

The Instructor's Guide to Course Development

for online, hybrid, & technology-enhanced courses

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SECTION I: Planning and Preparation

Overview

The *Online Instructor's Guide: Course Development & Facilitation* serves as a reference guide for instructors developing online courses. While the guide focuses primarily on online courses, many of the guiding principles can be used by instructors while developing hybrid and technology-enhanced courses as well. This guide is not intended to be all-encompassing, but rather one of many tools available to help instructors think intentionally about their course design. Developing and facilitating online courses is different than the process for face-to-face courses; much more time is generally required upfront in online course development as the materials need to be in place prior to the actual course start date. This guide is intended to help you consider the many steps in the development process.

In addition to using this guide to support course design, the team of instructional technologists and instructional designers in the Office of Online & Extended Learning strongly encourages all instructors to take part in an online course or workshop as a student – having walked a mile in the online student's shoes can powerfully inform the perspective of an online instructor. Multiple online workshops exist on the topic of online teaching & learning and online course development; taking a course in this subject can strengthen your knowledge on the topic through both the subject matter examination and the experiential learning opportunity. Contact the Office of Online & Extended Learning (OEL) if you would like recommendations.

“Shopping List” for Course Development

Before delving into creating the actual course components, it is helpful to gather the necessary resources and create a development plan to ensure you understand all of the elements that will be required to make the course development process a success. This shopping list should help you think about the resources you'll need.

Build a development timeline.

- Set a target end date.
- Set progress benchmarks at regular intervals before the targeted end date.

When will this course be taught? It is ideal to have at least one semester to create an online course from conceptualization to completion. All course components should be completed and ready **BEFORE** the course starts – ideally well before the course starts so you can review and so students may be allowed in the virtual classroom a few days early to explore and familiarize them with the course structure.

Storyboard the course.

Get a **big picture** idea of what you want your course to be. In general terms (don't get lost in the details yet): What will the course “look” like? Where should students be by the end of the course? What major topics will be covered? What learning materials will be presented? What technologies and media will be needed?

Gather the appropriate course design tools.

In addition to the Quality Matters Workbook, OEL has made available a Course Design Checklist and sample Syllabi with components needed for online students.

Get instructional design support.

The OEL team has been trained in Quality Matters – instructional design principles related directly to designing online courses. Schedule a consultation to review course design plans. Get a copy of the Quality Matters Workbook (copies available upon request from OEL). Know who your support people are on campus, and use them!

- **Gather the appropriate instructional technologies resources.**

What technologies will be needed to design and deliver the course? Plan ahead; don't wait for the last minute to learn what technologies are available and how to use them

Get technical training if needed.

Take advantage of the instructional technology training staff in OEL – listen to pointers they can offer on best practices for using the instructional technologies, along with the technical support they provide.

Principles of Course Design

Before starting your course development, it is helpful to have a foundational understanding of instructional design to help you create a purposeful learning experience.

Backward Design – The Basics

What is Backward Design?

"To begin with the end in mind means to start with a clear understanding of your destination. It means to know where you're going so that you better understand where you are now that the steps you take are always in the right direction."

Essentially, Backward Design means to begin with the end in mind. Using Backward Design, objectives are set before a course and its components are designed. Following formulation of the course-level and module-level objectives, the course assessments are designed, and then finally the course content. The idea is that if you ultimately know what you want students to take away from your course, you can better design the components of the course that will get them to that point, like giving your students a compass and a map to reach their destination.

The main principles of Backward Design can be captured in three central ideas:

- **Stage 1: Identify Desired Results**
 - Where do I want students to be by the end of the course?
 - To answer this question, you can look to your learning objectives (the final destination).
- **Stage 2: Determine Acceptable Evidence**
 - How will we know they've gotten there?
 - Using assessments that align with your learning objectives will help to put students on the right track.
 - Using rubrics helps you to determine if the students are achieving the objectives you are intending students to meet.

□ **Stage 3: Plan Learning Experiences and Instruction**

- How can I help them get there?
- What "modes of transportation" or learning activities makes most sense to get students to the desired destination?

What does Backward Design mean?

Backward Design helps create order and purpose to course activities.

Backward Design is a great tool for building online courses (face to face courses as well!). Knowing the final outcomes you want students to achieve helps to guide you through your entire course development. In the online classroom organization and explicitness is a must; it can help you achieve those goals by making sure each activity is tied to the desired final outcome.

Backward Design also provides transparency for students - in your final product (*the course*) they get to see what they should be learning, how the information they are reading and watching is relevant to their learning, and how the activities and assessments are helping them to achieve the goals of the course, connecting their learning to the course content.

Quality Matters (QM™)

What is Quality Matters?

Quality Matters is a program that provides educational organizations with the tools for evaluating the design (not teaching) of online and blended courses. The following excerpt was taken directly from the [Quality Matters website](#):

The **Quality Matters (QM) Program** is a nationally recognized, faculty-centered, peer review process designed to certify the quality of online courses and online components. Colleges and universities across and beyond the U.S. use the tools in developing, maintaining and reviewing their online courses and in training their faculty.

