



RU ONLINE COURSE DEVELOPMENT GUIDELINES & RESOURCES

Made Possible By:

*The McCormick Tribune Foundation Grant For Online
Learning @ Roosevelt University*

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Welcome to Roosevelt University's online learning initiative funded by a generous grant from the McCormick Tribune Foundation. This document will assist you in the design and development of your course. Although it recommends a set of linear steps to guide your thinking, the course planning process rarely fits into neat linear structures. Rather, these steps are presented as a possible path that you may choose to follow.

Introduction

The ongoing shift to computer-mediated education presents both exciting opportunities and significant challenges for faculty. This document addresses conceptual and practical issues in online course development and instruction in order to ensure that RU Online advances Roosevelt University's mission of student-centered innovation, outreach, and academic excellence.

Faculty members new to the online environment sometimes mistakenly assume that online course development involves only curricular conversion to technology-based mediums. It's crucial to remember that it's not the curriculum we are converting, but our pedagogy. The online classroom is different than the traditional one, and our approach to online course development and instruction must necessarily be united by an understanding and appreciation of the differences.

Since traditional pedagogical approaches may not work in the online classroom, we must address instructional elements that we take for granted in the traditional classroom. For example, how do we know when a student is actively engaged with the subject matter? How do we account for attendance and participation? How do we know if a student is having difficulty or is upset for some reason? Is it possible to read emotion into students' e-mail or threaded discussion posts? The success or failure of online education hinges on an understanding of and a sensitivity to the interactive relationships occurring simultaneously in an online course between students and technology, between instructors and students, and amongst students themselves.

Instructors and students behave differently in an online environment, and the nature of teaching and learning often changes quickly and dramatically. This environment provides many opportunities for students to explore course content collaboratively or to pursue their own learning interests. Instructors who cling to traditional patterns of defining course content and controlling the course will undermine the potential of online learning. Indeed, it is the willingness to accept and encourage this "loss" of traditional control that defines the successful online instructor.

The following questions are designed to encourage reflection on the transformative learning potential of online education and to gauge your comfort level as you begin the process of developing and teaching an online course.

- How do I generally run a class? What teaching methods do I rely upon most?
- Do I feel that I need to maintain control of the learning environment? How comfortable would I feel giving that control to the learners and being an equal participant?
- In the traditional classroom setting, do I empower students to pursue knowledge on their own? Do I routinely incorporate collaborative exercises and assignments into my courses?
- How do discussions generally go in my courses? Are they dominated by a few? Are my classes truly interactive?
- How comfortable do I feel with the concept of promoting self-knowledge in learners?
- How comfortable am I when students disagree with my point of view? How would I feel if a student suggested that I read material they have discovered in their learning process?
- How do I define learning? What do I hope to see as learning outcomes from an online class?

Your responses to these questions will have an impact on your success in the online environment. Below are four key elements found in every successful online course. As you proceed through the development steps in this document, consider how you will address each element.

Responsiveness

An online learning community simply cannot exist unless members respond to each other and the instructor responds quickly to the other participants. Unlike the face-to-face educational environment, learning in the online classroom only occurs when the participants interact with each other and with the instructor.

Relevance

The beauty of online learning is its ability to bring life in the outside world into the classroom. In order for students to get their minds around the topic they are studying, it must have some relevance for them. Relating the subject matter to their life experiences and encouraging students to seek out and share illustrative real-life examples greatly enhances the learning outcome.



Respect

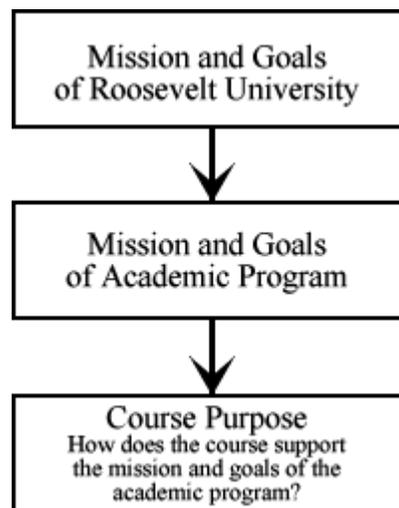
In order to coalesce as a learning community, members need to feel that they are being respected as people. This begins with an initial welcome to the group and continues through the respectful receipt of their posts and the receipt of constructive and expansive feedback on the material they present. Students need to feel as if they are equal participants in the learning process. The instructor holds no more power in the learning process than they do.

