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Special Report

Online Course Quality Assurance: Using Evaluations and Surveys to Improve Online Teaching and Learning

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IDEAS FOR EFFECTIVE ONLINE INSTRUCTION

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Online Course Quality Assurance: Using Evaluations and Surveys to Improve Online Teaching and Learning

Many higher education institutions use student satisfaction surveys given at the end of a course to measure course and instructor quality. But is that really a true measure of quality? All things being equal, an instructor who teaches a rigorous course will likely score much lower than an instructor whose course is a little less demanding.

Then there's the whole timing of the satisfaction surveys. For the most part, students are simply glad the course is over (even if they liked it) and put little thought or time into completing the survey. Unless of course they know they failed, in which case you will get a detailed assessment of how you are boring, inflexible, out of touch, or otherwise unfit to teach.

No wonder surveys get such a bad rap. If end-of-course evaluations are the only surveys you use, there's a lot more you can, and should, be doing. Done correctly, surveys can deliver tremendous insight into what's working, what's not, and why. This special report features 10 articles from *Online Classroom*, including a three-part and a five-part series that provides step-by-step guidance on how to use surveys and evaluations to improve online courses, programs, and instruction. You'll learn when to use surveys, how to design effective survey questions, why it's important to ensure anonymity, and the advantages and disadvantages of Web-based surveys.

Articles in *Online Course Quality Assurance: Using Evaluations and Surveys to Improve Online Teaching and Learning* include:

- Online Teaching Fundamentals: What to Evaluate, parts 1-3
- Course and Instructor Evaluation: If It's So Good, Why Does It Feel So Bad?
- Getting Evaluation Data through Surveys: What to Consider before Getting Started
- Using Surveys to Improve Courses, Programs, and Instruction, parts 1-5

If you're dedicated to continuous improvement, this special report is loaded with practical advice that will help you create more effective surveys before, during, and after your course ends.

Rob Kelly
Editor
Online Classroom

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Online Teaching Fundamentals: What to Evaluate, Part 1

By Patti Shank, PhD, CPT

Continual improvement efforts are often implemented poorly, leaving the folks being “improved” feeling hostile and unappreciated. But improvement efforts do not have to be foolish or punitive.

If we want to improve online programs, courses, and instruction, we have to first determine and gain consensus around the goals for these efforts, select metrics that will tell us what we want to know, and intelligently analyze these metrics for clues about needed changes. Sounds simple, but it isn’t.

The purpose of evaluation

Evaluation is a process by which data is collected and analyzed in order to determine if goals are being or have been achieved, and to determine what actions to take based on the analysis.

“Measures” or “metrics,” are selected and used to measure the degree to which goals are being or have been achieved. So, for example, if I want new online learners to be comfortable learning online by the middle of their first online course, I need to determine how I will measure their comfort level. Then I can use the data I gather to determine what to do if this goal isn’t achieved.

Many higher education institutions use student satisfaction metrics at the end of a course to measure of course and instruction quality. But I’d argue (loudly) that these metrics don’t measure quality, at least not by themselves. An instructor with an easier and more fun course is likely to get higher end-of-course ratings than another instructor whose course is more rigorous and difficult, all other things being equal.

When to evaluate

Evaluation efforts should be done before, during, and after online programs and courses have been implemented. The table below shows how evaluation efforts can be made, and lists questions that are typically answered during each stage.

It is common, but unfortunate, that institutions evaluate programs, courses, and instruction only after they have occurred and not in a way that provides the information

needed. And most online programs, courses, and instruction are not evaluated regularly in order to continuously improve them.

No matter how good an online program, course, or instructor is, time changes many things, including the need for the program; events; technologies; and regulations that impact content, activity, and assessment needs, as well as student demographics and other things. Here’s an example.

When	Evaluation Stage	Typical Questions
Before	Planning	What are our short- and long-range goals? What alternatives are there for reaching these goals? Which alternative(s) will be selected? What resources will be committed? What process will we follow?
During	Formative	Are we on target? Is the process working? What improvements are needed?
After	Summative	Was the goal achieved? What worked well and should be maintained? What worked less well and should be changed or eliminated?

The content in finance-related programs such as accounting and business needs to change regularly because of changes in regulations and laws. That means that program and course emphasis should shift with those changes. Ongoing evaluation processes can help these programs and courses stay current.

The two Es

The type of metrics selected and then analyzed in evaluation efforts typically fall into these categories: efficiency and effectiveness.

Effectiveness is about results. Efficiency is about the amount of effort needed to get those results. And both types of metrics are typically needed because a good outcome is not as good if it comes about inefficiently. And a less effective outcome is still less effective, even if it’s efficient.

Effectiveness metrics help us determine whether instruc-

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tional and other goals (such as enrollments and retention) have been achieved. Instructional effectiveness metrics usually answer the question, “Did the program, course, and instruction result in the desired changes in knowledge and skill?” This is usually assessed by determining if the learning objectives have been achieved.

If the learning objectives or the content, activities, and assessments that support achieving them aren’t well thought out, program and course quality are likely to suffer. I’d posit that this is one of the reasons why higher education programs in my field (instructional design) too often do not produce instructional designers who can handle the challenges of the work.

Even well-designed programs and courses will suffer over time when they are not evaluated against the world as it exists today.

Efficiency metrics are used to analyze the quantity of resources used. When online programs first started, it was assumed that online programs would be less expensive than face-to-face programs. This was a short-sighted assumption; online programs typically involve additional expenses, such as the costs for server technologies and staff; faculty and student support; and designing, implementing, and maintaining online courses.

Making decisions based on efficiency alone is often a huge mistake, because some things that use more resources are actually more efficient in the long run. Training is an example of something that looks resource-intensive only until the costs of not training become evident.