The **QM Process** for continuous improvement is the framework for quality assurance efforts in online learning and provides effective professional development for faculty making the transition into distance education.²

The **Quality Matters Rubric** has become the most widely used set of standards for the design of online and blended courses at the college level. Today, more than 700 colleges and universities subscribe to the non-profit Quality Matters Program.

The Quality Matters Rubric is a set of 8 general standards and 41 specific standards used to evaluate the design of online and blended courses. The Rubric is complete with annotations that explain the application of the standards and the relationship among them. A scoring system and set of online tools facilitate the evaluation by a team of reviewers.³

In many ways, Quality Matters (QM) compliments the Backward Design method of instructional design as one of the main focal points of QM is learning objectives. In fact, most of a QM review will hinge upon if you have successfully written measurable, learner-centered objectives, and then based the course materials and activities around achievement of those objectives. This is a concept QM refers to as **Alignment**.

Achieve alignment in a Quality Matters (QM) review.

Backward Design can help you to achieve alignment among the critical elements in your course. The objectives, assessments, and learning activities are deliberately connected. As you build each piece of your course upon the previous, you naturally progress toward full alignment.

What is QM Alignment?

From the [QM website](#): Critical course components - Learning Objectives, Assessment and Measurement, Resources and Materials, Learner Engagement, and Course Technology - work together to ensure that students achieve the desired learning outcomes. When aligned, each of these course components is directly tied to and supports the learning objectives.⁴

In a QM Review, certain parts of a course (the *critical components* listed above) are examined to make sure they bring each other into line, assuring each part is relevant to helping students achieve the objectives of the course. If one of those parts is not considered "in alignment" the course will not be considered to have met the standard(s) of the review. Using Backward Design to thoughtfully construct your course can help ensure you are aligning the "critical components" of your course.

Key Elements in Your Course

Before you work through the three stages of course development, it may be helpful to conceptualize your course by understanding and identifying some of the key elements that will be needed in your course. These key elements may influence how you think about presenting your course objectives and materials to your students.

Course Components	Key Design Elements
Initial Support	<ul style="list-style-type: none">• Welcome & introductory email sent to students 1 week prior to course start date• Course opens one week early to allow perusal• Orientation activities
Course Information	<ul style="list-style-type: none">• Structure and flow of Content• Course Calendar includes all activities and due dates• Syllabus information• Semester-long activities explained• Special instructions provided for third-party software
Building Community	<ul style="list-style-type: none">• Introductions discussion thread for students and instructor• Open discussion forum(s) (i.e. "Raise your hand" or "Ask the class/instructor") provide space for communication not related to a specific assignment/activity• Announcements posted regularly in Assignments
Content Presentation	<ul style="list-style-type: none">• Includes personal commentary from the instructor (written, video, and/or audio)• Goes above and beyond reading assignments – illustrates course topics, makes relevant to life beyond the books• Incorporates personality of instructor• More conversational than formal• Written for the Web – incorporates headers and chunking• Anticipates where students may struggle and provides support (in text or FAQ)• Appropriate use of media• Keeps accessibility and UDL in mind

Activities	<ul style="list-style-type: none">• Linked to learning objectives• Build from concept knowledge to practice, application, and analysis• Discussion encourages synthesis• Discussion follow-up encourages reflection• Quizzes used for reinforcement of concepts and auto-grading of homework
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SECTION II: The Course Development Process

When ready to begin creating and compiling materials for your course, work through Stages 1-3 of the development process. Be sure to keep handy your instructional design resources: Course Design Checklist, sample syllabi, and the QM Workbook to help guide you. It's not likely that you will complete the entire course development in exact order of Stages 1, 2, and 3. You will likely find yourself jumping back and forth between the stages as you progress through the development. However, starting with Stage 1 is pretty much a sure bet.

Stage 1: Identify Desired Results

It's now time to write the objectives you will use to set the framework for your course. Begin by writing the course-level objectives, and then proceed to the module-level objectives. Thinking in terms of Backward Design, where do you want your students to be by the end of the course?

Objectives are ***the most critical element*** in the course design process. They provide the foundation and infrastructure to guide the development of assessments, learning activities, and learning resources.

Often times course development resources use the terms goal, objective, and outcome, sometimes as separate, related entities, but sometimes interchangeably. Generally speaking, goals are broadly defined statements that provide direction for defining specific and measurable objectives, which result in student learning outcomes. For our purposes here, we will be focusing on course-level and module-level objectives in the course development process.

What is an objective?

An objective is a statement that describes what students are expected to be able to know, do, think, or feel upon completion of a course. Objectives must be clearly defined, student-centered, measurable, and achievable.

What's the difference between a course-level and a module-level objective?

The basic difference is ***scope***: course-level objectives are broader than module-level objectives. Ultimately the module-level objectives will help students achieve the course-level objectives.

Course objectives are the overall outcomes you want students to take away from the course. In designing course objectives, ask yourself: what are the enduring ideas I want students to remember when this course is over (or in two, three, or four years from now)? These outcomes are generally related to the core values or skills of your specific discipline. Module objectives are smaller, more specific outcomes that, collectively, will help students achieve the overarching course objectives. While both sets of objectives need to be written in measurable terms, module objectives are often more precise, measuring competency in a specific task or skill.

