

Evidence-Based Strategies to Foster Student Agency

Regional Educational
Laboratory Central

From the National Center for Education Evaluation at IES

Overview

Date and Time: November 20, 2020

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Transcript

DAVID YANOSKI: Good afternoon, everybody, and welcome to REL Central's webinar on evidence-based strategies to foster student agency. We have a number of excellent speakers for you today to share some experiences and some research and some strategies for increasing student agency in your school. And so let's go ahead and get started.

Just a couple of things to keep in mind as we are moving forward. First of all, our webinar today will be live captioned. If you would like to take advantage of the live caption service, please copy and paste the link that's in the chat box right now. That will take you to the live captioning service where they will provide the captioning as we're moving forward.

You just go ahead and click Register when you get to that sign in page, and it will take you right to where you need to go. You don't need to fill in any of that information.

Next, we have muted all of you to minimize noise. We are going to use the chat box today rather than the QA box. So you'll notice that the chat box is live. So if you have any questions for the presenters that you'd like us to address or anything that you want to pass on to the presenters, go ahead and use that chat box down at the bottom of your screen. And use it for any comments or questions you might have.

In addition, throughout the webinar the chat box will-- we will add links to a wide variety of resources that are available. So for example, the study that we're going to be referencing throughout this webinar. We will provide a link to that study in that chat box. So pay attention to that chat box for any resources-- links to any of the resources that we reference. So we'll be using that chat box throughout. Use that for any questions that you might have.

So just a little bit of background on REL Central and who we are and why we're talking to you today. REL Central is one of the regional education laboratories that are funded by the Institute for Education Sciences at the US Department of Education. And REL Central serves a seven-state region, including Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming.

And our job is to do, is to conduct applied research and provide technical support around research and the use of data to inform decision making within these seven states. The work that we're going to talk about today was done with one of our states up in North Dakota, Bismarck High Schools-- or excuse me, Legacy High School in Bismarck, North Dakota specifically.

All of our work as REL is done through research partnerships. And research partnerships are-- the goal of a research partnership is to make sure that the work that we're doing is being provided-- is being done in the service of the people of our stakeholders in each one of these states.

And so the North Dakota Innovative Schools Research Partnership is the one-- is the group of researchers and practitioners in North Dakota that are working together to conduct research and technical assistance around the implementation of innovative practices in North Dakota.

One thing I did forget to mention, there will be a recorded-- this webinar is being recorded. The link will be available on the REL Central website in probably two or three weeks. It gives us a little bit of time to put it all together and get the video together. But we are recording it and the link will be available later on.

So who are we? My name is David Yanoski. I am a researcher at REL Central. And today, we're going to be joined by two other researchers, senior researchers, excuse me, at REL Central, Marc Brodersen, and Jeanette Joyce. They'll be coming on to talk to more specifically about the Legacy High School study.

We also are going to be joined by a couple content experts, Suzanne Hiller from Hood College in Maryland, and Tom Schmidt, the principal of Legacy High School in Bismarck, North Dakota. And I will be introducing them in a little bit more depth as we go on.

All right. So what are we trying to accomplish today? Really, two things. One, we want you to be able to walk away with an understanding of student agency, why it's important, to try to build within your schools and within your students, and then some strategies that you can use to try to build student agency.

And then we're going to share the results of a study that REL Central conducted in partnership with Legacy High School about the strategies that they are trying to use within their school to increase student agency. More specifically, the use of flexible time built into the schedule, allowing students to have some voice and choice in how they use their time to support themselves academically.

And so we'll identify some lessons that we get from those efforts. And then finally share some evidence-based strategies to develop student agency.

So we're going to go ahead and launch a quick poll right now. We just want to get a sense of who our audience is. So if you just go ahead and indicate what your role is within the education system, I'll give you about a minute to do that.

If we can go ahead and take a look at the results of our poll. So we have a selection of SEA and school staff, a greater number of researchers than I expected, which is interesting. And so hopefully we'll be able to share some of those findings in a way that makes some sense to you.

All right. So now I'd like to go ahead and introduce Dr. Suzanne Hiller. Suzanne is an assistant professor at Hood College Frederick's-- in Frederick, Maryland, excuse me. She is also affiliated with George Mason University and Wingate University, and the Smithsonian National Museum of Natural History.

She is a researcher and writer, primarily focusing on STEM, but with a large focus on STEM careers, but most importantly for our purposes today, on student self-regulation and achievement. So welcome, Suzanne. We're excited to have you here today.

SUZANNE HILLER: Thank you.

DAVID YANOSKI: So I guess my first question for you is why is student agency important? Why should we care about building student agency within our students?

SUZANNE HILLER: Well, that's a great question, and we can think of it in even broader terms to ask, why is it that some students aren't learning what they should? This is a question that teachers are concerned about worldwide. They want to encourage students to be interested in learning, and also to optimize performance.