Measuring one without the other typically doesn’t give an adequate picture of how programs, courses, and instruction are doing. Some efforts that seem resource-intensive save resources down the road. Some important effectiveness metrics, such as preparation for subsequent courses, are too rarely evaluated, in my opinion. And important outcomes, such as whether distance students feel adequately supported in their studies, are often not on anyone’s radar screen.

In the next few articles, I’ll go into more detail on selecting and using evaluation metrics, because the wrong or no metrics can lead to counterproductive or even destructive actions.

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Online Teaching Fundamentals: What to Evaluate, Part 2

By Patti Shank, PhD, CPT

I am a big advocate of evaluating online courses, programs, and instruction on an ongoing basis and not waiting for the end of each course (when it’s too late to improve that course) to make improvements. My contention is that improvement should be an ongoing process, not an event to be endured.

In order to make improvements, you first have to determine what you want to measure (so it can be improved as needed). These need-to-measure aspects, often called metrics, typically fall into one or both of two categories: efficiency and effectiveness. Metrics that measure effectiveness typically measure results. Metrics that measure efficiency measure how much effort is needed to get those results. And both types of metrics are usually needed because good results are far less good if they are gained at too high a cost, and bad results are bad results at any cost.

Operationalizing what you want to measure

The first step in selecting evaluation metrics is to list the questions you want to answer that will tell you what needs improving. For example, I know that some students in my online courses are frustrated at being new online learners, and I want to prevent frustration, if possible, or intervene to lessen it otherwise. I might start with the following questions:

- Are students frustrated?
- What makes students frustrated?

To answer these questions, I will select metrics to measure if they are frustrated and what they are frustrated by. Selecting these metrics is called operationalizing the frustration concept so I can explain (to myself, and others if needed) what I mean by frustration and how I am measuring it.

How can I operationalize frustration so I can measure whether students have more or less of it and what they consider to be frustrating? Some ideas for metrics are number of postings in the discussion area (smaller

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numbers mean more frustration), number of emails to the instructor (too many or too few means more frustration), self-report of frustration level in bimonthly student satisfaction surveys (higher level of reported frustration means more frustration), and weekly anonymous surveys asking students to comment on things that are going well and less well (the things they like less well are likely to be frustrating). I like the last two metrics best, but I'm going to keep an eye on the first two as well, because in my experience those often indicate a student who is frustrated. And I have a lot more chance of reducing student frustration if I catch it early.

Here's another example. Your department head tells online instructors that they need to improve course completion rates for online students. You ask obvious questions: What is the completion rate, how is it measured (operationalized), and how much change is desired? Is it measured by students who finish a specific course or who finish a specific program? Is it students who graduate? In order to operationalize completion rate (so you can tell if it has increased, as desired), you have to specify how it is or will be measured.

When operationalizing a concept we want to measure, there are two different types of metrics that we can select from: quantitative metrics (which deal primarily with numbers) and qualitative metrics (which deal primarily with descriptions). In many cases, both types are useful and complement each other.

Qualitative and quantitative measures

Quantitative measures focus on numbers and frequencies, such as number of credit hours and retention rates, and typically provide information that can be analyzed in a straightforward manner (computing the mean or arithmetic average, for example). Qualitative measures tend to focus on non-numerical data such as perceptions, and use techniques such as interviews and observations.

Both qualitative and quantitative measures can be used to evaluate and improve online courses, programs, and instruction. Some folks put too much emphasis on quantifying everything only to miss out on important nuances. Others are interested only in the details and miss out on what the big picture looks like.

The following table shows some common quantitative and qualitative measures used to evaluate online courses, programs, and instruction.

Type of Measure	Example Measures	Example Data Sources
Quantitative	Completion rate Growth Feasibility Time savings Cost savings Satisfaction	Enrollment data Dropout data Cost data Revenue data Time data Turnover data
Qualitative	Student satisfaction Instructor satisfaction Student support Instructor support Course quality Program quality Instructor quality	Surveys Interviews Focus groups Observations

Many of the qualitative measures in the table can be analyzed in a quantitative manner by categorizing answers by number. So, for example, if I develop a frustration survey and students select their answers on a scale from 1 (not the least bit frustrated) to 5 (pulling my hair out), I could calculate a mean level of frustration (say, 3.74). What does that mean? One thing it means is that, on average, students are somewhat frustrated, and I probably need to do something to lower their frustration level. It also means that a mean of 3.74 requires more digging, because while I know the number should ideally be lower, I have no idea what is causing the frustration, so I cannot fix it. See how quantitative and qualitative metrics provide a clearer picture together than either can alone?

To find out what students find frustrating, I ask open-ended questions such as "What aspects of the course are most frustrating to you and why?" I analyze the answers to see if there are common threads that lead me to change certain aspects of the course or my teaching. If a number of students say that they are frustrated because my assignment directions don't provide enough guidance, I can begin providing examples of assignments completed to my satisfaction and rubrics that specify what I want. (The best examples are prior student work. When a student completes an assignment in an exemplary way, ask him or her if you can save the assignment, minus identifiers, to use as an example.)

The point is to not get hung up on the differences between quantitative and qualitative measures, but to realize that a variety of measures can be used to evaluate courses, programs, and instructors. Selecting measures, then, should be about determining which ones will help

you determine what improvements to make.

In the next article, I'll talk about different levels of metrics and examples of each.

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Online Teaching Fundamentals: What to Evaluate, Part 3

By Patti Shank, PhD, CPT

When selecting measures to evaluate course, program, and instructional quality, we can select measures from four levels represented by the mnemonic NOIR: nominal, ordinal, interval, and ratio. These indicate increasingly precise levels of measurement.

Nominal measures

Nominal measures put data into categories. Let's say that at the beginning of each semester, you ask your online students to tell you what degree program they are enrolled in, and you label their answers as follows: Liberal Arts 1, Engineering 2, Education 3, Sciences 4, Business 5, Agriculture 6, Other 7.

