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# DESIGNING COURSES FOR DISTANCE DELIVERY

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## Reading 7

### Question Set 1

#### **1. What is meant by an “iterative design process?”**

In computer terms, “iterative” refers to a routine that loops or repeats in order to accomplish specific tasks. Similarly, an iterative design process is one that repeats previous steps when needed to further refine the product as the design progresses. Answers to the fundamental questions determined earlier in the course design will likely be revised as later fundamental questions are answered. In other words, instructional design is not a linear process.

#### **2. For each of the six fundamental questions one should ask when developing courses, briefly summarize the principle behind it.**

The first question deals with knowing one’s target audience, which is a key principle in instructional design because understanding the learners is critical for developing instructional strategies that will best meet the needs of the audience while accomplishing educational goals. The second question deals with defining exactly what students will learn during the course and is based on the principle of clearly defining instructional objectives as a sort of road map both for the instructional design process and for learners involved in the course. The third question asks why students will enroll in the course and is related to the first question, but has particular implications for distance learning because of the special needs of distance learners, such as access, flexibility, and collaboration. The fourth question centers upon the delivery of the course and is based on the principle of selecting media, materials, and technologies that best support the learners and drive toward accomplishing the instructional objectives while making sense in a distance setting. The fifth question asks about resources students will need to succeed and is based on the principle of ensuring learning objectives and resources align and that learners have equal access to the resources required for success. The final question deals with how to determine if learners have succeeded and is based on the principles of both summative and formative evaluation in order to assess student accomplishment of the goals and the success of the course itself.

#### **3. Briefly describe each of the four strategies for success as described by the reading.**

Clarity, the first strategy for success, is all about ensuring all course materials, instructions, objectives, requirements, timelines, expectations, and strategies for success are clearly defined early in the learning situation to minimize any potential confusion. Communication is focused on connecting with individual learners and with the learning group as a whole, as well as implementing interactions with content, other learners, experts and other guests, the instructor, and outside resources. Because winging it is not an option, planning deals with chunking the learning environment into small bits and allowing for varying resources to which learners may have access for the course. Finally, evaluation focuses on providing learners with multiple assessment opportunities, including group and individual assessments, in a way that fosters creativity and leverages the technology for evaluating student success.

## **Question Set 2**

**3. The chapter states that focusing on technology questions (media selection issues) first creates “problems and discontent.” Why might this be?**

Ideally, media and technology questions come much later in the instructional design process. Since media and technology are merely delivery mechanisms and do not guarantee effective learning, it seems that the content of the instruction and the learning activities involved are more important than the delivery method itself. Certainly, there are times that technology and media selections are mandated by an organization; however, ideally the technology questions will come after the audience is analyzed, objectives are defined, and strategies are established.

## **Reading 8**

### **Question Set 1**

**1.1. The V-model illustration on page 3 in the article is a bit difficult to read. You should create your own model of how to design a virtual classroom based upon this reading and your own experiences with distance learning. You may incorporate as much of the article's points as you like, but you should consider special needs that you might have in your current position. For example, who are the stakeholders in distance education in your corporate education group? Or, what limitations might your school district have on distance education? You should include at least ten steps and show how they are sequenced. You can create a flow chart and have a brief description (2-3 sentences) of each major step. Alternatively, you can create an outline of your steps and have a brief description (2-3 sentences) of each major step. You should not reproduce only**

**the article's steps, we will be looking for customization to your needs and environment.**

**1. Analyze needs and define overall goal.**

Consider the educational goals of the organization and determine if a virtual classroom could be a helpful solution for those needs. Determine if a virtual classroom would add value to the organization through distance learning, just-in-time training opportunities, and the other advantages of a virtual classroom. Define an overall goal for the virtual classroom to serve as a foundation for the vision. Decide if that vision is for a single course deployment or a complete learning solution for multiple courses.

**2. Evaluate existing solutions.**

Determine if existing solutions and organizational resources within the organization will meet the needs. Before seeking other solutions, it is important to investigate existing resources to see if they will meet the needs. It may even be beneficial to consult with other departments in the organization.

**3. Consult with learning solutions leadership.**

Leaders in the learning organization will likely have contacts in other key functional areas. They generally partner with other leaders in the organization and have a sense of the organization's vision and objectives. It is important to keep the learning solutions leadership team in the loop and discuss the perceived needs and ideas for a virtual classroom. While this could be done as the first step rather than the third, it is placed here because in the business world, sometimes it can be wise to do a bit of research individually to build a case in order to be prepared to hold discussions with management.

**4. Consider both internal and external possibilities.**

Determine whether an existing third-party solution is a viable option or internal development is needed. Decide whether it makes sense to develop the virtual classroom internally or to make use of third-party solutions. Determine if the virtual classroom will be for a single course or if a more robust Learning Management System (LMS) or similar tool is needed. This step should occur in conjunction with step 5.

