of the conversation**
   It is a good practice to type up a summary of the discussion and send it out to students so they will have hard copy as a reference.

8. **Use rubrics if you are grading the chat**
   If you would like to grade the conversation, then use a rubric and post it prior to the discussion to give students ample time to review what is expected.

References

Technical Guides

- **IVLE Staff User Guide** - covers the tools to get you started with creating and managing your courses. (https://wiki.nus.edu.sg/display/IVLEStaffKB/Home)

- **IVLE Overview: Student User Guide** – useful for students in your module who are new to IVLE. (https://wiki.nus.edu.sg/display/IVLEStudenKB/Home)

- **IVLE Recipes** – showcases how other colleagues have been using IVLE and its tools to enhance their students' learning experience. (http://blog.nus.edu.sg/cdtkdr/category/ivle-recipes/)

- **IVLE Tutorials and Guides** – These online tutorials and guides provide support on getting started with using IVLE. (http://blog.nus.edu.sg/cdtkdr/online-tutorials/ivle-tutorials/)

Other Information

- Textbook adoption – For more information, read the section on "Important Notes on Book Order"(http://coop.nus.edu.sg/services/textbook_adoption/index.htm)

- E-Reserves – can contain book chapters and/or journal articles in electronic form usually as PDF or hyperlinks to electronic resources currently subscribed by NUS Libraries, and can be published via IVLE (http://libportal.nus.edu.sg/frontend/web/e-reserves/e-reserves-for-faculty-staff)

Readings

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