Does this numbering scheme indicate that Engineering, with a 2, is half as good as Sciences, with a 4? Hardly. Although numerical values may be assigned to represent non-numerical category labels, the numbers themselves aren't meaningful. Demographics such as sex, religion, and ethnic origin are nominal measures.

Ordinal measures

Ordinal measures can be categorized, like nominal measures, but they can also be rank ordered. We can say that one measure is higher or lower than another measure—but we cannot say how much higher or lower.

So, for example, if a committee is considering new course management systems and asks the members to rank order

their top three choices, we would be able to say which choices came out higher but could not say how much higher. Ordinal measures are frequently used to collect data about preferences. Likert-like scales, where respondents are asked to pick a number (typically 1 to 4 or 1 to 5) that shows the amount and direction of agreement with a statement, may be considered ordinal measures, as they provide a ranking from most to least, or vice versa. (There is disagreement about whether rating scales are ordinal or interval measures.)

Interval measures

Interval measures can be categorized (like nominal data) and rank ordered (like ordinal data), but the intervals between data points are meaningful. GPA is a good example of an interval measure, because we can say that the distance between a 2.5 and a 3.0 GPA is the same distance as the interval between 3.5 and 4.0. But we cannot say that a 4.0 is twice as good as a 2.0, even though the assigned value is twice as big.

Ratio measures

Ratio measures have all the characteristics of the first three levels, but they also contain a meaningful 0 point. By having an absolute zero in the measurement scale, we are able to describe data in terms of ratios. So, for example, we can say that a student with 60 credit hours has successfully completed twice as many credit hours as a student with 30 credit hours. And we can say that a class with 50 students has twice as many students as a class with 25 students.

Measurement precision

Measurement precision increases as measurement levels increase from nominal measures through ratio measures. And the statistical analysis that can be done increases as measurement level increases. So we can compute the mean of ratio-level measures (such as number of credit hours completed) but not nominal-level measures (such as gender).

Here's an example of how age can be measured with different amounts of precision.

Method 1: Child or adult

Method 2: < 20 years of age, 20–29, 30–39, 40–49....

Method 3: Date of birth (dd/mm/yyyy)

Method 1 is an ordinal level measure and is very imprecise. Child is younger than adult, but that's about all we can say. Method 2 is either an ordinal or an interval measure, and is more precise than child/adult. Method 3 is

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the most precise because we can compute an exact age and the difference in ages from one person to another. We can say, for example, that Marvin is three years and 22 days older than Mary.

Certain statistical tests (such as mean and standard deviation) require certain levels of measurement. But there are times where the ability to analyze the data statistically isn't that useful because it doesn't provide enough depth of information.

Let's say you want to know if students feel that a prerequisite course adequately prepared them for the subsequent course, and you use the following rating scale:

ECON 275 prepared me for ECON 375.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

How helpful is it to know that the mean answer is 1.17? That result probably gives you an idea that ECON 275 needs to be improved in order to prepare students better for ECON 375. But what should be done to improve ECON 275? I'd have far more information to answer this question if there were an open-ended follow-on question, such as:

If you answered Disagree or Strongly disagree, describe what would have helped you be better prepared.

What does this all mean? First, it means that if you are intending to analyze the data statistically, you'll most likely want to select interval or ratio measures. But start by deciding what information you need in order to continuously improve your courses, programs, and instruction. Then determine what data is needed, what level of precision is needed, and how you will collect and analyze the data. Give consideration to whether you need quantitative data (such as numbers and frequencies) or qualitative data (such as perceptions and feelings) or both.

Both qualitative and quantitative measures can be used to evaluate and improve online courses, programs, and instruction. Some folks put too much of an emphasis on quantifying everything, only to miss out on important clues about what is needed for improvement. Others are only interested in the details, and miss out on what the big picture looks like. Since qualitative and quantitative data complement one another, using both types of measures is often useful.

Consider building a list of the questions that require answers in order for you to continuously improve your courses, programs, and instruction.

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Course and Instructor Evaluation: If It's So Good, Why Does It Feel So Bad?

By Patti Shank, PhD, CPT

Most of us would agree that continual improvement is a good idea. For example, the manufacturer of my MP3 player needs to make certain options easier. But I'm thrilled that recording a television show using my DVD recorder is easier and more intuitive than recording a television show on my old VCR.

One of the reasons that continual improvement in our jobs doesn't feel as good as continual improvement in the electronics we buy is that improving humans is hard. And it's far too often done in a hurtful way and for the wrong reasons.

Evaluation, simply put, is about measuring value. That sounds straightforward, but it really isn't, because it's often hard to figure out what to measure and how to measure it. For example, when you are getting ready to purchase a new car, what makes it more valuable, less valuable, or not valuable at all? Well, that depends on what is important to the person doing the evaluating.

If evaluation sounds good in theory but feels bad in practice, it may be that you or others are operating under some common misconceptions.

Misconception: Outcomes are the only things worth measuring.

Reality: Outcomes, such as numbers of new courses developed, enrollments, retention, and satisfaction levels, are important and they should be measured. But it's also

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important to evaluate critical processes, such as support for faculty course development, relationships between course designers and developers and faculty, and student ability to get help as needed.

The processes that are involved in producing and delivering online courses and instruction should be evaluated alongside the outcomes of these processes so it's possible to see what changes would allow for better outcomes.

I recently worked with an institution that had an adversarial relationship between faculty and the online course development team, and both spent time pointing fingers to explain why the results weren't optimal. What they didn't see was that this adversarial relationship created bottlenecks and course development problems. Obvious solution? Build a better process and fix the damage caused by the old one.