**5. Estimate costs.**

Consider costs both for internal and external solutions. Be sure to evaluate all potential costs, not only for internal development but for support as well. Consider possible open-source solutions, remembering that they may be less costly to deploy but still require ongoing support. Also include hardware costs in the estimate.

**6. Meet with key stakeholders.**

Share the findings and cost estimates with senior leaders, learning solutions leadership, and other key stakeholders in the organization. It is crucial to attain buy-in from organizational leadership before pursuing the project further. Discuss budget implications as appropriate.

**7. Plan the virtual classroom and define specific objectives.**

Define specific objectives that expand upon the overall goal that was defined earlier. With buy-in from the organization and a decision to pursue a virtual classroom, it is time to define specific educational goals for the new system. Prioritize goals and consider alternative approaches to determine what makes the most sense for the organization. Ensure the overall vision and objectives align with the organization's own objectives.

**8. Research organizational style guides, branding requirements, and information policies.**

Consult any established style guides and branding requirements to ensure that the virtual classroom design is consistent with the organization's desired look and feel. Where these guides or requirements do not exist, establish standards that define the aesthetics of the virtual classroom and courses that are added to it in the future.

**9. Design the virtual classroom.**

Use the standards from the prior step to design the virtual classroom. Create a mockup and meet with key stakeholders for review and approval on the design. Ensure the design is well-accepted before proceeding. While high level design documents and other materials internal to the instructional design process would provide an overview of the virtual classroom, it is important to provide stakeholders with a tangible sample of what is being pursued.

**10. Develop the virtual classroom.**

Now it is time to create or install the virtual classroom. For an external solution, this may involve installing the various components, editing style sheets, templates, and codes, or downloading and installing themes to customize the look and feel. For an internal solution, this may involve creating and coding the system, determining the layout, obtaining source code from other legitimate sources, testing, and documenting the process.

**11. Prepare contents and materials.**

Gather contents for the virtual classroom and add them to the appropriate areas. If a course has not already been built, this step may end up being broken down

into the instructional design process as a course is built from the ground-up for the virtual classroom.

**12. Enable communication.**

Configure the necessary tools for learner interactions in the virtual classroom. Align communication tools with the instructional objectives and consider any cost or resource implications involved.

**13. Implement assessment tools.**

Configure or create assessment tools for the learners. This may involve installing modules in the third-party solution, using free solutions available on the Web, or developing assessment tools internally. Ensure the assessment provides the crucial feedback mechanism for the learners.

**14. Implement class management procedures.**

In conjunction with learning solutions leadership and other organizational leaders, determine how class management will take place. Determine what types of class management tools are needed, such as progress tracking, scheduling, archiving, and registration. If the virtual classroom will be part of a learning management system, determine what modules are needed for the desired class management procedures.

**15. Request evaluation by corporate partners.**

Now that the virtual classroom is working, present it to the learning solutions leaders as well as key stakeholders in the organization. Ensure they are happy with the product and are on-board with an eventual rollout to the organization.

**16. Perform end-user testing.**

Identify a group of users for testing purposes. Have the users try out the virtual classroom and log any issues or questions they may raise. Address those issues by repeating any of the prior steps needed to bring about the ideal solution.

**17. Rollout the virtual classroom.**

The organization will not reap benefits if the virtual classroom is not used. Therefore, rollout the solution to the organization by communicating with learners and others who will be using the system.

**18. Maintain the classroom.**

Keep courses up-to-date and add new ones as needs arise. Determine the best approach to backing up the system and execute to the selected approach. Ensure users know who to contact if they have problems with the virtual classroom.

## **Question Set 2**

**1. Of the 10 steps listed in the reading, which three do you believe would represent the biggest challenge to a distance course designer? Why?**

Step 1 (needs assessment and resource evaluation) can be challenging for a distance course designer, particularly in an organization that may not be as open to new technologies or approaches to learning. It can be challenging to build a strong case for pursuing a virtual classroom, particularly in terms of the potential costs that may be at least initially required.

Step 2 (cost and effort estimation) can be a challenge because it can be quite difficult to identify all of the potential costs involved with deploying a virtual classroom. There are so many facets of such a project that it is easy to overlook a component that could require a substantial investment. There are also some components of the project that may involve costs that are somewhat unpredictable, adding to the challenge of estimating the project costs and implications.

Step 10 (maintenance) is a challenge for a distance course designer because it basically requires ongoing support and maintenance of the virtual classroom. Generally the designer has already considered the project complete and moved on to other developments, making it difficult to maintain without depending on other individuals or groups to take the lead on maintenance efforts. Additionally, as more content is added to the virtual classroom, maintenance can become a time-consuming task when later projects begin.