

In the Classroom 38

Using Adaptive Release in Your Classroom

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Stan Skrabut: Well, thanks for taking time to listen to this podcast. It certainly means a lot. I know you can be doing other things but you're hanging out with me. Well, you may be doing other things but you're still hanging out with me and I really do appreciate it. This week, we're going to take a look at a technique called adaptive release. I'm going to tell you what it is, the benefits of applying it to your classroom, how you can apply it with Blackboard and Canvas and finally ideas for using it in your classroom. Let's get started.

What is adaptive release? According to Wikipedia, adaptive learning, which adaptive release is a piece of, is also known as adaptive teaching. It's an educational method that uses computer algorithms to orchestrate the interaction with the learner and deliver customized resources and learning activities to address the unique needs of the learner. Wow. Well, that seems a little formal but basically what it is is you receive input from the learner and then you start tailoring content for the learner. It could be that you give the learner a test.

Depending on how your content is structured, a learner may test out of something. If you can demonstrate that you understand and can apply the quadratic equation and maybe you have them do five or six questions and they can satisfactorily demonstrate that they can do the problem and get the correct answer, why do you have to spend all this time showing them how to do that? Let them bypass that. On the other hand, if they demonstrate that they can't do it, well that's when you would want to put this instruction.

This adaptive release allows you to control that. That's just one example. There are certainly other examples that you can apply. In addition to testing something, you may want somebody, a learner to read something before they go to the next step. They have to demonstrate that they've read it. It could be a simple checkbox that I have read this and then the other content appears. You are basically adapting the presentation of the educational material you have to their learning needs that they may have something that they already know, there's other things that they don't know.

Maybe you may release this material on all kinds of different ways. We'll talk a little bit about that. If you have a learner that says, "I want to see everything in video," you can have them make that selection ahead of time and that's what they will receive. Okay. It's just an idea. I'm not saying it's a recommended idea but it is an idea that you can give them one of two streams. If they prefer to see it all in tech maybe because they're visually impaired so they need a text reader. That having a lot of imagery would not be useful to them but having a lot of texts would. That they could choose for that and that's how the information would be presented.

You can build out two different sets and have a toggle that allows him to see it one way or another. With adaptive release, you may have everybody go through the same material but then based on how well they do maybe on a post-test that you may want to provide additional feedback to one group or you may want to challenge another group. You split out the content. Different ways of doing this. A lot of what adaptive release is used for in terms of learning is that you are seeing where the gaps are and you're filling the gaps and that's where you're focusing the information that you're providing.

Like I noted before if somebody happens to be an expert in something or has demonstrated expert knowledge, why do we have to make them go through this content again. If they could test out, that's a really powerful way of using adaptive release or adaptive learning. With Blackboard I know that you can control the release of information four different ways. One is through a date. This is the one that I see most often, that faculty members will hide folders and release this on a specific date. This is not necessarily adaptive. This is basically controlling it. Controlling the release of content because everybody gets the same information but you can also do it as adaptive release.

One example is maybe you want the learners to take a survey. Once they complete the survey then they get access to the material. If someone doesn't complete the survey, you don't want to withhold the information from them. Maybe after a certain date, it releases anyways. That is an option that you can make that or. They complete the survey or that date shows up. Another way of doing adaptive releases if they reviewed previous content. Maybe before you put them in the lab, you want them to review the safety procedures for the lab.

They would review the procedures. They said, "Okay. I have reviewed them," or maybe you gave them a quiz or something. We'll go with they review the material. There's a checkbox, review the content and poof. Here's the instructions for the lab that they are going to go through. Another way of controlling adaptive release is through grades. That they take a quiz and based on the quiz that they are presented additional material. Maybe they have to get a passing grade on a pre-test or on a practice test or even just a regular quiz before they can get to the next module.

Otherwise, they get review content. They need to review it, retake the test before they can move forward. When you do that, the tests that you're creating have to be given other opportunities for them to retake the test before they can move forward. That is something to definitely think about. You can control that they master one objective before they can move on to the next objective. Another way to control content for adaptive release is through memberships. Maybe you have different groups and based on the group that they're in, they get access to certain content.