If the process of producing and delivering online courses and instruction is problematic, courses and instruction are also likely to be problematic—and these problems are unlikely to improve without improving the process. So, while evaluating outcomes, it's also important to evaluate the processes that impact those outcomes. You will find inefficiencies, poor relationships, rework, contention, and more that are making better outcomes difficult or impossible.

Misconception: Evaluation is a CYA activity to be endured.

Reality: The purpose of evaluation should be to continuously improve, not to check off boxes on a checklist and then breathe a sigh of relief until evaluation needs to be done again.

Most higher education institutions conduct end-of-course evaluations, but this kind of evaluation often doesn't result in significant improvements to courses and cannot impact courses in progress. Hmielski and Champagne, in an article titled "Plugging in to Course Evaluation" call this consider-what's-wrong-after-it's-over approach an "autopsy approach" to course evaluation.

Because end-of-course evaluations may be required but often aren't sufficient, some online instructors have begun to implement weekly or bimonthly anonymous evaluations by students so they can make changes to the course and the process in the here and now. For example, I adopted a weekly, anonymous course evaluation technique that my colleague Joni Dunlap at the University of Colorado Denver uses (an explanation of the technique is in *The Online Learning Idea Book*, published by Pfeiffer). This continual improvement process could be implemented using a Web form or an online survey tool such as Survey Monkey.

Bottom line? The purpose of evaluating online courses and instruction should be improvement, not pain. And improvement efforts are most successful when they are valuable to all concerned. So analyze whether the misconceptions described in this article apply to your institution—and if some do, consider how to change them for the better.

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Getting Evaluation Data through Surveys: What to Consider before Getting Started

By Patti Shank, PhD, CPT

Surveys are one of the most common tools for gathering course, program, and instruction evaluation data. Although surveys appear to be easy to design and implement, designing surveys that provide valuable information requires some thought. Surveys developed without this level of consideration tend to be disjointed and provide data that isn't easy to analyze for needed improvements.

In this article I'll discuss some high-level questions to consider before designing and implementing surveys for the purpose of gathering course, program, and instruction evaluation data. I'm not talking about rigorous survey research, where choosing a sampling method, assuring an adequate sample size, worrying about response bias, and measuring significance is needed, but rather designing surveys to fuel continuous improvement.

Is a survey the right tool?

Surveys have limitations. If we don't ask the right questions, don't get answers from the right people, or use

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surveys to answer questions that would be better answered using other methods, the information gained is far less likely to be useful. And surveys set an expectation of action. If you're not looking to improve anything, why ask?

Survey usefulness also depends on participant truthfulness and recollection. If you ask students to estimate the amount of time they spend using online course materials and tools each week, students might over- or underestimate. This is an example of a question that probably could be better answered using objective measures. Survey questions could be used to get at the "whys" of the objective data.

Because surveys can be anonymous, they can be quite useful for getting honest opinions. They can also be useful for answering "why" questions. If student assignments are often turned in late, survey questions can be used to pinpoint the reason(s): Are assignment dates unclear? Are there too many assignments? Is the upload tool not working?

What information is needed and why?

The clearer you can be about what you want to know and why you want to know it, the easier it'll be to determine what questions to ask and how to ask them. And the more clearly and concisely your purpose is explained to potential participants, the more likely they will be to answer your questions and provide valuable answers.

If you want to know if students feel motivated, what exactly do you want to know? Do you want to determine if they are interested in the course topics? Why? Or if they feel like they are part of a group and not alone? Why?

What's the point? Your clarity of purpose translates into better questions and more useful data. If you find it hard to create survey questions, it's a sign that you haven't yet been specific enough about what you want to know and why you want to know it.

A faculty friend of mine uses an anonymous end-of-week survey to find out what students think worked well and less well that week. Her purpose is very specific: to improve the course as it is in progress. After reviewing the responses, she posts a discussion listing each week summarizing what folks said and her response. As students see that she is genuinely interested in making course corrections, they are more willing to provide feedback.

Who has answers?

After you have determined what you want to know and why you want to know it, you'll need to determine who can provide you with answers. If you want to know if your

assignment directions are clear, for example, you can ask your students. But it's important to remember that it's sometimes hard to get honest answers from current students unless they can provide this information anonymously. You could also consider asking people who are less intimidated about providing honest feedback.

Let's say you want to know if certain help tools and strategies, such as online "office hours" or calls from student services reps, are likely to be valuable to students in your online program. But whom should you ask? Existing students? Dropouts? Potential students? Asking different audiences might provide valuable insight into supporting your online learners.

The goal of using surveys is to get valuable information to fuel continuous improvement. Figuring out what you want to know and why you want to know it and determining who can provide valuable answers points you in the right direction for gathering this information.

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Using Surveys to Improve Courses, Programs, and Instruction, Part 1

By Patti Shank, PhD, CPT

Surveys are commonly used as data collection tools for improving courses, programs, and instruction because they are easy to administer. But the value of survey data is highly dependent on the design and implementation of the survey. So my goal, in this and the next few articles, is to provide some guidance on designing and implementing surveys so that you get data that helps you improve your courses, programs, and instruction.

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I'll start out by discussing when to use surveys and how to select the correct survey question type.

What is a survey good for?

The primary reason for using surveys as data collection tools for improving courses, programs, and instruction is to obtain students' opinions, attitudes, or beliefs. Another reason to use them is to get information about things we are unable to personally observe, such as amount of time spent on assignments.

Surveys seem easy to develop and administer, but they aren't always the tool of choice. For example, if you want to know if your student work groups are having problems, you'll probably want to pop into their discussion areas to see how things are going, instead of or in addition to asking students directly. Likewise, you might get more accurate data about whether students have used specific course resources from course management system reports than from the students themselves.