And the way that teachers go about doing that depends on the context. For instance, Teacher A might have several students face to face and other students online, and they may be very concerned about how to encourage dialogue and collaboration.

That's very different from Teacher B, who may have a very large class with many diverse learning needs. He could have gifted and talented students, special education, ELL, all together, and the teacher may wonder how to meet all of these needs.

Or Teacher C might be, if we look at the next slide, that teacher might be concerned with how to address student needs and motivate high and low achieving students. So all of these teachers are interested in motivating children and creating high levels of achievement.

If we look at this quote, "It's not about the pieces, but how they work together," that quote is from the fashion design industry. But it's very relevant to our discussion today, because factors in the classroom do not operate in isolation. They're all integrated. And so student agency is not a sole function of the classroom, nor is motivation or achievement.

So if we look at the next slide and we think about what is student agency, this is when an individual accepts responsibility and ownership for learning. And it's very much tied to self-regulation. So self-regulation is when a student sets goals, makes plans, select strategies-- if we could go back --selects strategies, and then reflects on their learning.

And self-regulation, motivation, and achievement are intertwined. In fact, they can't really be separated. And this is great news, because if you have a student who is not motivated, if you can get them to self-regulate, they will inherently become more motivated and their achievement will increase.

So there are many lenses for self-regulation, which is our next slide. I'm using one developed by Barry Zimmerman. This is the cyclical self-regulatory feedback loop model. And the purpose of this model is to build student agency through self-regulation.

So there are three phases. There's the forethought phase, the performance phase, and the self-reflection phase. And each phase is subdivided into two sub-processes. In the forethought phase, the students will set goals and select strategies to reach those goals. And in this phase, self-motivational beliefs are very important, and they're important to the Legacy High School context, particularly self-efficacy, which is a person's beliefs about their capabilities. And it's in orange, because I'm going to refer to it later.

And then in the performance phase, the student will try the strategy and sort of monitor how things are going. And we're going to refer to a self-regulatory strategy called calibration later. And then the third phase is self-reflection, where the learner reflects on the strategies.

Now, an important note here is that students who have a weak self-efficacy have a very hard time reflecting on strategies in the self-reflection phase. They will attribute setbacks to outside factors like genetic predisposition. So if you're an educator, if you ever heard a student say, oh, nobody in my family's ever been good at math, they likely have low self-efficacy.

They may also blame factors like luck or even teacher ineffectiveness. And we want proactive students to be focused on self-regulatory strategies so that they can fine tune the strategies they used, and then move back through this loop.

Now, I myself had a situation as a classroom teacher about 12 years ago, where I had a dilemma kind of like Teacher C. I had the high achieving and low achieving students. I was teaching physical science. And my high achieving students, and there were a lot of them, were very advanced. They were several years ahead in math and reading.

And then my low achieving students were on grade level or below grade level. And I wanted to create an assignment that was very rigorous, but I didn't want to put parameters on my low performing students, because we know as educators that setting high expectations is very important. Children tend to rise to the occasion if you set high expectations.

So I solved this dilemma by integrating student agency and self-regulation within an assignment. So if we could go to the next slide. So all of the students were given a project on sound and light. But I created a sheet for them to use as they were working. And there were guiding questions. And you can see that this is representative of Zimmerman's cyclical self-regulatory feedback loop model.

And so I knew a lot of the relationship between self-regulation, achievement, and motivation from research. But as a teacher, I was quite shocked. Because my lower performing students kept running in at recess to show me what they had created. They wanted me to review their writing, they were showing me their materials.

They were so excited about this assignment. And I was so pleased that by inserting a relatively easy strategy, I was able to motivate students and have high quality for all students, not just the high achievers. So if we could go to the next slide.

So in terms of how we support the development of self-regulation, I want to talk about two key terms, so if we could go to the next slide. So self-efficacy, I mentioned before. And this is a person's beliefs about their capabilities, and it's domain specific. So someone can have a really high self-efficacy for reading and low self-efficacy for math. And it's also very strongly correlated with achievement.

There are four sources of self-efficacy according to Bandura. The first is mastery experiences. This is where an individual has multiple opportunities to practice a skill. There's adult influences. This could be signals from parents, teachers, coaches. Peer influence, which is very important in the Legacy High School context, are the cues from classmates and peers.

Now, if these three sources are positive and high, you should have minimal negative physiological states like anxiety. An example I could give, you several years ago, I was doing a research study, and I took 8th grade students to the beach to measure horseshoe crabs with a professional scientist. And we had to go overnight, because horseshoe crabs come out at night.

Well, before we went on the trip, some of the male students were really active. They're kind of running around and throwing things. The teacher was a little concerned. And I thought, oh, 14-year-old boys. I thought that was to be expected. And we took pre-imposed measures of sources of self-efficacy. And we were surprised to find out that prior to the intervention, some of the male students were having extreme anxiety, which might explain why they were running around.