Honesty

In order for participants to connect with each other, there must be a sense of safety and trust. Participants must feel comfortable that the others in the group are who they say they are and that they will post messages that provide open, honest feedback.

Step One: Determine Course Goals

RU Online envisions online course development as an element in the broader environment of institutional mission, programmatic mission and objectives, and administrative services. Ideally, students in your course will see how the academic content connects not only to the objectives of the course, but how the course reflects the objectives of the program, and how the program reflects the unique qualities of a Roosevelt education.



Although this model works well regardless of whether it is taught entirely in the classroom or entirely online, the flexibility and scalability of online content provides numerous opportunities to reinforce the student's connection to their classmates, the instructor, the program, and to Roosevelt's social mission.

As you begin the process of determining course goals, ask yourself, "What should students take away from this experience?" In other words, "What are the desired learning objectives or goals for the course, and how do they fit into the desired learning objectives or goals for your program?"

Consider the following specific questions:

- What should the student **KNOW** upon completion of the course?
- What should the student **BE ABLE TO DO** upon completion of the course?



- What should the student **HAVE EXPERIENCED** upon completion of the course?

The answers to these simple but powerful questions can form the basis of the entire course planning process. They become the goals that guide course design and development. Focus on these goals while making every decision, whether it's a decision about how much content to cover in the course, the nature of course activities and interactions, or the nature of course assignments and evaluations. Every aspect of the course should be designed to guide students toward the desired learning objectives.

Whether you have taught a course for twenty years or one semester, we encourage you to think carefully about learning objectives, since they are essential to providing the best possible learning experience for your students, maintaining the integrity of your program, and maintaining the reputation of Roosevelt University.

REPRESENTATIVE PRACTICES

- Provide students with a set of learning objectives at the beginning of the course and for each of its modular components.
- Ask students to design an “action plan” to demonstrate that they understand and accept responsibility for achieving the learning goals. An initial assignment can be used to confirm that students understand the course goals.
- When possible, use performance-based learning goals that are accessible and authentic in order to determine students’ attainment of course goals and objectives.
- Eliminate instructional activities that do not directly contribute to learning goals, since achieving outcomes generally requires more time and effort than in face-to-face instruction.

Step Two: Determine How Students Will Learn

Once you have determined the learning objectives for your course, your next decision is how to help students reach those goals by determining course content and accompanying learning activities.

There are myriad ways to present content and organize learning activities. A *knowledge-based approach* focuses on the presentation of content. Student recognition and recall is the emphasized learning goal. An *application-oriented approach* places the student more firmly within a context in which associated problems are explained and related problems are solved. Application of what the student knows is the expected level of learning. A *problem-based approach* presents students with authentic problems in the field of study. Students apply what they know in order to generate and defend compelling solutions.

The following categories of instructional design will help you conceptualize the relationship between instructor and students in your course. Each has implications for the nature of the course content and course materials that you will develop.

Inquisitory Presentation

Inquisitory Presentation is based on questioning strategies to engage students in discovering rules and relationships. Rather than having an instructor present subject matter, this approach initiates interrogatory conversations with students and encourages them to discover the answers. The key role of the teacher is to coach the students by questioning, providing context to the subject area, and drawing upon prior and prerequisite knowledge.

Collaborative Learning

Collaborative Learning involves two or more peers working together on learning activities, such as when two or more individuals are engaged into some activity which forces them to maintain some agreement and to reach eventually a shared solution.