Surveys can also be used to answer questions and corroborate tentative conclusions. Let's say many of the students in your course handled a specific assignment poorly. From the communications you had with two students, you think that the directions may have been misleading. A survey might help you determine if this hunch is correct.

Closed or open?

There are two types of survey questions: closed-ended and open-ended. Both are useful, and they tend to complement each other (which means it's often a good idea to include both).

Closed-ended questions offer a finite set of options that the respondent can select from. They often look just like multiple-choice questions. They are easy to administer, and the resulting data can be analyzed statistically. Many of the online survey applications (such as Zoomerang) help you perform simple statistical analysis (such as the percentage of respondents who selected each option), and you can usually filter the answers so you can see, for example, if juniors and seniors answer differently than freshman and sophomores. The disadvantage is that these questions are often difficult to write, and answers may not provide enough data to pinpoint the changes you should consider making.

Open-ended survey questions provide a prompt and then a space for respondents to answer in their own words. An example of an open-ended question is:

How could the [resource name] be improved so it is more useful?

The data from open-ended questions have the benefit of more closely reflecting respondent opinions and views because respondents are describing them in their own words. This increases the likelihood of gaining insightful suggestions. As a result, it is common practice to include open-ended questions alongside closed-ended questions.

Open-ended questions have some disadvantages too. Statistical analysis isn't performed, and responses require more interpretation than closed-ended question responses do. They also require more thought and time on the part of the respondent. And that may mean more opt-outs among respondents.

One open-ended question that you should consider adapting for the final question in your survey is, "Is there any other information you would like to add to help me improve this course?"

Closed-ended question styles

There are numerous closed-ended question styles that can be used in a survey, but the following types are most common.

Likert-like scale: These are typically used when asking for opinions.

Respondents select a place on the scale that matches their opinions. One end of the scale commonly reflects a negative opinion, and the other end of the scale commonly reflects a positive opinion.

Example: The chat sessions were helpful to me.

Strongly agree				Strongly disagree
1	2	3	4	5

Multiple-choice: These are very commonly used, and they ask the respondent to select the best answer (or answers if you want respondents to select all that apply). Examples:

Did you use the [resource name] when completing the [assignment name]?

- I used it for each [assignment name].
- I used it initially but didn't continue to use it.
- I didn't use it.
- Other (please explain) _____.

If you didn't use the [resource name] or didn't continue to use it, why not? (Check all that apply.)

- a. I didn't need it.
- b. It wasn't helpful.
- c. I didn't understand how to use it.
- d. I didn't know it was available.
- e. Other (please explain) _____.

Each of these closed-ended questions has an open-ended question built in. Nifty way to do closed- and open-ended together, no?

For opinion-related questions, surveys may include a standard set of options, as shown in the following example. These are similar to the Likert-like scales but are written in a multiple-choice format.

The instructor responded to email questions within 12 hours.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

Ranking: These are used when you want the respondent to rank order the options. Example:

Put a number between 1 (least helpful resource) and 5 (most helpful resource) next to each course resource listed below to rank their helpfulness.

- ___ a. Assignment checklists
- ___ b. Assignment examples
- ___ c. Annotated resource list
- ___ d. Weekly chat sessions
- ___ e. MP3 lectures

Next month, I'll provide general guidelines for designing surveys. I'll preview one here to pique your interest.

Work up to hard. Ideally, the first few questions in a survey should be easy to answer, because once respondents begin the survey, they are more likely to keep going. Place hard or sensitive questions near the end of the survey. That way, if respondents stop answering, you'll have some data rather than no data.

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Using Surveys to Improve Courses, Programs, and Instruction, Part 2

By Patti Shank, PhD, CPT

Surveys are frequently used by online faculty to collect data about their online courses and instruction. They're easy to administer (a plus), but the data gained is only as good as the design and implementation of the survey (not a minus but requires thoughtful consideration).

Surveys aren't the best tool to use to measure outcomes if those outcomes can be measured directly. For instance, it doesn't make sense to ask students how many of the assignments they completed on or before the due date because you can use the course management system to measure that directly. But you might want to use survey questions to gather student opinions about the assignments. Similarly, asking students how often they visited the course resource links isn't worthwhile if the course management system can provide this data. But asking students survey questions about the value of the links makes sense.

The bottom line is that surveys are best for gaining opinion data (whether there was enough time between assignments, for example) and to find out why (would the resource links be more useful if each link was annotated, for example).

This month, I'll discuss some general design guidelines to help you get more responses when using survey data to improve your online courses and instruction.

Assure anonymity. If students are concerned about negative consequences from their answers, answers are less likely to be truthful, if the questions are answered at all.

Emails are not anonymous, period. If you are using your course management system to administer a survey, chances are that replies aren't anonymous and even if they are, many students won't think so. Many of the online survey applications allow users to create simple surveys at no charge and provide the anonymity that is needed. And

don't forget to tell students what you are doing to ensure that their answers are anonymous.

Work up to hard. Ideally, the first few questions in a survey should be easy to answer because once respondents begin a survey, they are more likely to finish it. Place hard or sensitive questions near the end of the survey. That way, if a respondent abandons the survey, you'll have some data rather than no data.

Keep it short. Have you ever opted out of a survey in the middle of filling it out because it was taking too much of your time? No one wants to fill out a 15-page questionnaire. If you are asking questions whose answers aren't critical to your goal, nix them. Still too many? Divide the questions into need-to-know, helpful-to-know, and nice-to-know; and delete most of the helpful-tos and all the nice-tos.

Explain why. Tell students the purpose of the survey and what will be done with the answers. We are all pretty cynical about whether our answers (on surveys) will actually change anything, so you may want to offer an example of a change you made based on previous survey answers.

Defeat habituation. If a series of questions all have the same answer options, some respondents will start giving the same answer to all without considering each question or prompt. Consider breaking up these types of questions using different options (to defeat autopilot answering).