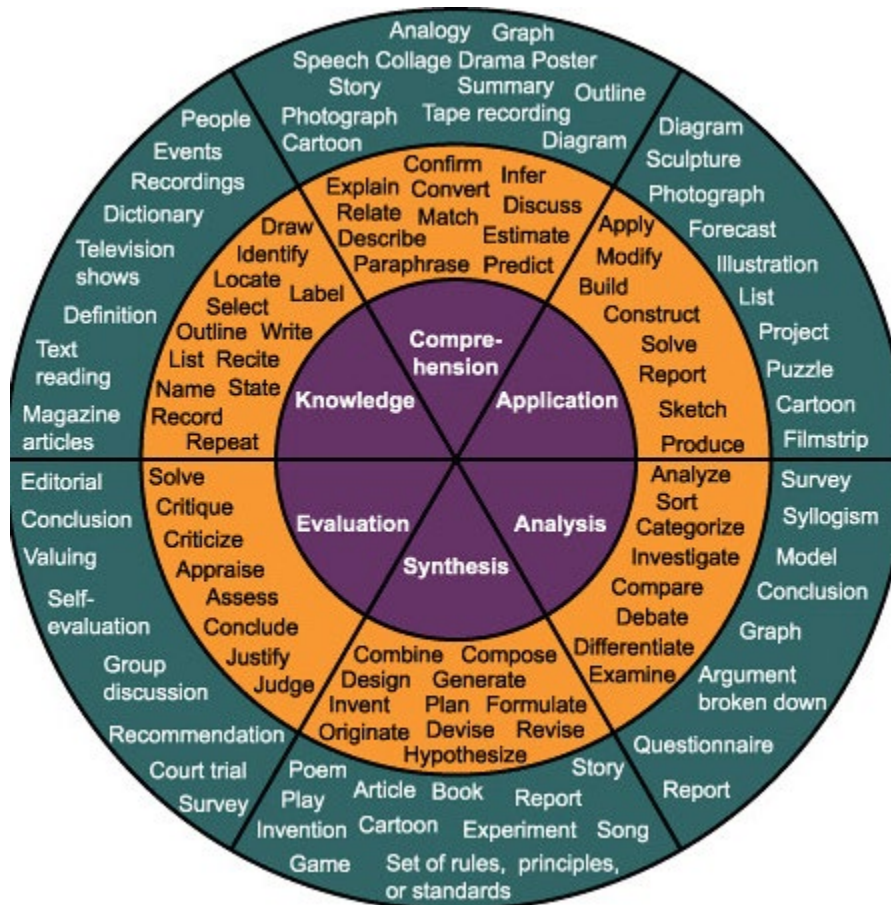
Why are objectives important in the course development process?

In the example above, we turned key concepts into measurable learning objectives. These objectives will guide us to develop assessments, learning activities, and instructional materials that are aligned with each other, and help students achieve the desired objectives. For example, Module Objective 1 above indicates that students will be able to "translate passages from classical literature, including Roman authors Cicero and Sallust." The verb "translate" guides us to an assessment that requires students to interpret and express information. A multiple choice quiz might not be an appropriate assessment for this objective. Rather short answer quizzes and short essays would better assess students' ability to translate specific passages. The second module objective indicates that students will be able to "Analyze grammar, syntax, and morphology of Latin passages." Here matching, labeling, fill in the blank, or multiple choice activities may be appropriate assessments for the objective. The third objective, "Identify and discuss the values and beliefs of ancient Roman writers through analysis of Latin texts" could be assessed through a discussion activity or essay.

How do I identify objectives?