Expository Presentation

Expository Presentation is a lecture, presentation, or “telling” strategy used during instruction. The instructor is in control of presenting the subject matter and directs the students through the lesson. A rule is presented with an example and then practice is provided. The instructor focuses the students’ attention on the key points of the subject and may use graphics, diagrams, or other representations to elaborate upon the subject.

Generative Learning

Generative Learning activities provide students with an opportunity to



mentally manipulate information to create a personal understanding of the subject. Students actively participate in the learning process and generate knowledge by forming mental connections between concepts. Activities that generate integrated relationships between what the learner sees, hears, or reads include demonstrations, metaphors, analogies, interpretations, paraphrases, and inferences.

Anchored Instruction

Anchored Instruction requires placing students in the context of a problem-based scenario. The students “play” an authentic role while investigating the problem, identifying gaps to their knowledge, researching information needed to solve the problem, and developing solutions. For example, students play the role of a pilot to learn about aeronautical subject matter such as gravity, airflow, weather concepts, and basic flight dynamics. Or, students play the role of a corporate or governmental decision maker in order to understand relationships between internal and external constituencies, legal restrictions, commercial imperatives, and societal constraints. The instructor facilitates and coaches students through the process.

Problem-Based Learning

Problem-Based Learning starts with the presentation of a real world problem. With the instructor’s guidance and resources, students are encouraged to delve into the problem, construct an individual understanding, and propose a potential solution.

REPRESENTATIVE PRACTICES

- Carefully match chosen instructional strategies with appropriate supporting technologies.
- Keep the mix of technologies selected for content delivery and learning activities simple. Students will feel overwhelmed or become confused when course delivery is technologically fragmented.
- Be aware that technologies may produce learning impediments as well as benefits.

Step Three: Determine Breadth, Depth and Organization

As you consider course content, think carefully about how materials can most effectively be presented to facilitate the type(s) of learning you have chosen. Many questions come immediately to mind:

What should I cover, and what can I leave out?

How will my students best learn each piece of content?

How will I know if they've mastered the learning objectives?

Is there a logical sequence to the course topics?

Is it necessary for students to work through the topics in a linear fashion? Is there a "suggested" path?

If I don't have students work through the content in a linear fashion, how will the topics be presented?

Is there a logical way to group the course topics?

How does the course time frame map against the number of topic groupings?

Perhaps you have constructed course outlines and syllabi that propose to cover a vast array of topics, only to have to abandon the final few topic areas and/or activities at the end of the semester because you run out of time. One of the trickiest elements in the course planning process is estimating how much time it will take to cover the desired content. This is further complicated when we take our teaching out of the traditional classroom.

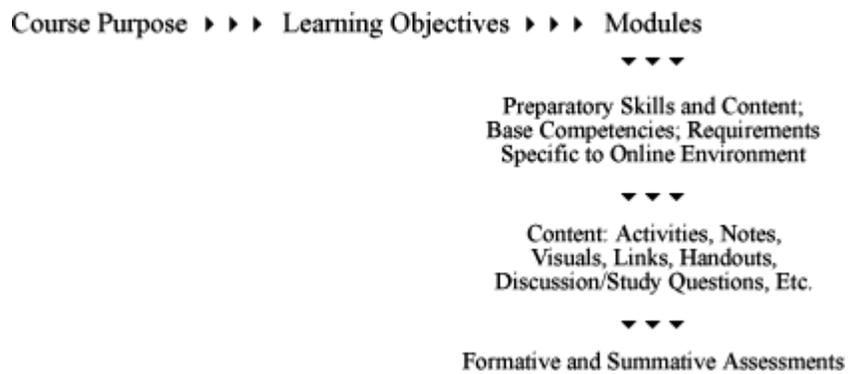
In a traditional classroom, we know that we have a specified amount of time to devote to teaching and learning—and our students know it as well. However, when we design for online environments, we suddenly have endless “time” in which to cover our content. Exciting possibilities open up on the one hand, but on the other hand, we risk overwhelming our students. There isn't a precise formula for determining the proper amount of content to be covered, but here are some guidelines to consider:

- *Learn from previous experience.* If you've taught a course before in a traditional classroom, then you have an excellent idea of how much content can be covered in a given time frame. You should use that information as a guideline for how much content to include in online versions of the course, even as new technologies and delivery methods become available.
- *Don't include a piece of content just because you can.* New technologies and delivery methods can enable instructors to share everything they know about a given topic with relative ease. Remember that our students have a limited amount of time to take our courses and a variety of other demands on their time.