The following example questions show use of different options for the answer choices even though the answer choices on question 6 could be used for question 7 (with the blank removed).

6. The instructor provided adequate feedback on assignments.

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree

7. Peer review comments on assignments were _____ helpful.

- a. Extremely
- b. Moderately
- c. A little bit
- d. Not

Allow for opt-outs ... judiciously. Consider providing a "not applicable" option if the question isn't applicable to all. But don't offer this option on questions where the question is applicable to all students.

Include a "decline to answer" option for sensitive information. Many respondents will refuse to answer questions about race or income level, for example, and if the survey doesn't allow them to skip this information, they are likely to abandon the survey. But don't add this option to questions where there's no reason to decline to answer.

Use these options judiciously because if you provide easy opt-outs, you're likely to get lots of opt-outs.

Allow for more ... judiciously. Include an "other" option with the ability to type in an additional answer if you think it's probable that the list of options provided won't adequately cover all the likely answers. (Last month's article discussed uses of open-ended and closed-ended questions.)

The following example question shows use of an "other" option, in case respondents had problems that weren't listed.

16. Did you experience any problems using the assignment examples? (Check all that apply.)

- a. No, I used them without problems.
- b. Yes, I didn't know they were available.
- c. Yes, I had technical difficulties when trying to open them.
- d. Yes, the examples weren't similar enough to my topic to be useful.
- e. Other (Explain: _____)

Confirm as needed. If you end up with unclear or surprising information, you'll want to confirm your interpretation. One of the best ways to confirm your interpretation (or get help with interpretation if you don't have an interpretation) is to set up one-on-one meetings (by phone or in person, if possible) with students who typically provide constructive and appropriate feedback. (Be careful here if the course is in progress. Even these students may be unwilling to be put on the spot if they fear that their comments may jeopardize their grades.)

It's not enough to get more answers; you'll also want answers that are as useful (for improving online courses and instruction) as possible. So in the next article I provide guidance on writing good survey questions.

Patti Shank, PhD, CPT, is a widely recognized information and instructional designer and writer and author who helps others build valuable information and instruction. She can be reached through her website: www.learningpeaks.com/.



Using Surveys to Improve Courses, Programs, and Instruction, Part 3

By Patti Shank, PhD, CPT

Surveys are often the tool of choice for evaluating online courses and instruction because they are relatively easy to develop and administer. But this ease is truly a double-edged sword because it's very, very easy to write questions whose answers provide information of little value. For example, consider the following survey question.

Assigned readings were worthwhile.

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree

At first, the question seems fine. But let's take this a step further and say that the question yielded the following data.

Assigned readings were worthwhile.

Selection	Number
a. Strongly agree	3
b. Agree	14
c. Disagree	8
d. Strongly disagree	2
Not answered	2

More than half of the respondents thought the readings were worthwhile. Is that an acceptable number? "Worthwhile" isn't defined, and there are no clues as to what to do to make them more worthwhile. Here's one example of a rewrite. (See table to the right.)

This rewrite is likely to yield better information because it is more precise (the question defines "worthwhile" with two attributes) and allows respondents to rank each reading separately.

Next, I'll discuss two important guidelines to follow for writing survey questions that yield information that can help you improve your online courses and instruction.

Ask the right question(s) to get the information you

need.

As we saw earlier, it's easy to write questions that provide little or no useful information—and waste everyone's time. Consider the following question:

How often do you work on assignments or other classwork (such as reading discussion postings) for this course?

1. Very often
2. Often
3. Sometimes
4. Rarely
5. Never

How often is "Very often"? Does it help you to know that 3 out of 35 students responded "Very often," and 12 out of 35 students responded "Often"? Not so much. It's better to offer more meaningful options, such as in the following rewrite.

How many days a week did you work on assignments or other class work (such as reading discussion postings) for this course?

1. Every day
2. 4-6 days week
3. 2-3 days a week
4. Once a week or less

It's important to determine what you want to know and write each question so that it will yield the information you want. The last example might be asked to determine if some assignment-completion problems were due to students not allotting enough time to do the work. If that turned out to be the case, you might want to make sure that students understand the workload and what will be needed to be successful in the first week of the course.

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Please rate each of the assigned readings on the following attributes.

	Attributes (Rating scale: 1 is lowest score and 3 is highest score)	
Readings	Helpful for understanding multiple points of view (1-3)	Worthwhile extension of textbook readings (1-3)
...		
Comments:		

Be clear.

What's wrong with this question?

Where do you do your schoolwork?

- a. Home
- b. Work
- c. Both home and work

Hmmm. What should a respondent answer if he does his schoolwork at the library or at school? Or what if he does his schoolwork at home, school, and the library? One option is to add more options. Another is to add an "Other" option with space to input another answer. Yet another is to provide a checklist, such as the one shown below.

I do my schoolwork at (check all that apply):

- Home
- Work
- School
- Library
- Other: _____

Make sure that each question asks one thing at a time. Yes or no answers to "Were the checklists and example assignments useful tools for completing the course assignments?" won't tell you if the checklists and examples were both useful, or if one was useful but not the other.

Also, make sure your language is as precise and clear as possible. I discussed earlier how the word "worthwhile" might mean very different things to different people. One student might reply no to "Was [resource name] worthwhile?" because he didn't make time to utilize it, while another might answer similarly because he found the resource hard to use.

Also, be careful about coming to conclusions from unclear questions. For example, say that many students did poorly on the last assignment and then you asked, "Was the final assignment too hard?" Seventy-four percent said no, so you might conclude that the assignment didn't need fixing. But what if it wasn't too hard, but it was too much to accomplish in the allotted time? The answers provided would not yield data to help improve the course the next time around. An open-ended question such as "How can the [assignment name] be improved?" would likely yield better improvement insights.