It's just simply a matter of adding their name to the group and magically that information appears. This is all really dependent on the LMS, on the learning management system, on how all this stuff can be released. Regardless, you're trying to target the content. You're just honing in on who gets what content and when do they get that content. You can design paths through your material. It's possible to use multiple rules to control the release. As I mentioned before that they either complete

a survey or a date appears. A certain date gets there and then the material's released so one or the other.

Sometimes you want them to do an end. That they've read the instructions, they pass the quiz with an 80% and then the material is released. You can control it that way but the more rules that you apply the more complex it is. I'll talk about some of the challenges later, once the material is released to one student, odds are it's probably released to all the students. There's nothing stopping them from sharing that content with someone else. Why even consider adaptive release? I think this applies really from the Andrew Goji side of things. That adult learners want to get the content that they need and no more. They typically are solving a problem. Once they have the problem solved, they're done. They move on to the next problem.

They will stop in the middle of a course. If they think they've gotten all the information they need, they're done. "Okay. I don't need anymore information." They'll skip boring material. Anything that seems to be a waste of their time, they get frustrated. By having these opportunities where you can tailor the information to them by filling in gaps, you can do this through a quiz. That you give them a quiz and based on the results of the quiz then you release certain content. When I would build a quiz for this, actually I build multiple quizzes.

Quizzes that really hone in on one specific thing. In terms of mathematic, if you are looking at plotting information on a graph or quadratic equations, I would pull those questions together and make one smaller quiz and just measure that specific objective. That will help to release the information. It is not as easy to pull out that information and be able to do adaptive release if it's all part of a 50 questions quiz. By breaking into pieces, you can really hone in on what they do and do not know. Then you can tailor the information a little better.

How is it used in the classroom? Lots of different ways that it's used in a classroom. Learning Management Systems, as I already mentioned that they have adaptive release features in it. With adaptive release, you can go ahead and release it on a specific date. Maybe that you are stepping them through module to module based on time. 16 weeks, you got 16 modules and you're releasing one at a time so you hide everything else. I'm not necessarily a fan of that but that is certainly a strategy that you can use.

Other ways are you gamifying your courses using game design when you're building this that you can use the gamification elements in your adaptive release. That you can provide a series of quests. One quest you must complete before other quest move forward. I've talked about this in a previous episode. I believe it's episode 16. You can go back and check on that. Talking about gamification, and what you can use and apply to your classroom. When they do one quest, they then get additional quests. I play *World of Warcraft*, and that is used in that game extensively in order to control, that you have to master something before they let you get to more complex parts of the game.

Distance learning. Depending on how you set up your class, that you can use this to control the pace of your class. That if someone knows something, that you can release

it to them. Otherwise, you can give them content for review, and that's quite useful. Learning mastery. Codecademy I think is masters at this. When you are working through-- I'm going to use mathematics again. That they will give you information, then you take the test. If you don't pass the test, they'll have you review and they'll give you more information. Basically, you have to pass that test before you get opened up to the next parts of the course, and that's a way that they control that information.

There are a lot of benefits to adaptive release. The first one is it allows you to adapt to the abilities of the students in the classroom. That some students, they have expert knowledge in one area but are weaker in others. It allows you to tailor this to each of the students, and you can build your courses to work to the margins. You can know everybody on that spectrum. Those who are novices to those who are experts, and it allows them to work on their own pace. This butts up against having a course that is measured by see-time makes it a little difficult.

It's possible that you can have somebody who really is comfortable with the content get through the content quicker. I have this in my students success class. Basically, I have one student who has completed all the content, and she did this two weeks ago, and we still had half the class to go. Great, she did what she needed to do, and now she is working on other things. She's moved on with her priorities. One of the other benefits is that you can provide personalized instruction where needed. It allows you over time to figure out where those pinch points are and provide additional support, and you can roll them out as part of an adaptive release where students will struggle.

Another benefit is students are not bored because they are working at their ability, and they're being challenged at their ability. This also allows free time for one-on-one instructions. Rather than teaching everyone where some people don't need the information, and some are really struggling, it allows you as the instructor to go ahead and focus that one-on-one instruction on those that really need it. The other thing it does is it respects the adult learner in their prior knowledge.