- *Be clear about what material is required and what is supplemental.* We may want to take advantage of some of the newer technologies and delivery methods to go into greater depth in a topic area than we have been able to in the past. But do students really need to know all of that information in order to meet our course objectives?

Having considered the learning goals for your course, the approaches you want to take, and the content you plan to cover, you'll probably want to use some planning tools to help you organize your course. The following example emphasizes a modular theme centered on learning objectives. The number of learning objectives and modules is determined by the nature and scope of the course:



Storyboards or flowcharts are also useful tools to flesh out detail within course modules. A storyboard or flowchart can help you obtain a visual overview of your course, enabling you to see how the content and learning activities will “flow.” Additionally, writing a detailed syllabus for each learning objective or module can be a valuable way to look at the smallest components of your course.

Step Four: Determine the Nature of Course Interactions

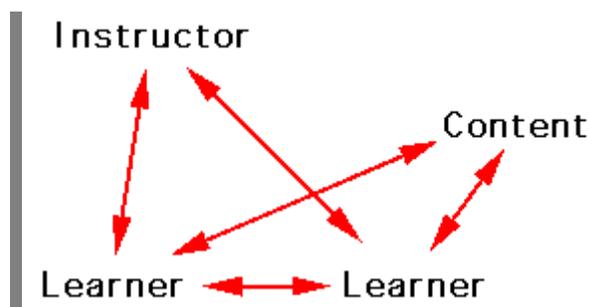
Course interactions ensure that learning is taking place as a course progresses. Students interact with course materials, with one another, with the instructor, with other faculty, or with persons outside the university environment.

Think about the first time you encountered a student who challenged and questioned you in front of the entire class. Were you slightly intimidated—or were you inspired? Did you react immediately—or did you give yourself a moment to reflect on the question and its intent? Chances are you became deeply involved with the student and wanted to answer the question in a way that was meaningful to the student and the class. One of the key methods of engaging your students online is to add a good deal of interactivity to your course. In thinking about the interactions that will take place in a given course, there are a number of questions to consider and the answer to each will influence course design and delivery.

WHY will students need to interact?

- To acquire course content*
- To ask questions about course content*
- To participate in group discussions*
- To engage in self-reflection exercises*
- To conduct self-check quizzes*
- To engage in peer reviews*
- For social or professional networking*
- To participate in student presentations*
- To engage in role playing exercises*
- To engage in a collaborative activity*
- ...Etc.*

WHO will students need to interact with?





The selection of informative and engaging materials is important to promoting positive interaction between a student and content materials. Interaction between and among students and the instructor can be as simple as maintaining an open dialog via e-mail or threaded discussion, or as involved as designing complex collaborative learning environments for group discussion and presentation.

In thinking about classroom communication under online conditions, consider your control of participant involvement: What is the degree of interaction that takes place between participants? What is the degree of interaction between participants and leader? Consider also how will you gauge the involvement of participants: What is the degree of effort offered by the students? What is the degree of student interest? What is the degree of student comprehension?

WHAT will students need to interact with?

What are required course materials?

What are supplementary course materials?

HOW will these interactions occur?

In real-time? (synchronously)

In delayed-time? (asynchronously)

What, if anything, do people need to SEE during these interactions?

What, if anything, do people need to HEAR during these interactions?

What, if anything, do people need to BE ABLE TO DO during these interactions?

REPRESENTATIVE PRACTICES

Technical Considerations

Make sure students are as comfortable as possible with the technology you ask them to use. The technology should be as transparent as possible.