But when they were at the beach, they had multiple chances to measure horseshoe crabs, and they had field experts helping them. So they had the adult influence. And they were in collaborative teams, so they had positive cues from their peers. And after the time with the scientists on the beach, these students no longer had severe anxiety. So that's how these sources work.

I have one more term that I want to explain on the next slide, which is relevant to our discussion, and that's calibration. So calibration is when a person makes a judgment about their performance in comparison to a prescribed standard, and low performing students tend to have really need calibration. They think the strategies they selected are fine.

So if you're an educator, if you ever heard a student say, well, I studied, I thought I knew it, right? Well, they may have weak calibration. And so there are ways for teachers to help students have a better sense of what the requirements are, so that they can fine tune their strategies and be successful.

So in summary, there's a strong relationship between self-regulation, motivation, and achievement. Great news. We can integrate self-regulatory strategies pretty easily to develop student agency and increase motivation and achievement. And two terms that are going to be relevant to our discussion later are calibration and self-efficacy.

DAVID YANOSKI: Great. Thanks, Suzanne. This was designed as just an overview of self-regulation and student agency. If there are any questions that we can ask Suzanne at this point in time, you're welcome to go ahead and put those in the chat box. So I'll give you just a chance to think about if there are any questions that you want to address at this point in time.

Well, it looks like at this point in time, Suzanne, we don't have any questions. But we will be bringing Suzanne back a little bit later to talk more specifically about how these ideas apply to legacy and some more really concrete strategies for how we can improve student agency. So we actually do have a question come in. I'm going to go ahead and pass it on, Suzanne.

So what about student voice? Students being able to explain or being able to share their own thoughts or ideas. How does that help support student efficacy?

SUZANNE HILLER: Well, I think that's a wonderful strategy, because if they're having options in their learning, that permits self-motivational beliefs. It's one of the other really important motivational beliefs is interest. So when you give students voice, they have more opportunities to develop their self-motivational beliefs. And again, we need those beliefs to be really strong, because when they are reflecting on their performance later on, they'll be likely to focus on strategies, instead of seeing it as like a character flaw.

Also, it's a great way to get feedback from the adults and the other students, which can be extremely helpful, and can also bolster self-efficacy, as well as master experiences and quality of work. And then finally, it's a way for students to have a voice in their reflection, and also to select activities they want to use, where there's a lot of ideas like universal design for learning, where students have opportunities to use their voice to develop activities and so forth, so I think that's a very important part of self-regulation.

DAVID YANOSKI: We have one more question that came in. And could you go ahead and just, so revisit that definition of student agency. I think the definition sort of got lost as we moved forward. So what is student agency?

SUZANNE HILLER: The student agency is when students are actively involved in their learning. They take ownership for learning. And they're responsible for the learning. So they're not expecting to wait and be given information and just sort of absorb information. They're very proactive in learning. And that's where self-regulation comes into play, because they set their own goals, and then they select strategies to reach their goals. And that as an individual, that student agency-- they're heavily involved in steering their learning outcomes.

DAVID YANOSKI: Great, Suzanne. Thank you. And we're going to invite you back to in a little bit to share some more ideas. Thank you very much for what you've shared so far. So Legacy High School in Bismarck, North Dakota took this idea of student agency and had an

opportunity-- Legacy is a relatively new high school --and had a chance to really think through and design their school, and wanted to design their school around the idea of student agency.

And so now I'd like to bring in Tom Schmidt. Tom Schmidt is the principal of Legacy High School in Bismarck, North Dakota, and he's going to talk a little bit about what Legacy looks like and how it works.

TOM SCHMIDT: Thank you, Dave. Like Dave said, my name is Tom Schmidt. I'm principal of Legacy High School in Bismarck. Our situation is a little unique, because we were able to build a new high school, and at the same time design what our instruction was going to look like around that building model.

So we were created as a school in 2013. We moved into our building in 2015. And at that time, what we've noticed is we visit with our local universities, our colleges asked what is the number one reason students aren't successful? And never once did they come back and say it was due to academics.

We talked to local employers. We talked to our military personnel. We asked the same question. And again, it was not due to academics. What they came back and said was the things that Suzanne just mentioned. Student agency, self-efficacy, self-advocacy. Those things were missing.

And we started looking at this, and we figured out, you know what, we keep kids under lock and key for 13 years. They graduate in May or June. We turn them loose on a college campus sometimes hundreds or thousands of miles away, and we wonder why they're not successful.

We haven't created the environment for them to be self-advocates. We haven't created the environment to go ahead and have them advocate for themselves, have the student agency. So we had to create that learning environment. Besides the academic side, how could we create an environment that would promote those ideals and those four C's that you're seeing on your screen.

So what we did is built a new building design around this. We changed our schedule. We created learning environments for students to go ahead and learn and advocate for those skill sets. So if you flip to the next screen, please.