The fact that you are asking them what they already know about the topic, and then altering the course to meet their need, this shows a lot of respect for them. Also it's very learner-centric. Research points in the direction that learner-centric methods definitely satisfy the learners, and they end up with better results and satisfaction for the course. Students will also learn faster. They don't have to go through things that they already know, and then therefore they're focusing on the things that that don't know, and it allows them to cruise through this just a little quicker. They're finding out it's more engaging, because it is focusing on the things that they don't know rather than rehashing the things that they already know.

Some of the challenges that come with adaptive release, it requires an extensive amount of work to map out the course, and develop it so you're really thinking about how the path go. Therefore, it's higher cost in implementation. There is typically not enough support for faculty in how to develop this. It requires more training in order to bring faculty up to speed. Dealing with a large amount of data, that can also be a difficulty. The two learning management systems that I primarily deal with are Blackboard and Canvas.

Blackboard, I spend most my time with Blackboard. That's the one that I use to support the faculty at the community college that I'm working at. With that, as I mentioned, you can do adaptive release based on date, if they've reviewed content, if they have completed a quiz, and also based on membership. That's different ways that they can do this. When you set up the adaptive release rules, normally you will just first do adaptive release. Then you can go into the advanced adaptive release in order to make modifications.

When you set up the rules, typically if content is not available to the student, it is not visible to them. It will be invisible until they meet the criteria to see that content. There are couple of tools that you can use. One is a performance dashboard that will allow you to see how students are moving through the content. Another one happens to be user progress, which for each item, you can see if a student can see the content or not, and if they've access to that content. Those are different ways that you can control this.

With Blackboard, you can also create advanced multiple rules criteria for your adaptive release. This is probably beyond the scope here on exactly how to do it. In the show notes, I did provide links to a variety of articles and resources that you can hunt out that will show you how to do this. The same goes for Canvas. Canvas allows you to do prerequisites. Before module is released to somebody, maybe you have to have these prerequisites, so this is very much an adaptive release. They also have requirements for completing a module.

You can set up Canvas where you have in each module a variety of things that need to be done, and at the end of it, indicates if the module is completed or not. This is one way to do this. These requirements, they have five requirements that are out there. One is to view an item. The fact that they checked on it, this turns on a flag and indicates that a student has viewed the content. Another one is mark as done. They can mark the assignment as being completed, or submit the assignment before the progress to the next piece.

That's another way that you can do this. Contributing to the page where they maybe need to participate by actually typing something on a group page where everybody can build out on a page. I mention submitting assignments. That is certainly one where they submit assignments, they get a grade posted, or submit a quiz. This is also a greater discussion if they get a score for that. Another place is score at least. They have to get a minimum score before something gets opened.

Those are different ways that you can control the requirements for parts of modules or different parts of the assignments and such before things get released. Then they also have what's called mastery path. This really ties in to quizzes and anything that's graded. Based on the results of the grade, you can set up different paths that allow you to provide different content depending on where the grade is. 0 to 40%, maybe you provide one set of content. Then 40 to 70, another set of content, and 30 to 40, a different set of content.

Once again, how to do this specifically, I'll put that into the show notes that you can find that. These are two learning management systems that I know support adaptive

release in some form. Each one is just slightly different, and so you have to look at it for your specific learning management system. Lastly, let's talk-- not lastly. Let's talk about ideas for using adaptive release in the classroom. Number one, competency mastery. Being able to master content before they move on. That is I think a good place to start. Gamification.

As I mentioned in episode 16, I talked a lot about Gamification. That is something else that you can do is that you can award achievements and points, but you can also control the release of new content until they've earned certain scores or certain level of points before they get to move on. Before they level up that you can control the levels. Specification gradings. I talked about specification grading in episode 31. This is basically go, no go. If they pass using a rubric, if they get so many points, ten it opens up to them. Otherwise it's not, and you can control that.