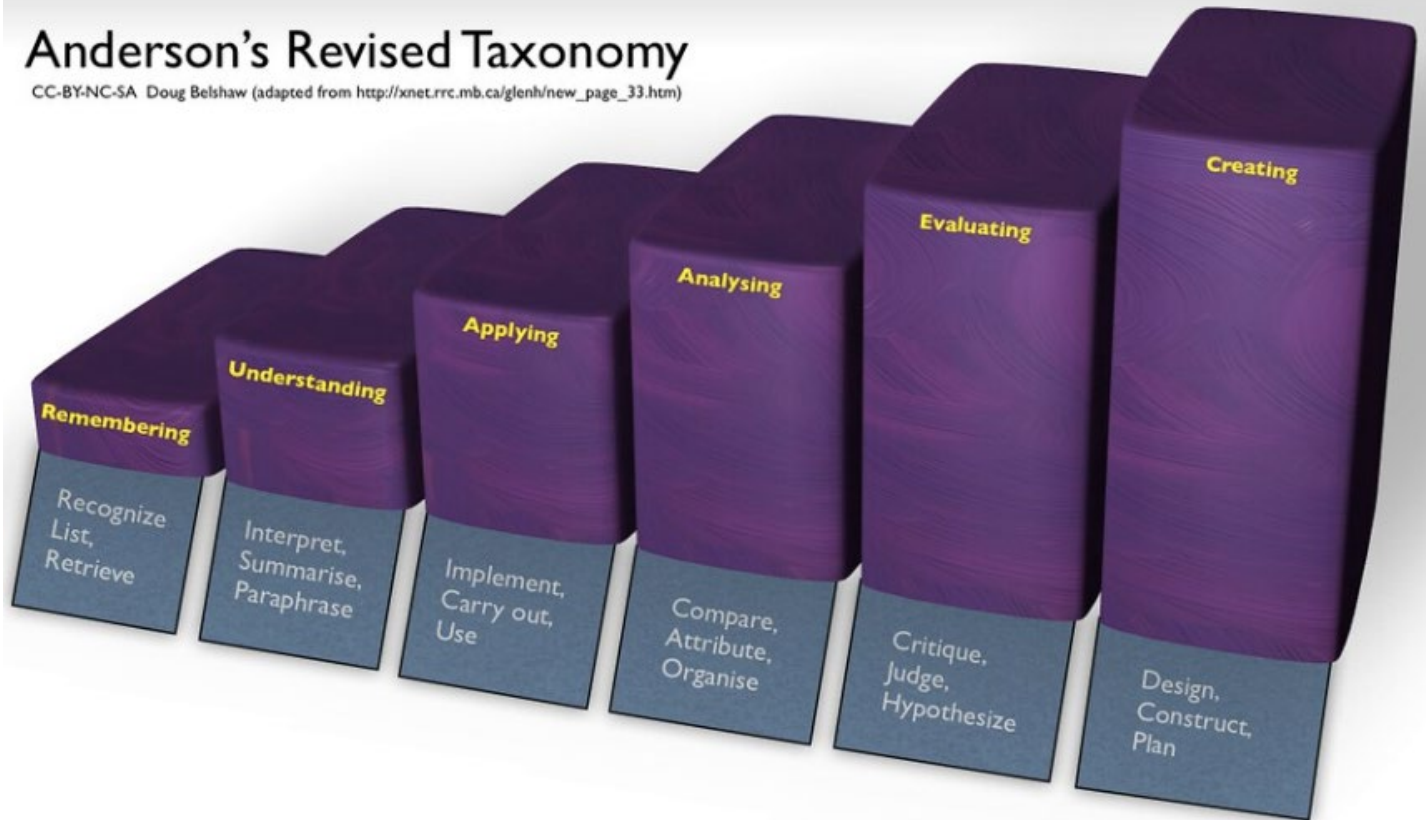
The easiest way to identify objectives is to open the textbook for your course and see what's listed there. Is that the best strategy? Perhaps sometimes, but not always.

Bloom's Taxonomy of Cognitive Levels, developed by Benjamin Bloom in 1956, identifies appropriate assessments based on the various levels within the cognitive (knowledge) learning domain. Bloom also identified two other domains for learning, affective (attitude) and psychomotor (skills). Taxonomies for these domains have also been developed since Bloom's original taxonomy was developed.



Anderson's Revised Taxonomy

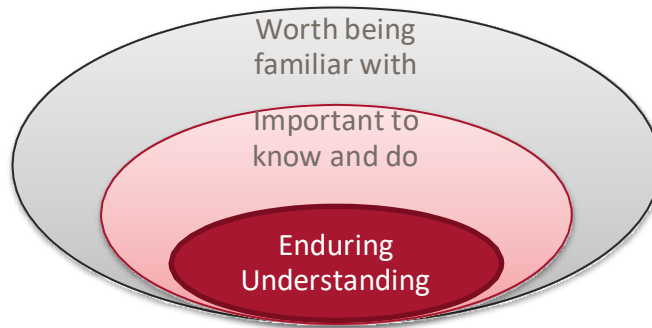
CC-BY-NC-SA Doug Belshaw (adapted from http://xnet.rrc.mb.ca/glenh/new_page_33.htm)



While we would all like to believe our students remember every bit of information that comes up on our courses, the reality is that much of the information is lost after time. So a good place to start when identifying learning objectives is to ask this question:

"What are the key concepts my students should remember from this course?"

Once you answer that question, you can take those concepts and convert them into course objectives by identifying what your students should be able to know about and do with these key concepts. From there, you can drill down and generate specific module learning objectives.



Those items placed in the smallest circle (Enduring Understanding) are **your course-level** objectives – the most important concepts that students should take away from the learning experience. They are the foundational “must know” pieces students will take away from the course. The second circle (Important to know and do) provides the support to achieve the enduring understanding of the major concepts and are, therefore, the **module-level** objectives. They are the “need to know” pieces. The last circle (Worth being familiar with) allows for you to identify some of the concepts and information that are related to the main course objectives and worth of mention throughout the course but may not be important enough for assessment. These can be considered the “nice to know” pieces.

How should objectives be written?

No matter whether the learning objective is at the course level or the module level, there are certain criteria to follow in writing the objective.

- Is the learning objective measurable?**

Meaning: Use action verbs, such as "identify" or "evaluate" or "apply".