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@

Using Surveys to Improve Courses, Programs, and Instruction, Part 4

By Patti Shank, PhD, CPT

In the last few articles, I discussed how to write good survey questions in order to provide insights that can help you improve your online courses and instruction. This month, I'll discuss some special considerations to take when using email to collect survey data.

Because so many people have email access, and because an email survey may feel less intimidating or less time-consuming than a Web-based survey (Web-based surveys

It's easy to send your students an email survey, but it's also easy for them to overlook it.

Because most students, like the rest of us, get tons of email, it's also easy for them to skip over the email if they don't perceive it to be important as they're examining their inbox.

may involve navigation and often feel like they'll take a long time to complete), email may be a better tool than Web-based survey tools for some audiences.

Advantages and disadvantages of email surveys

The biggest advantage of using email to deliver surveys is that the process is very simple. It only relies on the questions you develop and the recipients' ability to send and receive email. Almost everyone taking an online course

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has email, and email surveys can be delivered very quickly and at little or no cost.

Remember though, ease of distribution can—and too often does—lead to reduced planning and thought about design and implementation of surveys. Furthermore, reduced planning and thought may lead to data that is of little value.

It's easy to send your students an email survey, but it's also easy for them to overlook it. If you're using an email program such as Outlook, you know how easy it is to "lose" emails in a full inbox: out of sight, out of mind. Because most students, like the rest of us, get tons of email, it's also easy for them to skip over the email if they don't perceive it to be important as they're examining their inbox.

Email that you send to students can end up in spam filters by mistake, so some of your students might never receive the survey you send. If you send email to a student email account at the end of the semester, students may not be reading email in that account until the next semester starts. You may, therefore, need to send post-semester surveys to each student's "normal" (home or work) email address.

If you use HTML forms in your email survey (so you can format the survey as you desire plus include radio buttons, checkboxes, text boxes, and so on), students who haven't set up their email to receive HTML emails may see an unformatted mess. Using HTML forms inside email is risky.

All of these disadvantages may be enough to sway you from using email as a survey delivery medium. But the biggest disadvantage, in my view, is that email surveys are almost always very simplistic because they most likely will not contain any logic.

Survey logic allows you to input "go here if..." rules into your surveys. So if you ask questions about the extra credit assignment options you provided, for example, and the respondent didn't use any of the extra credit options, the survey will skip over any remaining questions about the extra credit options and take him or her to the next applicable question.

You can write logic into the text of your email survey questions, as the following example shows:

8. Did you make use of the extra credit assignment options?
 - a. Yes
 - b. No (skip to question 10)

But adding logic to the question (8b) makes the survey question more confusing and time consuming. Some who

select answer "b" will answer question 9 anyway, and that information will be confusing when you analyze responses. (I am dealing with this problem, personally, right now.) The more logic you add in this manner, the more confusion is likely to occur. In Web-based surveys, this logic is typically programmed in behind the scenes so the questions that the respondent sees are automatically based on answers to previous questions and the respondent doesn't have to figure out where to go next.

One last, but critical, disadvantage to using email surveys is that respondents may or may not feel that their answers are anonymous, especially if respondents are emailing their answers directly back to you. If the responses are not anonymous, you are very likely to get either no response or responses with less-than-honest information.

Start your email survey with a description of the rationale for the survey and a short explanation of how you have used the data in the past to improve your course and instruction. Keep the survey short, and write clear questions.

Making email surveys work better

If you do not have access to Web-based survey tools and email is the only or best way for you to collect survey data, there are some things you can and should do to make the experience better for respondents and the data more valuable for you.

Start by getting the best email address(es) from your students and tell them when to expect the survey. If this email address is not the address they used during the course, remind them to whitelist your email address (set spam filters to allow your email to get through).

Start your email survey with a description of the rationale for the survey and a short explanation of how you have used the data in the past to improve your course and instruction. Keep the survey short, and write clear questions (see previous articles for important tips).

Do everything you can to provide anonymity, and explain in the survey directions how this will be achieved. This is especially true if you are sending surveys while the semester is in progress in order to improve the course and

instruction right now (a good idea). Students can send their answers to a third party, such as a graduate assistant or office administrator, who can strip identifying information and give you the data only. One faculty member I know asks her students to use remailers, which allow people to send email anonymously. Google “anonymous email” or “email remailer” to find out more about these services. Some are portals for sending spam, so check them out carefully before using.

Patti Shank, PhD, CPT, is a widely recognized information and instructional designer and writer and author, who helps others build valuable information and instruction. She can be reached through her website: www.learningpeaks.com/.



Using Surveys to Improve Courses, Programs, and Instruction, Part 5

By Patti Shank, PhD, CPT

Surveys are easy to design and implement, but designing good questions and getting good information isn't easy. That's why I've written previous articles on how to write good questions so you get the information you need. This article completes this series by discussing the use of Web survey applications.

Web survey applications are online applications such as Zoomerang and Survey Monkey, which facilitate creation, implementation, and analysis of surveys using their online application. Your institution may have its own Web survey applications, and this article should apply to them as well.

Advantages and disadvantages of Web surveys

One of the advantages of using a Web survey is that potential respondents likely know how to use them. Here are some additional advantages to using Web surveys:

- Most of the Web survey applications make designing,

implementing, and analyzing a Web survey quick and easy.

- Some of the Web survey application vendors allow anyone to create free surveys.
- Many of the Web survey applications can apply complex question logic (such as if the answer is a or b, present the next question and if the answer is c or d, input two additional questions before the next question) and have other unique features that can't be accomplished with paper or most email surveys.
- Some research shows that people give longer answers to open-ended questions on Web surveys than they do on other kinds of surveys.

And now some disadvantages:

- It's quite easy for respondents to quit in the middle of a Web survey because interacting with a Web page is impersonal.
- You may need to make sure that only desired respondents can reply and that desired respondents can only reply once.