Also in specification grading, they talked about learning bundles, or specification bundles. You can have the students declare the beginning what grade that they're aiming for. A D, a C, a B, an A. Based on that, they can check, I want to pursue a C, and this content would be opened up to them. If they chose a B, then additional content would be opened and finally, in an A, all the content would be open to them, and then they would need to work through those. They can control how much of the course that they actually want to participate in. Learning paths, that you can set up learning paths if you want them to specialize in something.

I'm thinking back to my *World of Warcraft*, that each character had specialization. Typically, there was three different tracks and in these three different tracks, you built up certain skills and allowed you to do that. Building these learning paths, you can also do this where, say that somebody, I'm thinking back to my multimedia learning course, somebody wanted to specialize in video creation, they can check that and they would get a lot of information but maybe only basic information for our audio and text and imagery. For video, they would get all the content.

That you may want to release content after a survey. Maybe a survey at the beginning of class, finding out a little bit about your students and from that, it opens up the first module. Lab instructions, before they can go participate in the lab that they have to demonstrate knowledge of a safety procedures, either by reviewing something or taking a safety quiz and successfully passing this.

Now naturally, as I mentioned before, if you're using quizzes, you're going to want them to be able to do multiple attempts. You can create multiple cohorts who are given unique content and that they based on their interest groups, that's concept they are provided. You can also provide a series of short pre-tests, which then open up different modules based on the results of the test. Like I said, if they master quadratic equations, then do they really need to get all the content you have on quadratic equation? Whereas somebody who failed it, they would probably need the content.

Tailoring feedback based on their interactions. This is another thing that you can do that, do with that based on how well they did on a quiz that you provide additional feedback and instructions. You can see that this is going to take a little bit of work to

do this. Before they could get a quiz, maybe you have them mark the content that they reviewed it and then suddenly the quiz appears.

If they have not marked it reviewed, and they don't get the quiz. Now naturally, you're going to have to provide some additional instruction to tell them to do exactly that. Restricted discussion until students have read the content. That a typical strategy and discussions that they need to read the content first or make a post before they're allowed to do something else.

Success strategies, how to put this into practice. The University of Melbourne shared several strategies for success when implementing adaptive release. One of the strategies is map out your pathways. Get on a whiteboard, get a big piece of butcher paper or something, and basically draw this all out. The University of Maryland provides a template, an Excel spreadsheet for creating maps. There's a link in the show notes for that.

Basically, you're going to build a content map and you're going to plot this information and show what the prerequisites are that they have to complete X, Y, and Z before they can see A, B, and C. You plot this all out, and that will help you build this back out. Make sure that you're tying things back to your learning objectives. This is very much tied to backward design in that you are getting your objectives lined out, building out your assessments and then deciding what content you're going to provide.

Well, if you provide the assessments before the content, this allows you to control what and how much content that you have. You're going to definitely want to identify those prerequisites. Part of rolling this out is you're going to have to explain to the students what you're doing and how it works, and then also make sure that you keep it simple. The more complexity that you bring into this, the more difficulties that you're going to have in administering it. Try to keep it as simple as possible.

As I noted before, students are going to bypass your system, so if you're trying to high stakes, control that content and information, understand that once it's released to one student, all the students have it, well, potentially. Other things, other strategies is really try to focus the quizzes around specific topics or learning objectives that you can control any of the content that you're going to push out.

If you're giving them a 50 question quiz, then that's probably not going to be useful, but what you can do is create 10, five-question quizzes and those 10 five-question quizzes can be rolled together for one grade in your in your grade book, but that allows you to control the release of content based on how well they did on specific objective. One thing that you want to do is make sure that you don't have any dead ends in your learning paths, which will prevent students from getting through your course. That'll be important. Finally, try to focus on formative assessments. These are where students have the opportunity to improve their performance as opposed to summative assessment.

There you go, that's a little bit about adaptive release, and talked a little bit about what it is and how it's used in the classroom, some of the benefits and challenges of it, talked a little bit about how to use it for your LMS but you're really going to have to go

see the instructions on that and they're in the show notes. Then I shared some ideas that you may want to take into play and some ways that you can make it successful. With that, I just want to give you a little plug for my book.