While course-level objectives are meant to be broader than module-level objectives, it's still important to ensure they are measurable. It is best to **avoid** verbs that are difficult to assess such as to *know*, *understand*, *appreciate*, and *familiarize* whenever possible as they are very difficult to measure.

- Does the learning objective use an effective action verb that targets the desired level of performance?**
- Is the learning objective student-centered?**

Meaning: Written in a way describing what the student will be able to do, not what the instructor will do in the course...i.e. "Following this module, the student will be able to..."

- Does the learning objective target one specific aspect of expected performance?**
- Is the learning objective written in terms of observable, behavioral outcomes?**
- Does the module objective stem from a course objective?**

Bloom's Taxonomy

Bloom's taxonomy provides us with a means of intentional design of our courses, i.e., objectives, class activities, and assessments. Using Bloom's Taxonomy to design our courses does the following:

It informs the **students**:

- what they should study
- how they will be

assessed It guides the

instructor:

- in assessment strategies
- in teaching strategies

It tells the instructor (and accreditation agencies):

- if teaching strategies worked
- if assessment strategies worked

Verb List

The following table breaks down the levels of understanding based on each domain of learning (as defined by Bloom's Taxonomy) and into the various levels within those domains. The "Relevant Verbs" column provides a list of verbs that can be used when writing learning objectives to correspond with the appropriate level of understanding you want your student to achieve.

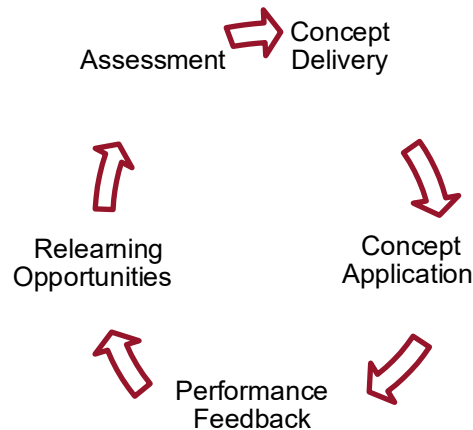
Domain	Emphasis	Relevant Verbs
Cognitive	Knowledge	Recall, identify, recognize, acquire, distinguish, state, define, name, list, label, reproduce, order
Cognitive	Comprehension	Translate, extrapolate, convert, interpret, abstract, transform, select, indicate, illustrate, represent, formulate, explain, classify, comprehend
Cognitive	Application	Apply, sequence, carry out, solve, prepare, operate, generalize, plan, repair, explain, predict, demonstrate, instruct, compute, use, perform, implement, employ, solve
Cognitive	Analysis	Analyze, estimate, compare, observe, detect, classify, discover, discriminate, explore, distinguish, catalog, investigate, breakdown, order, determine, differentiate, dissect, contrast, examine, interpret
Cognitive	Synthesis	Write, plan, integrate, formulate, propose, specify, produce, organize, theorize, design, build, systematize, combine, summarize, restate, argue, discuss, derive, relate, generalize, conclude, produce
Cognitive	Evaluation	Evaluate, verify, assess, test, judge, rank, measure, appraise, select, check, judge, justify, evaluate, determine, support, defend, criticize, weigh, assess
Affective		Agree, avoid, support, participate, cooperate, praise, help, offer, join
Psychomotor		Adjust, repair, taste, bend, measure, perform, operate, use, move

Once you've determined the objectives students should be meeting in your course, it becomes much easier to tailor your assessments and activities to help students meet the desired outcome. The assessment should be directly related to the verb used in the objective (Stage 2). The activities/assignments should enable students to be successful in that assessment (Stage 3).

Stage 2: Determine Acceptable Evidence

It's now time to create the assessments you will use to measure the outcome of the learning objectives. How will you know students have arrived at the intended destination? Using assessments that align with (and directly measure) your learning objectives will help you know if your students have arrived. Creating multiple opportunities to assess the students throughout the course will help you know if your students are on the right track to that final destination.

Designed purposefully, online assessment becomes a teaching tool and not strictly an evaluation mechanism. Strategically, assessments should be designed as part of the learning cycle process.



Types of Assessment

Learning is often a cumulative process. Punctuating your course with multiple assessment opportunities with feedback provides you the ability to gauge your students' learning progression and students with opportunities for re-learning and re-applying, building toward mastery of the learning objectives. An optimal strategy is to build in a variety of assessment techniques.

Formative assessments provide the instructor and students with regular feedback on mastery of course module objectives. As an instructor, you can use the results to refine your instruction, intervene, and redirect learning as appropriate. Students can use the results to identify areas for further study. These assessments are generally "lower-stakes", such as **discussion posts, reflections, quizzes, simulations, short answer questions, self and peer evaluations.**

Summative assessments provide results that can be used to assign grades and make summary conclusions about course-level objective mastery. The goal is not diagnostic feedback, such as with formative assessments, but rather accountability. These assessments are generally "higher-stakes" and occur at the end of a learning module. Examples include **midterm and final exams, essays, research papers, simulations, projects, portfolios, presentations, case studies.**

It is often helpful to **benchmark** larger project or research type assessments throughout the course. Having various components due at regular intervals during the course helps keep students on track time and content-wise. This also provides peer-review opportunities for students.

