

Module 5A: Longitudinal Assessment of Student Learning

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Hello. My name is Tim Brophy. And welcome back to Passport to Great Teaching-- Creative Assessment. This is module 5. And in this module, we're going to introduce, describe, and explain longitudinal assessment of student learning approaches that you can use as a university professor.

There are two primary goals in this module. The first goal is to take some time to introduce and explain portfolios and their role in assessment. And I know you probably are familiar with the idea of what a portfolio is. But I'm going to share with you some things you need to consider and think about and how you can best put these together.

Then we'll introduce and explain the pre- and post-test approach to assessment of learning over time. Now, there are two videos in this module. And each video addresses these goals.

When we consider portfolios as longitudinal measures of student learning, we first need to really think about what it's defined as. A portfolio is a collection of student work. Now, this represents his or her progress or growth in a particular discipline. So it means it contains examples of a student's work that shows the range of skills and knowledge they have in that particular discipline or in some other area that you're interested in. As the importance and value of assessment rises in higher education, though, we find that the portfolio is being increasingly used as a longitudinal measure.

So when we plan for portfolio assessment, we really need to ask ourselves some very critical questions right at the outset so we can plan appropriately. First we have to think about what is the purpose of our portfolio because that's going to drive everything that you do in the development of what you expect to see in the portfolio.

Then you have to think about its intended uses. Now, how you're going to use the portfolio evidence and the assessment results that you get for some reason. What is that intended use? And that will help you keep your portfolio project valid.

Then we think about the alignment of a portfolio and the degree to which the evidence in that portfolio is aligned with the relevant standards or expectations or outcomes that you have for the students and whatever course or program that you're measuring.

Then we have to think about the evidence itself and who determines that. Who decides what evidence goes in there? Do you let the students do it? Do you tell them they must have certain pieces in there? And what do you expect? What do you require?

Then finally, the assessment. Assessment of portfolio work usually occurs in two stages. The first stage is with the original piece of evidence-- the original artifact, we'll call it-- that the student creates, whether it be a video, a PowerPoint, a presentation, a paper. Whatever it may be, that's usually assessed at the course level by the faculty.

And then it's put into the portfolio for a larger purpose. And the portfolio collection of evidence then is generally assessed later, maybe in a summative way, as a degree to determine the degree to which students have actually achieved the outcomes or goals or expectations that you have for a larger reason, like a program.

Then because they're designed to show change over time, portfolio entries really aren't limited to a student's best work or only their most recent work because we need older evidence to be able to compare it to the newer evidence to be able to determine growth and change over time. So we know that portfolios can contain evidence of student learning involvement in a variety of formal and informal contexts. So we also want to be sure that the portfolio tool that you're using will accept various media and items that are appropriate for various learning domains as well. It should not only be papers and presentations, but maybe videos and audio recordings depending on the area that you're measuring.

So how do we get started with portfolio building? Well, my first advice is to really start small because we want to collect evidence a few items at a time. I think it's easier to handle this way.

Because many of us see hundreds of students, we really want portfolio development to be gradual. So it often occurs over a period of years or a period of semesters. Or if it's just simply a course portfolio, it could be a period of weeks. But I would advise you not to try to collect all of the evidence at one time. Spread it out over time. And collect the evidence a few items at a time.

Continuing, you want to develop digital folders at first to collect the evidence. I would suggest that you ask your students to put all their work in folders that are online. Maybe store it somewhere on their computers so that they can later then put it up into their online portfolio.

I would use a free online portfolio tool or one that's provided by your unit or by your institution. So a common free tool is called Wix, W-I-X, dot com. I know that's used with some success. Canvas does have an online portfolio tool that you can use. So there are ways to do this electronically that don't cost any money. But there are also other portfolio options that are available that can cost depending on how many features you want to have in it.

So you want to store the evidence as it's created. So as I said, don't do this all at one time. Do it gradually. You want to teach and expect your students to do their own uploading. It's not your responsibility to upload things into their portfolios, it's theirs.

Then periodically plan time for adding to the portfolio. In other words, in your syllabus, you might say, OK, in week two, we're going to upload this into the portfolio, or week four and week 10, whatever you choose to do. But periodically plan for that time to happen.

Some suggestions for evidence. Obviously, papers. We write lots of papers in university work. And students also can present their work using different kinds of media-- audio and video files, their presentation documents that they create, like PowerPoints and handouts. PowerPoints can be converted to Adobe as well. Or they can be uploaded as live PowerPoint presentations.

