Transcript – Educational Innovation: The "Backward Design" Framework

So, backward design is an instructional design framework that actually comes out of the k-12 world. And the folks who are considered as the founders or the primary influence are Wiggins and McTighe. And they have a series of very practical workbooks and workshops around how one can think about the design of learning environments in terms of learning first. And so that may seem obvious and not backward but essentially what they say is that often we begin with what things we want people to do in the classroom. Oh, I want my students to make an annotated bibliography say or I want my students to do this experiment. And essentially what they say is by starting with activities, you are forced to map in the wrong direction toward what it is you want people to learn. And so what they propose is, at its basic level, a three-step process that starts with what goals do you have for your students. That is, what is it that you want them to be able to know and do by the time they've finished your class or your learning experience or your program of study or whatever it is. What are the competencies, you know, and in different disciplines, these have different terminologies, right? Core competencies, you hear sometimes. Skills?

You know, we have the essential learning outcomes. One could argue that learning outcomes are goals but what is it that you want people to be able to know and do? And then they say, oftentimes, if people have started with that, they will then jump to activities. Well, I want people to know how to analyze a 20th century fiction text so I'm going to have them write a paper on some 20th century fiction text of their choosing. Jump right to the activities. What they say is rather than that the next piece you should consider is how are you going to assess that they've met those goals. So, what counts as learning and displays of learning in that domain. What forms of assessment ought you to use? And they talk both about formative assessments – so assessment of process and, along the way, and opportunities to move students down different trajectories if they don't seem to be getting it – and also summative assessment. So, what are you going to do at the end of a process to make sure they've learned it. Only then, do you move to what are we actually going to do in the classroom. Because all of

those activities in theory should be geared towards students' display of knowledge within the context of what it is you want them to be able to learn.

So, if the idea is that they should be able to analyze some, you want them to be able to understand how the analysis of fiction text works, you would ask yourself, well, what constitutes evidence that they know how to analyze a fiction text. And that may take you to the paper but it may take you to some other forms of assessment that are either smaller along the way or look somehow different than what the standard assignment is. Or you may realize that you're asking people to do that as an assessment but that you're not giving them any clues along the way as to how to get there. Whether that's a more micro assessment – smaller you know breaking down the task into smaller versions – or you're not giving them any sort of explicit instruction around how to engage in that task. But simply expecting, well, all students know how to write a paper so write this paper but the instruction happens around these other ideas.

And so really the backward design process is an alignment activity, a series of alignment exercises. And the biggest, I think one of the biggest challenges is that sometimes what happens is you have to get rid of things that you really like. So, you've been doing this great, you know, debate activity in your class for ten years and it's great because students get really heated and they really like to debate, you know, whether abortion ought to be legal or not. That's a really hot topic. It works really well but in

thinking about what the purpose of your political science class is, that debate becomes fun and interesting, but possibly irrelevant to the learning goals. And so, what they really encourage is figuring out a way to essentially shed some of the activities, that though really fun and engaging, may not take you back toward those kind of core learning goals – What it is that's important for students to learn and be able to do.

Sometimes the backward design process doesn't take you very far from where you started and it's just a useful way to make explicit for yourself how your classroom activities do align up with the ways in which you're assessing learning and the goals that you have. And just as a reminder a way to make explicit for students a way to make clearer to them how what

they're doing on a day-to-day basis contributes to the learning goals. So even if you're already there, which some people are, you can be more explicit about that relationship. And I think one of the things I found in my own teaching is that we assume that those relationships are clear for students but they're often not clear. And so simply by being explicit about the relationship between learning goals and assessments and activities can be helpful for students along the way and to continually revisit that. And reflect on it in your own teaching but also in the ways that you have students work with assessments to have them reflect on that relationship can be a really helpful instructional tool.

So, there are lots of different ways to identify learning goals. There are lots of sources for learning goals, you know. I think they're one source for learning goals is your own personal reflection on what's important in your domain and what counts as knowledge in your domain. So, what makes one a practitioner of that particular domain and those things can be they can be at various scales, various levels, right? So, I think the essential learning outcomes on campus are an attempt to give voice to very high-level learning goals that we as a campus have for undergraduate students and you can see those taken up in different ways, in different kinds of disciplines. So, we can have these high level, you know, what does it mean to be a practitioner of and I don't mean practitioner but professional but student of you know a discipline. What does it mean to be a student of political science and what do we expect people to know and be able to do in that context? I think, you know at a more basic level, there are clues about that in the texts that we draw from. So often text books, for example, will be structured in terms of content learning goals. You know, if we're learning 20th century American history, there'll be big blocks, big chunks of content that we think are important for people to understand. They'll also be chunks of processes, right? So, I think a common, I'm not a historian, but I think a common process in undergraduate historical analyses is to be able to reason through why historical events have happened and the sources that we draw from; to make those arguments; how the arguments get structured; what constitutes a good argument; what constitutes a good narrative. So, all of these are potential sources for learning goals within the context of a course. Colleagues are good sources for learning goals. Former students who may be in the field for

which your course is potentially situated and suited. Courses that come before and after your course, if your course is within the context of some sort of sequenced learning.

Wiggins and McTighe also talk about different levels of learning goals. So, they talked about at the broadest scale, what they call enduring understandings. So, things that you want students to have ten years after they've taken the course or ten years after they've had the experience, right? Then they have what they call important to know and do which are much more practical, right? Are there skills that you think students ought to have, right? Some sort of historical analytic skills or something like that. And then they have I think I may be getting the phraseology wrong but things that are kind of worth knowing about. So, facts could often be placed in that category where you know do I care if 15 years from now somebody remembers exactly when Vygotsky developed the theory of the zone of proximal development? Absolutely not. Is it worth kind of talking about the general time period in which it happened because that situates it within a broader historical context? Yeah, that's probably important to me. Like it's important to me that students don't think, you know, Vygotsky was writing in the 1600s, you know. And so, in some ways, that's a goal but it's not at the level of like things I want them to have in 10 years but I do think about kind of this – the specific information that we work with and have a goal that students are sort of generally oriented toward that information.