This is one of our hallways, looking through our garage door. This is pre-COVID, so these pictures were taken last year, and not this spring or this fall. This was last fall, even before the pandemic had hit. So you're seeing students in the hallways using physical spacing. If you go on the next slide, please.

Here I see one of our Saber Centers, where students are advocating for themselves and engaged. So how can we create this environment to make this happen? We had to get rid of the time element. And we all know that in learning that time is the constant and learning is a variable, and we flip-flopped that. We wanted to make learning the constant and time the variable.

So we had to change our way of thinking with our schedule. If you see on your screen, now on the top, you're to see mods 1 through 22. Each one of those mods represents a 20-minute period chunk of time. So you're going to see Spanish 1, for example, Monday is mods 1, 2, and 3. That class meets on Mondays for 60 minutes.

That class then meets again on Thursday for 80 minutes, and Friday for 80 minutes. So what you're seeing on your screen now emulates what most of us experience in a college schedule. Now, most of us in college didn't have seven or eight classes. We had three or four.

But we're trying to create that learning environment where students can go ahead and have that schedule that would look like to go ahead and create that aspect of a college environment. What we also know is not every class needs to meet five days a week. And not every class needs to meet 50 minutes a day.

We have a biology class that might be better suited for 80 minutes sections. We have a lab-based class-- excuse me, a non-lab-based class that may be better for 40 to 60 minute sections. But for the last hundreds of years, we've been locked in a schedule where everybody meets 50-minute period chunks of time and move from class to class. And those classes then have to fit in that chunk of time, versus design a chunk of time around those classes.

So [INAUDIBLE] goes ahead and allows this to happen. So you're going to see a difference between a freshman schedule and a senior schedule. And if you notice, a freshman schedule had a lot more spaces that were filled. If you go back to the freshmen center for a quick second, if you notice, on Monday that freshman has nothing on mod 10, and has nothing mods 13 and 14.

So that mod 13 or 14 may be where that student goes ahead and gets lunch. Our cafeteria is open all day. Students eat when they're hungry. We don't have a set lunch time that is established. So we don't have this mad rush of 1,300 students.

We have a population of about 1,340 students. We don't have this mad rush of students who come to the cafeteria all at once, because everybody has a white space on their schedule, which is going to be different for every student. So you choose when to go ahead and eat.

Other things that can happen during those white spaces. We have Saber Centers throughout the building. So if you look on Tuesday, this student has 60 minutes for free. They may be struggling in physical science. They can go to the STEM Saber Center where there's going to be a physical science or math teacher in there to go and help them with their physical science assignments. They may be studying for an exam. They may be need to finish an art project.

They want to go ahead and get-- work on their All State Wind Ensemble solo. So they can go ahead and do those things during that time. We don't schedule weights. So I have a student who's involved in a weight program. I've got 60 minutes free on Tuesday. I can go to weights during that 60 minutes there, or I could wait and go at the end of the day at mods 19 through 22.

I have those times to go ahead and advocate for myself. As long as I get my workout in during those times, I get my workout taken care of. If you flip to a senior schedule, you're going to see a lot more free space on their day. What do students do during that time?

Well, I'm going to look at Friday, for example, because that's where we're at. If you look at the student right now in mods 12 through 16, they can leave the building. They can go do internships. They can do job shadowings. Some of our students go to our feeder elementary schools and they tutor in math and reading. That time is their time.

So students are scheduled in x number of minutes per week for a class. But then they have this extra white space on here. We call this flex time. They can use that flex time for other courses, meaning I'm looking at Dave on my screen right now. Dave's a very strong math student. And I'd be a struggling math student. We are both scheduled in math for 240 minutes per week.

I might need more than that. So I have this flex time built in my schedule. I can go to the Saber Center with the math teacher to get more help. So it's a non-structured time, but it's still time available for me to go ahead and get that support.

Or what can happen is if you look at on Monday, if you look at AP statistics. This is an 80-minute class that day, meets for four months. We went through a concept yesterday. Dave grabbed it. He's good to go. I wasn't. The teacher can flex the rest of the class out. So 40 minutes into the class or 60 minutes into the class, she can flex students out, so they're dismissed.

A student like myself who needs more help with this, I stay back. The teacher gives me one-on-one assistance in that class. Where does Dave go when he gets dismissed from that time? That's up to Dave. He might need biology help. Or a senior term paper help. He can use that 40 minutes now and go to the Saber Center to get that help in those subjects.

He can go get some lunch. If he has more than 40 minutes time, he can leave the building. He can go work on his art project. He can get his workout in. Those minutes are his minutes that he gets to use where he needs to see those minutes fit. They're unique to him and to his learning.