- Ask for feedback from students. Are they mastering the technological skills necessary to achieve your goals?
- Are there guides or tutorials available that illustrate how to use the technology you require?
- Set aside sufficient time for students to get comfortable with technology. Don't expect everyone to be up and running the first day of class. Start

simple, and plan to escalate the skills that you expect students to master as the class progresses.

- Design a “low risk” instructional activity that enables the learner to experience an early success using the technology.
- Consider the age, maturity, and unique characteristics of learners, including disabilities, when selecting and using any instructional media or tools in an online activity.
- Consider the realities of time constraints that learners bring to their study and carefully select supporting tools and media that will provide the necessary flexibility and support for students’ learning experiences.
- Consider the impact that the learners’ social, economic, and cultural backgrounds will have on their ability to use and benefit from any media or tools that you contemplate using.

Managerial Considerations

Provide leadership by setting the agenda, objectives, and timetables. State your rules and regulations clearly and try not to deviate from them.

- Planning is essential. The hardest thing to do asynchronously is to change the directions once everyone has begun.
- Define the purpose or objective of each interaction.
- Make it explicitly clear what students need to do online. For threaded discussions, students need to have rules governing participation, as well as rules for content and format of posted messages.
- Consider your workload as a result of an interaction. Responding to multiple messages from every student is extremely time consuming. Take advantage of peer involvement when possible. Consider monitoring, rather than participating, in some interactions.

Instructional Considerations

Design communication activities that will encourage the kind of interaction between and among students that best supports your learning objectives.

Consider:

- The *type of students* you have, their motivation, knowledge, skills, etc.
- The *number of participants* involved in the discussion



- The *content* that will be the focus of discussion
- The *type of learning* that you would like to occur; recall, comprehension, application of knowledge, brainstorming, problem solving, evaluation, etc.

Generally, interactions fall into one of four categories: Individual; One-to-One; One-to-Many; and Many-to-Many. Try to provide a variety of learning activities to accommodate differences in learning styles and life experiences of students.

Social Considerations

Create a friendly, social environment in which learning is promoted. You'll need to find ways to meet the challenges of teaching at a distance by building an online community. You'll want to encourage teamwork and collaboration among students, and you'll want to build a strong rapport with each student. No longer just connecting faces with names, you'll want to connect names with styles of learning and processes of reasoning to identify individual students. Continually ask what you can do to make everyone that is part of an online learning community feel closer, welcomed, and familiar?

At the heart of online learning is the online community. Here are some ways to help build an inviting environment:

- Promote continuity by answering e-mail promptly, asking open-ended questions in bulletin board discussions, and posting to discussions frequently.
- Accommodate variations in cultural “norms” about gender, age, and authority figures so that students are neither penalized for their cultural differences nor impeded in their learning processes by those differences.
- Make sure it's easy to identify participants. Create profiles of members that can be found on individual web pages, and require students to introduce themselves at the beginning of the course. Consider uploading pictures of students to help put faces and names together.
- Give students a chance to get to know you. Make sure your personality comes across, and give students a sense of your background, achievements, goals, and interests.
- Set rules to create a friendly environment. If you notice any harsh language, immediately send a private e-mail to the student who sent the inappropriate message.
- Invite experts to participate in chats and bulletin board discussions. Announce to students when the expert will be “arriving” online.

- Use a calendar to post start and end dates for specific discussion topics. A sense of initiation and completion will encourage prompt student interaction.
- Make online discussions a part of the student's grade. This can substitute for the usual class participation portion of the grade. You may even require a certain number of postings each week.
- Encourage reflective thinking and ongoing discussions by avoiding questions that lead to right and wrong answers. Encourage your students to go deeper than mere opinions or surface answers. Have students support their arguments with facts and supportive data available from specified resources.

Always reinforce good student behaviors. Notice what your students do and say. Simple compliments are incredibly encouraging and make students feel a part of the community. Use humor, but be careful! What is funny in a face-to-face situation might be interpreted very differently in an online environment.

In general, be proactive and responsive, and let the aspects of your personality and teaching style that brought you success in the traditional classroom shine through online.