Rubrics

Rubrics can be used to outline criteria for discussions, case studies, essays, course projects, and other activities. Rubrics help you determine if students are achieving the objectives you are intending them to meet in particular assessments. Rubrics also act as a scoring guide for you when evaluating papers or projects - you will know implicitly what makes a good final product, and why, and thus how to 'grade' each student's assignment in a consistent manner. When students receive the rubric before beginning an assignment, they understand how they will be evaluated and can prepare accordingly. The rubric can then provide scaffolding to improve the quality of the student's work.

Advantages to using rubrics:

- Instructors can increase the quality of their direct instruction by providing focus, emphasis, and attention to particular details as a model for students.
- Students have explicit guidelines regarding instructor expectations. Explicit directions and clear expectations are especially necessary in an online class.
- Students can use rubrics as a tool to develop their abilities.
- Instructors can reuse rubrics for various activities. Once a rubric is created, it can be used for a variety of activities and across courses. An established rubric can be used or slightly modified and applied to many different types of assignments.

Sample rubrics are available for your reference; feel free to use and modify. Online rubric-making tools are also available.

Stage 3: Plan the Learning Experiences and Instruction

It's now time to design, create, and compile the materials and activities for the students in your course. How can you help your students achieve enduring understanding of the course subject? What are the maps, tools, and interactions students will need to successfully navigate through the assessments? What "modes of transportation" or learning activities makes most sense to get students to the desired destination?

The activities and learning materials in your course should help students build a framework for understanding the course concepts. Ultimately they ensure students will be successful in the course assessments. If you have already defined the learning objectives and created assessments to measure those objectives, the activities and materials are the resources students use to work through those assessments and ultimately achieve the objectives.

Often online courses are heavily text-based. What does this diagram mean for how we should approach online course design in terms of the learning materials and activities?

The research findings of William Glasser suggest that we remember:



You may choose to write or record your own course materials. You may choose to incorporate the works of others (videos, articles, texts, webpages, guest experts). Much of the course material you select may be text-based or perhaps you will incorporate a lot of multimedia, such as video. The type and variety of material is important, but what you have your students do with that material is paramount. Will they simply read/watch, or will they also reflect? Will they discuss? Will they experiment? Will they analyze? They must engage for a lasting effect.

Student Engagement

Ultimately, how much students take away from the course, will depend upon how much they have engaged in the course. While they must be motivated to take on the learning challenges presented to them, it is also incumbent upon you to create an environment of engagement. There are three main capacities for student engagement in the course. The degree to which students participate in each of the three capacities varies from course to course, but each should be considered in your course design.

1. Student – Content

Students can engage with the content of the course in many ways including (but not limited to) reading, researching, reflecting, completing assignments, and watching videos.

2. Student – Student

Students can engage with each other in multiple ways such as group work/collaboration, class discussions, peer reviews, and informal exchanges (chats, emails, discussions, etc.).

3. Student - Instructor

Students can engage with the instructor through many means, such as discussions, online office hours, and feedback received on assignments.

UDL: Universal Design for Learning

Universal Design for Learning (UDL) is a framework for guiding the development of flexible learning environments to accommodate for differences in individual learning. The intention of UDL is to increase access to learning by reducing

physical, cognitive, intellectual, and organizational barriers to learning. UDL is related to Accessibility in that they share the goal of expanding access to learning for all. While accessibility is concerned mostly with providing fair and equal access to education no matter the physical differences in learners, UDL goes further by also addressing variability in learning of all learners.

UDL calls for courses to be developed using three core principles:

1. **Provide multiple means of representation** to give learners various ways of acquiring information and knowledge. Provide multiple, varied examples to your students. (Supports [recognition learning](#).)
2. **Provide multiple means of expression** to offer learners more than one way to demonstrate what they know. Use more than one form of assessment and allow opportunities for practice and feedback. (Supports [strategic learning](#).)
3. **Provide multiple means of engagement** to tap into learners' interests, challenge them appropriately, and motivate them to learn. Present the course concepts in more than one way. (Supports [affective learning](#).)

As you create the learning activities for your course, consider presenting course concepts and assessments in varied ways to reach learners who process and express information in different ways. Efforts made toward following UDL principles often reinforce efforts for making courses accessible.

More information on UDL is available in this [online learning module](#).

Learning Materials (Student-Content Engagement)

In a sense, in the online classroom, you are a curator of content for your subject matter. You must find the best sources of information related to your course and make that available to your students. The result is often a combination of external sources of information (such as field experts, textbook publishers, researchers, organizations) and internal sources (you). The delivery of the course concepts can be done using multiple mechanisms: textbooks, documents, articles, videos, audio clips, links to web pages, PowerPoint presentations ... etcetera, etcetera, etcetera.

Instructor Created Content – Instructor Commentary

As a subject matter expert you may deem it appropriate to create some of your own resources to include in the course. An effective way is through **instructor commentary** – this can be done by text, audio/video, or a combination of the two. Used effectively, the instructor commentary is not just a rehash or summarization of what students have already read in the assigned text (or other readings), but rather the value-added piece you bring as the expert. This is your opportunity to bring context to the content, drawing upon real-world examples (some may even be from your own experiences) and illustrating the meaning of the concepts being covered in a particular module.