So as we've gone through this, if you looked at that freshman schedule, again, you're going to see less white space for flex time, because freshmen don't have the skill set yet to go ahead and advocate for themselves that number of minutes per day not being in class. As we moved up in our grade levels, we've increased the number of mods that students have free to go ahead and learn those self-advocacy skills.

DAVID YANOSKI: Thanks, Tom. So now what I want to do is go ahead and turn to the study that REL Central conducted in partnership with Legacy High School. Legacy was interested in learning more about how students were using their flexible time within their individual schedules.

And so I'm going to turn this over to Marc Brodersen of REL Central, and Jeanette Joyce of REL Central, to share a little bit about the findings from this particular study.

JEANNETTE JOYCE: Yes, great. So as David indicated, we partnered for the 2018-19 school year with Legacy High School to study how students were using their flex time. So before we can even begin to say whether there is an impact of flex time on those aspects of student agency that Suzanne and David were talking about, we had to know what are students doing with their flex time.

So to do that-- well, back a slide, please --we designed a study, and part of that study was to create a student time log. We used the Survey Monkey platform, and students could access it on their phones, tablets, or school computers to log what they were doing during their flex time.

And one of the things that we wanted to look at were students who were struggling academically. Were they using any of their flex time to access those instructional supports that Tom described in terms of going to a Saber Center, or meeting with a teacher? The study report is linked here, and I believe will appear in the chat. And it has a paper and pencil version of the time log in the appendix, if you want to take a look at it. And now we can go ahead and move forward.

So in the time log, we have students complete the time log three times a week for five different weeks over the course of the school year. And they would do this in class. And in one of their later period classes. So they were reporting on what they had done, and not having to guess how they would be using the time log, the flex time.

The first question we asked them was who had control of your flex time? Did you decide how to use it, or did a teacher ask you to use your flex time in a certain way? And then if you determined how to use your time, did you decide to use it for an academic purpose, or a non-academic purpose?

If you said it was a non-academic purpose, did you remain on campus, or did you go off campus? And then if it was an academic purpose, we asked them to describe were they in a Saber Center, meeting with a teacher, working on coursework in one of those spaces that Tom showed you that's designed for students to do coursework, practicing art or music, engaging in extracurricular activities, or seeking guidance and counseling?

We also had an other category where they could write in something else that they were doing. One other question we asked them if they said they were working academically is what subject area were they working in? And we can go ahead and move to the next slide.

So if you click on that link and go to the report, you'll find the 15-page full report, and then you'll find a 4-page sort of executive summary brief, as well as a one-pager. We Additionally have an infographic that's separate from the reports that's now in the chat that's more visual, and those appendices which include the time log.

One of the ways we organize the findings in the full report, and we'll discuss here, is across all students, how are they using their flex time? Then we zeroed in for certain demographic groups. And then we also looked at three academic achievement levels-- struggling students, students who are meeting expectations, and students who are exceeding expectations.

So let's go ahead and take a look overall how students spent most of their flex time. It turns out for this cohort, 2018-19, they were mostly engaged in non-academic activities on campus. And I want to tell you two things about this pie chart that we're looking at now.

This is not for a given student on a given day. So we're not saying if a student had 100 minutes, they were spending three minutes doing something that a teacher told them to, and 33 minutes off campus. This is averaged across all students across all days. So this is on average how it shapes up.

The other thing I want to remind you of that Tom brought up is there's no lunch period at Legacy High School. So we do expect to see some non-academic time. We expect them to at least be eating their lunch during that time. So we don't expect that to be 0. And we can go on.

So the majority of their academic time, when students were deciding to use their flex time for academics, they were working on coursework outside of those Saber Centers or Learning Centers. They were using those spaces that were designed for them to work collaboratively or individually to get work done.

When the teacher had control of their time or took control over their time, and this was in very few cases-- 61 students out of our 495 had any of their time determined by the teacher. When the teacher did take control, they were sending students to the Learning Center about half the time. Other activities they were having them do was meet one on one, or possibly make up a test or an assignment. And, interestingly enough, a lot of the teacher determined time was spent on math or science.

So we talked about those students and those achievement levels. And about 10% of our students were identified as struggling in math and reading. For those students, as we might expect, teachers were taking more control of their flex time.

And we noticed that the struggling students spent more of their academic flex time on this other category. And even though they had indicated that it was an academic purpose, we found that when we asked them to elaborate, write in what that other was, either they left it blank, or they wrote in things that were clearly not academic, such as riding the bus, or talking with my friends.

They also spent less time working on coursework outside of the Learning Centers than their cohort companions, who were either meeting or exceeding expectations. So at this point-- yes, go ahead, Tom [INAUDIBLE].

DAVID YANOSKI: Thanks, Jeanette. I'm going to bring Tom Schmidt back in to go ahead and talk a little bit about how Legacy interpreted these findings, and what they're doing with these.