Design considerations

Include introduction text and general instructions on the first screen. Explain why you are asking students to provide answers to these questions and what you will do with the information. Assure them that their answers are confidential (if they are—and they should be). Put other instructions where they are needed rather than putting all instructions up front.

Design for clarity. Web survey applications may allow you to add various bells and whistles, but use these judiciously because they are distracting. It may be a good idea to use a different font or font attribute for instructions rather than for question text so respondents can find instructions easily. But don't use italic for long passages of text. Italic text is hard to read.

Make the background color white or very light and the question text black so respondents can easily read the questions. Don't use graphics unless they are needed to answer the question.

All multiple-choice answers should be labeled the same way. Be consistent with color, too. If the instructions are blue, they should always be blue. Remember that some respondents may be colorblind or using a screen reader.

Make the survey as short as possible, and tell students how long it should take. Five to 10 minutes is reasonable. Provide open-ended questions to find out what changes are

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needed.

Limit required answers to truly crucial questions. Making questions required may increase dropouts or nonsensical answers. And if required questions are multiple-choice, be careful to include all expected answers or add an answer that combines multiple choice with open-ended, such as d) None of the above (please explain).

Test your survey. Make sure that all the pages look and act as expected. Ask others to tell you if your questions are clear.

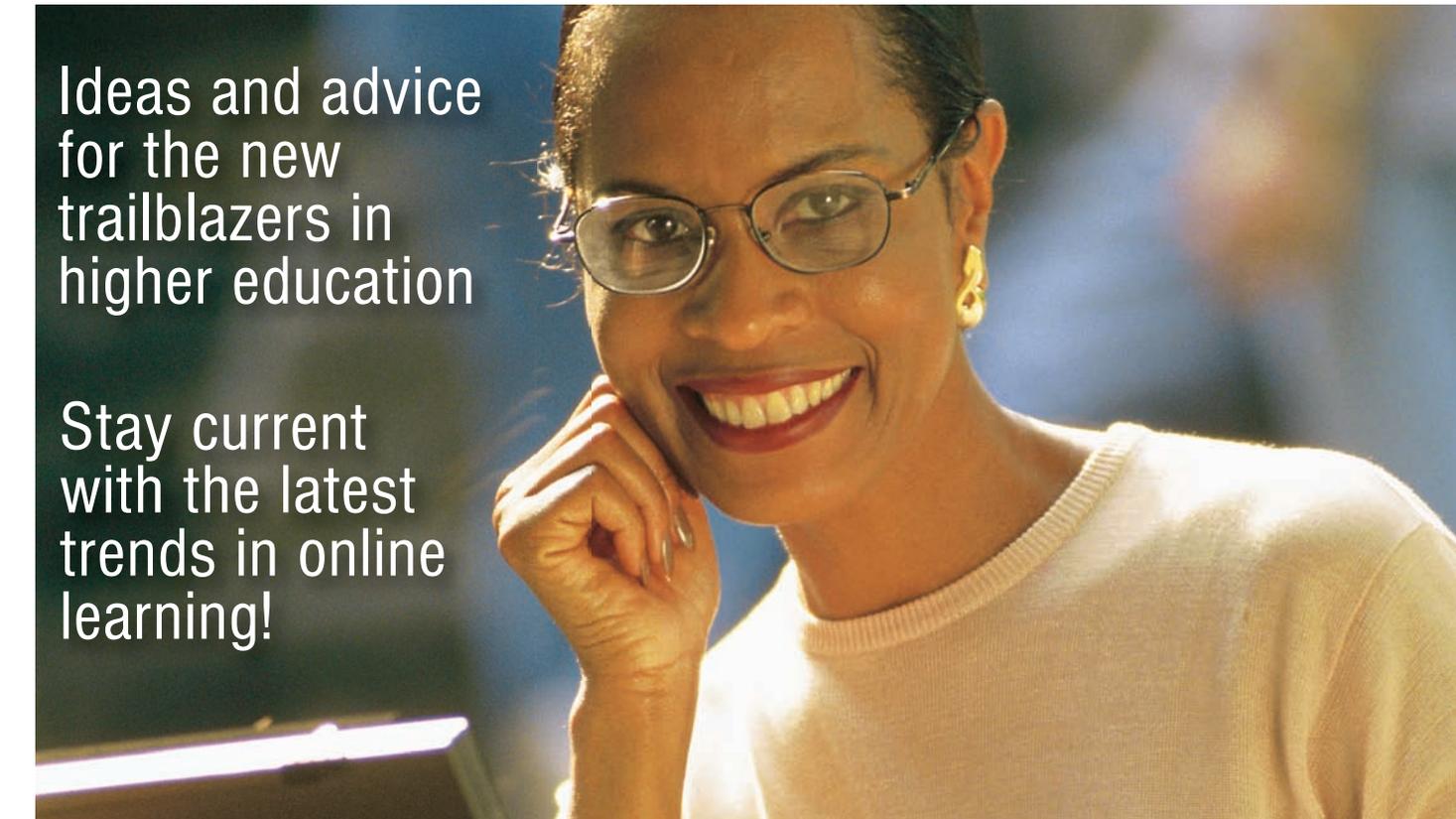
Most Web survey applications allow you to download the data into Excel for analysis or to analyze the survey online. If you want to be able to determine if the answers are different for males and females, undergrads and grads, new online students and experienced online students, for example, make sure to ask for those demographics in the beginning of the survey.

Web survey applications
www.questionpro.com/
www.surveykey.com/
www.surveymonkey.com/
www.surveyshare.com/
www.zoomerang.com/

Patti Shank, PhD, CPT, is a widely recognized information and instructional designer and writer and author who helps others build valuable information and instruction.

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