The instructor commentary can be presented to students via text through such tools as HTML documents, PDF, Word documents, PowerPoint, SoftChalk, or a combination of these. While the choice of which medium to use is somewhat a personal matter that depends on the time and tools you have available to you, there are advantages and disadvantages to each. Consult with OEL if you have questions about the various options.

Using HTML documents in D2L Brightspace can be advantageous as they are editable directly within D2L Brightspace and are generally readable across all browsers and devices. SoftChalk lessons are also easily readable across various platforms and easily allow you to “chunk” your content and embed multimedia, making it web-friendly. SoftChalk also allows you to build interactive and self-check activities, helping students to more fully engage with the material.

No matter what form of text you choose to use, you will want to make sure it is fully accessible as you create it. This would include using headings in your document (pre-build headings are built in to MS Word, D2L Brightspace’s HTML editor, and SoftChalk), adding **alt text** to any images, and captions or transcripts for any videos you have included.

Transcripts are necessary if **closed-captioning** is not available on the video - having both is even better! Most publisher- created videos are closed-captioned or transcripts are made available, and many YouTube videos are also scripted or captioned. Should you choose to create your own videos for your course, the same

expectations apply.

Short (5-minute) videos created by you are effective ways to deliver targeted content to your students – adding variety to a course that may already require a lot of reading. Instructor-created videos also add a human element and instructor presence to the course. Many video creation options exist. Our current campus-supported software are Panopto and MediaSpace, which allow you options of combining video with screen capture and/or presentation capture (i.e. PowerPoint or Keynote). You may be tempted to replicate 30-60 minute in-class lectures in a video for your online course. However, to keep video instruction effective, it is considered best practice to keep them **short** and targeted to a few main points.

Links to Existing Web Content

The Internet is a wealth of information and a great deal of existing content may exist to which you can link directly from within your course. Text publishers may also have pre-packaged learning modules you can import into your course or link to from their web site. An excellent resource for existing learning materials is [MERLOT \(Multimedia Educational Resource for Learning and Online Teaching\)](#) – a free, peer-reviewed collection of learning materials. Here you may find materials you wish to use in your course, or develop ideas for materials you would like to create yourself.

Videos, podcasts, web pages, simulations, and articles can be shared with your students as part of their required course activities. Keep in mind that web content changes and links break so you will need to make a practice of checking your links each term before your course is offered. It is also helpful to provide students with an introduction to external content – set the stage for them: Why are they watching or reading the material? How does it relate to a module or learning objective? Are there particular things you want them to look for while reading/watching?

You will need to keep copyright and fair use in mind if you are linking to content made by someone else. Make sure that you are free to use the materials for your purpose and that you attribute sources where appropriate. Also, just as

Articles

Including journal articles as part of your course readings is an effective way to present students recently published pieces or seminal works in your field. Before posting a PDF copy of an article directly in your course site, first check to see if the article is freely available online or in the library database. Providing a link to the article, rather than posting the article directly in the course, is advantageous for multiple reasons. If the article is in the library's database or you are linking to the original source (i.e. The Wall Street Journal) you do not have to worry that you are violating the publisher's copyright. Also, many database articles are available for students to choose either HTML or PDF format, so they can access whichever format is easier for them to use on their device.

If you cannot find an online or database version of the article, nor can you link to the original source online and only have a hard copy available, you can scan your article as a PDF and upload into your course. You will need to be sure to scan the document as text, and not as an image, to ensure it is accessible for a screen reader or other assistive technologies.

Learning Activities (Student-Student & Student-Instructor Engagement)

The degree to which students will be expected to engage with each other in the course may vary depending on the course topics. The level at which students organically engage with each other will also vary depending on the mix of personalities, ages, and experiences of the group. Structuring student-student interactions into the course builds a **Community** of learners within your online classroom. This also helps to build a **human element** to your course, which, along with **instructor presence**, is often considered paramount to the success of the course and satisfaction of the student. Students can interact with each other in many ways – discussion boards, collaborative projects/papers, and peer editing/review.

In addition, live, synchronous web conferencing for class events, such as Q&A sessions, group discussion, guest speakers, and student presentations provides an opportunity for both student-student and student-instructor interaction. To keep true to the flexible spirit of online learning, it may behoove you to make any synchronous sessions optional (or provide multiple opportunities to fit varied schedules) as not all students may be able to adjust their

schedules to attend a live session. However, recording these sessions allows students who may not be able to attend to view them later.

Part of what some instructors (and even some students) fear gets lost in an online course is the direct contact between student and instructor. While it may be expressed differently, that contact does not have to be sacrificed. As the instructor, you can still interact with your students and show your presence in the course through regular Announcements postings, discussion participation, feedback provided on assignments and assessments, email, and by offering online office hours. Much of your presence will be made known while you are actually facilitating the course, but should be built into the course design.