Anything they might publish or that they have that's appropriate. And their reflections as well because one of the foci of our new Quest program is student reflection on the work that they're doing. So reflections would be a good thing to put in the portfolio as well.

Now, continuing, you can include evidence of projects. Now, these are usually longitudinal or long term within a course, multiple-week events. There could be multiple people involved. But these projects can be both in and outside of class.

I would encourage you to allow students to include work in their portfolio that comes from outside of class if it's relevant to your course or to the program. These could be externships, internships, and so forth. They could also be programs, photos of their participation in various events. Also, if they attend events, evidence of that, like programs, written critiques, or evaluations of the events they have attended.

Now, there are two basic portfolio designs that I would like you to consider. The first one is what I call a "sectional design." Now, this is recommended when you have one or two years of materials that students have organized that they put into their portfolio. They've collected it in files for a while.

Then they put it in their portfolio and organize it by chronological year. So you have students put in their 2017-2018 information in the portfolio. They organize it in their 2018-2019 information.

But the serial design is also possible. And that can be really done when you have several years of materials that are being organized. Or you could do it from the beginning as well. This is organized by evidence category, where there would be papers or presentations or coursework or out-of-course work. Those kinds of designations are really up to you to design and to craft to fit the program or course that you wish to assess.

So to organize their materials, the students first have to gather them in the general categories, like their in-class work, or what we call their more formal assessments. Their informal work. That's anything outside of class. Their reflections and so forth.

They're going to organize those in-class categories and materials in chronological order by the category. That's my recommendation. Chronology is important when you're trying to

measure or observe growth and progress over time. And then they can organize their out-of-class evidence in the most really sensible manner that they do, either chronologically or by event. But I would suggest that you remain open to the kinds of information that students could put into their portfolio to help you better understand how they're growing and developing.

So if you design a project for your students, you got to first determine what's important that you teach for which you have evidence. Then determine what is important for your students to reflect upon from their study with you.

Then clearly align the portfolio entries with what you deem to be important measures of progress. So again, what I mean by that is in your syllabus as you're designing your course or in the program design when you're designing a program, you want to have certain points in either the course or the program where you're aligning the assessment with something that is important for students to put into their portfolio.

Then you just want to decide how the portfolio should be organized. And in some cases, you could work out an organizational style that works for your students that you and your students work out together.

Continuing, you want to determine your timeline for implementation. It's critical to do this at the outset. You need to know when you're going to get something done, when you're going to get it implemented, when you're going to collect, when you're going to develop the portfolio, and so forth.

Determine, again, if it's going to be graded if that's your intended purpose for grading. Otherwise, you want to be sure that you are using it for the intended purpose that you established at the very beginning.

You want to set a due date and a collection and return plan. In other words, if you have something you're collecting at the end of a period of time, you want to set that due date. And you want to be sure that your students are collecting the data and that you're collecting the portfolios from them and returning them to them at a certain point as well. And then I think it's a good idea to design a checklist for your students so they can go down and make sure they have the relevant evidence in their portfolio that you expect them to collect.

Some final words here, of course. Really stress the value of the portfolio as a learning tool to your students because really, this is an important learning tool for them. Because it's very revealing for them to see what they did at the beginning of the semester, the end of the semester, or the beginning of their program, the end of their program. And they can really tell right away the degree to which they've modified and improved their learning and whatever else you're measuring.

Also, why not consider giving access to this to parents or other interested stakeholders? That is, allow your students to have that opportunity to share their portfolio more widely. And in some cases, portfolios are used for the purpose of-- well, the best way to say it is to use it as a way to share with employers what they've done at the university and how they've improved. So it could be used for that purpose as well. That would be another interested stakeholder-- maybe their future employers.

Continuing on, you want to determine if the evidence in the portfolio is going to influence your grading at all. Now, I would assume that the assignments that go in the portfolio have been graded in part of some grading scheme that you have or some reason for collecting a grade on that. But the entire portfolio itself-- is it going to be used for a grade?

And again, remember they're assessed in two stages. Each piece of evidence has been measured or graded. And second, the entire portfolio is measured. So think about those steps in the process and how that might affect how you grade your students.

So here's your question to think about. What evidence of student learning would you want to collect in a portfolio and why? That concludes module 5A. Next we'll talk about pre- and post-testing.