TOM SCHMIDT: And what we-- thank you, Dave. So what we noticed is we needed a baseline. We needed to see where our kids were at. And this was new to them. And these learning behaviors hadn't been taught yet. So how do we teach these behaviors? And what we noticed is there is a stigma behind going to the Learning Centers.

Students would be more likely to work in the hallways, more likely to work in the library, or the commons area than they were to go to the Saber Center, because there was that stigma attached with going there, that oops, I need help. So how do we go ahead and change, one, the perception of that? And two, how do we get students to learn the skill set to advocate for themselves and all the teachers going?

So we're working with REL Central to go ahead and look at this data. How do we go ahead and create that learning environment differently? So right now, through David, Jeannette, Matt, we are working-- and Marc --we are working on going ahead and educating our staff on how do we create those environments differently. So we're breaking down the data. We're looking at the root causes of it.

We're gathering fixes for those causes. And how do we go ahead and make sure our data's changed to be where we want to have students in that self-advocacy piece and self-efficacy? Because right now, it is deemed as, one, they're voluntarily not going, or two, they're going if the teacher asks them to go.

So teachers were hesitant in asking students to go, because we wanted to go ahead and have them advocate for themselves and do this work. So now we need to figure out how do we teach that skill set to our students, so they take advantage of the opportunities, in which, one, the building, and two, the schedule provide for them.

DAVID YANOSKI: Great, Tom. So this is an opportunity, if you have any questions about the study itself, or questions about what Legacy High School is doing, I would love to-- I would love to go ahead and pass that on to our presenters. So our first question is coming up. I'm going to address this one actually to Tom.

Can you talk a little bit, what are the skill sets that you think your students need to have to be successful in your school, to be active in having agency in their own learning?

TOM SCHMIDT: One, students need to understand who they are. They need to understand their learning style. So maybe we do have to teach that, so students can understand that piece. And two, we have to instill that pride and then self-efficacy to go ahead and have them advocate for themselves, but it's also a maturation thing. We'd rather have them learn the skill set here before they go off to college and spend \$15,000, \$20,000 a year trying to figure that stuff out themselves.

DAVID YANOSKI: Great. And so another question has come in. Have you had the opportunity to work at all with your middle schools to try to sort of preload what it's going to be like up at Legacy when they [INAUDIBLE].

TOM SCHMIDT: Yes, so our school district is divided by a feeder system. So we have three high schools in town. We have three middle schools in town. They feed into each other. So our middle school has adopted some of the same kind of thing. They've done some building redesign. And they changed their schedule, in a more elementary basis than what ours is, to go ahead and

have those students have some flex time during their day, and have some necessary white space, so they can go ahead and try to start learning those baby steps them way into where we're at now.

Our big mistake we made our very first step into this is we turned our freshmen loose. And a freshman had as much flex time as our seniors did. And obviously, we can't do that. That was a dumb mistake. But you live and learn, right? So we're going back with the eighth grade, too, of slowly back channeling to go ahead and open that free space up more and more per grade level.

DAVID YANOSKI: OK, great. Looks like I got one other question in here, Tom. So I'm going to hold you just a second longer. Do you feel that what you're doing is allowing all students to feel safe in your space? So for example, do you think that by giving agency to students, you are increasing a sense of inclusion and equity for all of your students?

TOM SCHMIDT: That's been the biggest piece. And what we noticed is in the traditional schedule, buses would drop students off at 8:00. Classes start at 8:10. Class gets out at 3:30. Buses are there by 3:40 picking student's up. And those students never had access to their teachers. And teachers never had access to those students.

Now our students who come from socioeconomic backgrounds that can't have access to the teachers get that during their day. And those teachers can then go ahead and work with those students and grab those students for all those opportunities. Internships as well. Private music lessons as well. We have amazing music folks in our building, and kids didn't have access to those private lessons, while the haves did, and the have-nots didn't.

And now those students have access to those folks as well. And that just doesn't go for music. That goes for all of our curriculum activities. So it's leveled the playing field a lot economically speaking.

DAVID YANOSKI: So do you think, Tom, and I know this is where we started our whole conversation about conducting a study with you. Do you think that there's been an impact so far on student performance, both academically and social emotionally?

TOM SCHMIDT: Yeah, we're very proud of our graduation rate. We're in four graduating classes now. We've had one non-grad. We're very proud of that fact. And it was because we can grab those kids get that piece. Social emotional, yes. We've done all sorts of different things that we can go ahead. The schedule provides us to have an advisory program.

So an advisory for all four grade levels, which we couldn't provide before, but we were able to find spots in the schedule to go ahead and do this. And we started with just freshmen. Then we noticed that, you know what, so we deal with freshmen. Our freshmen aren't behavior problems anymore. Now our sophomores were.

So we created a voucher program for all four grade levels, in which we do things like a why try program and resiliency breakthrough. We do things like that in those programs to go ahead and create those skills. We also bring a clinician into our building once a week. Students have time in

their schedule during their flex time or their white space, as you would see, where they can meet with licensed health professionals to go ahead and get some social emotional help if need be.