Online Discussions

Discussions provide a direct means for student-student and student-instructor interaction, and often become the heart of an online course. In addition to graded discussion activities, the discussion tool can be used as a means for students to ask course-related questions and have informal exchanges with their classmates. A bit of strategy and special consideration is required for designing and working with graded discussion activities in online courses.

Discussion Design and Logistics

Most online discussions are designed to mimic what happens in a face-to-face discussion. This approach is not always the most appropriate for meeting the desired learning objectives. In the classroom, a full-class discussion happens in real-time and generally follows one idea before moving on to another. In the online discussion, many ideas can emerge at the same time and can overwhelm students, not to mention the instructor too. It's critical that the design of the discussion activity be appropriate for the online environment to maximize student learning.

Design Considerations

A "traditional" discussion that mimics the face-to-face discussion can work in the online environment, with a few strategic modifications.

- **Ask open-ended questions as the basis of the discussion activity.**

The question must be open enough to sustain original ideas and contributions from all students involved in the discussion. You can also list "probing" questions out as well in the discussion assignment. If you chose to list the probing questions up front, make it clear if the students only have to focus on one, some, or all of the questions in their post.

- **Assign staggered deadlines.**

Instead of asking students to post all of their messages to the discussion assignment by one specific date, ask them to post by two separate dates: one due date for their first post, and a second due date later in the week for their subsequent post(s). This helps reduce the number of students who wait until the last minute to complete the assignment, allowing for discussion to actually happen. A true dialog cannot emerge unless students are posting messages at different times and have posts from their classmates to which they can respond.

- **Provide suggestions for responses to avoid the "agreement" syndrome.**

Below is a list of different ways the instructor can encourage students to respond to each other in traditional discussion assignment. Depending on the nature of the discussion question and the learning objectives associated with the assignment, some of these response strategies may be more appropriate than others:

- **Reflection about meaning:** Describe thoughtfully what something means or new insights it provides, or raise a question as a seed for clarification or further discussion.
- **Analysis:** Discuss relevant themes, concepts, main ideas, components, or relationships among ideas. Or, identify hidden assumptions or fallacies in reasoning.
- **Elaboration:** Build on ideas of others or ideas found in the readings by adding details, examples, a different viewpoint, or other relevant information.
- **Application:** Provide examples of how principles or concepts can be applied to actual situations, or discuss the implications of theory for practice.

- **Synthesis:** Integrate multiple views to provide a summary, a new perspective, or a creative refashioning of ideas.
- **Evaluation:** Assess the accuracy, reasonableness, or quality of ideas.
- **PQP:** Praise, Question, Polish. Students can first point out something positive in a classmate's post, then pose a question about something in or related to the post, then offer suggestions to expand upon the idea in the post.
- **Provide an alternative format for the discussion assignment, as appropriate.**

There are a number of ways that discussions can be formatted besides the traditional format, including debates, fishbowls, jigsaw, show-and-tell, and peer evaluations. By providing alternative formats in the discussion assignments, you might be able to better meet the assignment's learning objectives while also offering some variety for your students.

- **Debates**
Instead of discussing a question openly, students can either pick a side to support or can be assigned to a specific side. Be sure to remind students to be professional in their messages and direct their comments at discussion points, not individuals, to avoid flaming.
- **Fishbowls**
In this discussion design the class is divided in half. One half of the class starts the discussion while the other half observes. Then the groups switch and the other half of the class completes the discussion activity. It's critical to provide clear expectations for student participation up front in order for this format to work.
- **Jigsaw**
Some discussion assignments may require students to focus on multiple topics as part of the discussion. A jigsaw is a great way to make such assignments manageable. For this discussion format, you first enroll students in homogenous groups where each group is assigned a different topic to focus on. In part two, you split the groups up and form new groups that contain at least one person from each of the homogenous groups to form heterogeneous groups. In their new groups, they might work together to provide a "big- picture" recommendation based on the individual topics they researched. Once again, it's critical to provide clear expectations so students understand what their individual role is in each discussion group in order for this format to work.
- **Group Consensus**
Students work in small groups to come to agreement on a question or problem. Groups must be small; four is the ideal size. Students should also be responsible for posting their own thoughts first and then go on to work on agreement to avoid freeloaders. Finally, extra time should be given for discussions that require consensus due to the amount of time it takes to achieve this in an asynchronous environment.
- **Show-and-Tell**
While the Show-and-Tell discussion format generally doesn't evolve into a true dialog, it's a great opportunity to facilitate sharing among your students. Ask students to find articles, videos, or other resources related to a particular topic and share with the class, along with a brief annotation, to generate a bibliography for a specific topic or module in the course.
- **Peer Feedback**
A common response on course evaluations is the request for more feedback. While it's important for instructors to provide feedback, students can also provide feedback for each other. Formatting a discussion to generate peer feedback can be an extremely valuable learning tool for students giving as well as receiving feedback. When creating such discussions, it's important to ensure that all students receive quality feedback. Having students work in small groups of 3-4, where they provide feedback to everyone in the group seems to work best. The instructor must also provide guidelines for how the feedback should be focused