Step Five: Determine How Learning Will Be Assessed

How will you be able to prove whether learning has taken place in your course?

Evaluation and assessment should be integrated into the instructional design and teaching process. They are not separate elements to be grafted onto the course, but should be embedded in class activities and course interactions. An ongoing formative evaluation process built into the class structure will ensure that students are mastering each element of the learning goals you have identified.

Instructors who craft coherent learning goals and outcomes, as well as carefully define the criteria for evaluating student performance, will find that establishing a formative process of student evaluation is relatively easy. It's necessary, however, to take a broad view of possible areas for assessment.

Evaluations and assessments should take into account multiple sources of data, such as the quality and frequency of participation in the online discussion. When used to complement assessment of course assignments or other exercises, a more accurate view of student performance emerges. Instructors can continuously scan the online dialogue for spontaneous comments related to learning objectives and to the quality of the learning experience. This dialogue can be a rich source of evaluation material if the instructor remains alert to its presence and notes examples as they appear.

To “jump start” the idea of integrative assessment, design a pre-course assessment to assist prospective students determine whether your course is right for them. This will also provide you with information about the knowledge level of each of your students before the class begins. The questions should be ones that students will be able to answer at the end of your course. Consider using questions adapted from your summative assessment(s). For prospective students, the pre-course assessment is helpful in imparting the scope of course content and gives them a sense of what they already know. For the instructor, the pre-course assessment establishes a benchmark to gauge student progress, and allows them to emphasize or de-emphasize certain content areas.

One of the most frequently raised issues in online education is cheating. Instructors want to know how to monitor and eliminate cheating in the online environment. There is no evidence that cheating is a widespread problem in online learning, but there is substantial evidence that people perceive cheating to be a widespread problem in online learning. It is our contention that when a course is well constructed, learner-centered, and promotes learner empowerment and self-reflection, the notion of cheating should not become a concern.

If, for example, assignments promote the use of critical thinking and are designed to be shared with the class, then participants gain a sense of responsibility for producing pieces of learning that will be useful for the others in

the group. Once we agree that “everyone is a teacher,” then students become the expert at their own learning. Cheating becomes irrelevant in the process because students will not want to cheat themselves.

And yet, some students will still try to cheat. If you are obsessed about cheating, there are some things that you can do to minimize the possibility. Develop daily quizzes, for example. The cheating individual will either have to arrange (and possibly pay) for someone to take a daily quiz. If someone does consistently poorly on the quizzes but excels in other assessments, you can investigate further. You can also pick up the telephone and engage a suspected student in a discussion about the material on the assessment. If they can’t discuss it intelligently, you may have identified a cheater. For certain types of assessments proctors may be the best guarantee, although it typically involves an additional expense.

If you integrate assessment into the fabric of your course and evaluate the totality of students’ participation, cheating should not be a problem.

<u>Assessment Options</u>	<u>Implications & Issues</u>
Graded Quizzes	--Proctor may be necessary --Can be automated --In addition to providing the exercise, instructor should provide the rationales for right/wrong answers
Individual Projects --Self Evaluated --Peer Evaluated	--Enables students to apply course concepts --Best if learner can choose the topic and/or project
Collaborative Projects --Collaborative Evaluation	--Can enrich learning experience --Added logistical issues in asynchronous environment

REPRESENTATIVE PRACTICES

- At the beginning of the course, communicate the planned assessment and measurement strategies to the learner. Clearly state the nature, duration, due date, and impact on the grade of all assignments and measurement techniques.
- Where possible, provide assessment and evaluation techniques and options that capitalize on the unique characteristics and situations of the online learner.



- Consider a variety of “low stakes” assessment strategies that enable learners to gauge their progress without impacting their grade.
- Develop and support learner-to-learner interactions for assessment and evaluation. Provide opportunities for learners to generate their own evaluation instruments.
- Use a number of “self-check” assessments or activities within the course, enabling students to adjust their progress within the course.
- Consider credit for student effort as one component in the assessment process when the particular skill or concept is complex.