So they have all sorts of different opportunities. The thing I want people to think about is think of all the things that frustrate you as an educator. And the number one cause of those frustrations is really going to be time and scheduling. And how can you eliminate that? You change your schedule up, and all of a sudden, all those things that you couldn't do before, you now find, oh shoot, we can do those things now, because that's not the factor anymore.

And time is always that factor. And so since we've started doing that, it's opening doors to new and new things. And we're not discovering them as administrators. Kids and staff are the ones discovering those things. And they're pushing for them, which is the really cool part about it.

DAVID YANOSKI: Great, thank you very much, Tom. I want to invite Suzanne back in to go ahead and talk a little bit about how what Legacy is doing fits with the research on student agency, and then also to talk a little bit about some strategies that schools can use to improve student agency.

SUZANNE HILLER: Great, well thank you so much. If we can go to the next slide. So I want to begin by looking at the findings from REL Central. So those are in bold italics. And so this comes from the report. So it says students may need more support in using flex time for personalized learning.

While there is some evidence that integrating self-regulatory strategies-- remember, the point of that is to develop student agency. If you integrate that with personalized learning, that it is beneficial for students. However, most students do not really have access to that type of integration in their school structure. And that's particularly true for children as they get older and in secondary school.

Another finding was that leaders at Legacy High School in the Bismarck School District are considering training teachers to develop self-regulatory functioning and positive choice. And yes, there is a very large research background in self-regulation. It actually spans 40 years of empirical research across subject domains, grade levels, demographic factors, cultural differences. So there's a lot of support for integrating self-regulation to increase mastery, learning, and achievement.

And then students who are struggling may benefit from targeted support. And I might suggest that one way to do that would be to target calibration. And what I mean by that is teachers could give students a task and ask them to rate how they, did and then the teachers could rate how they performed. And if there's a discrepancy, then the teachers can model how the way they tackled the task did not quite meet the standards. And this is very helpful to struggling students. And there's evidence that that is a good strategy to do in small group settings.

So next, I want to look at how the Legacy High School flex time aligns with what we know about research. And I'm going to refer to the sources of self-efficacy again. Because remember,

in order for students to have student agency, in order to steer their learning through self-regulatory processes, they need to have a really strong foundation on self-efficacy.

And so if we look at this, I'm using the design of Legacy High School. So terms like mastery experiences, if we could go to the next-- right. So the way the school is structured, it's designed for flexibility to help students master academic content. That would be reflective of mastery experiences.

In terms of adult influence, the way the school is designed, there's this additional mod so that teachers can call students back when they need support. So that would be reflective of adult influence. And then for peer influence, well, it's a very flexible schedule, so students can collaborate. And they can also relax with friends.

So if these three sources are positive and high, then remember, we can have minimal negative physiological states like anxiety. Well, next I want to look at the findings of the REL Central report. So first for mastery, when we look at the report, the findings said that students on average were using the flex time 19% for academic activity. So again, remember we want students to have many experiences where they can practice skills.

In terms of adult influence, when the teacher determined-- when it was the teacher determined flex time, 42% of the time the students went to learning centers. And then the 28% that said other academic activities, it's kind of unclear here how much time really students had with one-on-one practice with teachers or in small group settings.

And then for peer influence, 78% of the flex time was used for talking with friends, going to lunch off campus. So if you look across at the mastery experiences and pure influence experiences, there's a little bit of an imbalance. Of course, we want to remember that part of that time, it sounds like is allocated for lunch. But there's a bit of an imbalance. And I should mention that of these four sources of self-efficacy, the one with the greatest influence and overall self-efficacy is mastery experiences, as well as achievement levels.

So we want to consider that we have a slight imbalance here between those two sources. And then this statement caught my attention. It says students who are struggling in reading are using less of their student determined flex time to use the English language arts component.

And so if we go to the next slide, I want to mention why that caught my attention. So if we look at that quote again, that caught my attention because I wondered if this could be symptomatic of work avoidance. And work avoidance is a hallmark of anxiety. So that's something to be aware of.

There are a couple things that also caught my attention in the report. So if we go to the next slide. So when students decided how they're going to use their learning centers, they tended to focus on math and science. And when teachers had teacher determined flex time, they tended to give students activities related to math and science.

And it made me wonder if the students and teachers at Legacy High School have a high value for math and science. And then I wondered why. I wondered is that because of the job market protection? Could that be because of associations with parents and adults in the community?

So I pulled the career projections for North Dakota. And you'll notice that quite a lot of them, you would need a good background in math and science. And I thought this is a good thing to note, something that could be capitalized on in the future.

So my recommendations for self-efficacy, for building self-efficacy. Again, students need to have strong self-efficacy to promote student agency, so that they can steer their learning through self-regulatory processes. We want to make sure we have sort of a balance. Perhaps finding ways to have more mastery experiences and a little bit less of the peer influence experiences.

There may be some students who are having anxiety. Sometimes it's hard to tell. It's like I showed you in my example of the research study at the beach. I didn't know that the boys were having anxiety until after the fact. You know, sometimes it's hard to tell in a school context.

But for these students who may be having anxiety, perhaps one on one support from teachers would be very helpful, because that brings in the adult influence. I would recommend integrating self-regulation within classrooms and part of flex time. And for struggling students, teachers may want to consider using calibration strategies to show them how they can fine tune their strategies.

And then finally, it may be helpful to integrate self-regulatory processes in authentic real world applications. And one that came to my mind, I was doing a research study with naturalists a few years back. And one of the naturalists had told me that they had helped a group of students in an urban area design and build a boardwalk in a nature preserve.

And I thought an activity like that might work really well at Legacy High School, because the students would be engaged in something related to math and science. They'd be building mastery experiences. But there would also be lots of opportunities for collaborating and interacting with their peers.

So I had a few other thoughts that came to mind, just things to ponder. We've talked about individual student agency, how an individual takes ownership and responsibility for learning. But sometimes students will work, or individuals or work in groups. They have a collective goal. They have a collective way of functioning. And they have collective self-efficacy.

And I wondered if sometimes if there is groups of students that may be working collectively to under-perform. In other words, maybe not trying very hard on formative assessments. Maybe meeting minimal requirements. When that happens, it's really hard for teachers to gauge what students actually know. So I wondered if this could be possibly a factor.

And then another what is the impact of an imbalance between the role of a teacher and individual student responsibility. So we know what happens if students have agency. But what if they don't? They're not particularly motivated. They're not particularly successful. Teachers who want their

students to do well may try to compensate by giving up their lunch time, staying after school, creating extra study guides. It takes a lot of energy and work.

We want to make sure there's a balance, because just as students need time to reflect, so do teachers. So we definitely want to preserve their instructional planning time for the good of the whole group. And we don't want it overly diverted for individuals who do not have a student agency.

DAVID YANOSKI: Thanks, Suzanne. I have a couple of questions for you. But before I do that, I just want to invite our audience to go ahead and put any questions that you have for any of our presenters into the chat box, and we'll go ahead and answer as many of them as we can in the time we have remaining. My first question for you, Suzanne, goes back to, you talked about mastery experiences and adult influences and peer influences.

It would seem to me, based on my experience as a teacher, that those peer influences are going to be really, really incredibly strong on many of our kiddos. Is there a way to minimize those peer influences and maximize those adult and mastery influences? Or does that happen naturally?

SUZANNE HILLER: Well, at this level, you know, they say 10 to 25 now is considered adolescence according to [INAUDIBLE]. So because students are more dependent on their families for a longer period than they used to be. And so peer influences are just huge.

And I always think of it as like the elephant in the room. Like there is no way around it. You do have to find ways for students to interact, and that's going to happen. In terms of the adult influences, again, possibly finding ways to regroup students without pulling the teacher's energies to a point that they can't actually do a really solid job planning.

And so I think that it could be in terms of restructuring. And again, that example I gave of building the boardwalk for the nature preserve. That's something that I think students would get very excited about. And so they'd have those mastery experiences, but they wouldn't be stripped of their interactions with their peers.

DAVID YANOSKI: OK, great. Tom, if you're still with us, I have a question that's come up for you.

TOM SCHMIDT: Yep, I'm here.

DAVID YANOSKI: So can you talk a little bit about how did teachers handle the adoption of this schedule? What kind of professional learning did you offer? And how was the change received?

TOM SCHMIDT: Teachers draw this. So the year before we implemented the schedule, we came to our staff and asked them one simple question. If you were to think about you and only you, what was your schedule look like in terms of minutes per day, minutes per week, large chunks of time, small chunks of time. And what they described was flex mod.

Teachers came back and said, you know what, as a science teacher, I need longer time for lab days, smaller time for small lecture days. One thing we didn't talk about on here is we do large group. So all four biology teachers in the auditorium at one time once a week with all 320 biology students. And one teacher delivers a lecture that day with a lab demonstration. Not every student receives this.

So instead of spending three or four teachers doing this five times a day, we did it once and every student has it. Now they can go ahead and use their time more effectively for other things. So teachers described what flex mod was. They just didn't know what flex mod was.

They designed the schedule. They didn't know there was something out there like this already. So they came back to-- they came to us with this model, this concept. We came back to them with the design, say, hey, this is flex mod. What do you think? And we looked like geniuses, because we listened to their solutions. That became a solution for their problem.

So they drove this. We asked our students the same question. I went and visited with the majority of our parents-- and when I say majority, I went to the majority of those allowed parents. The mom that sits at the soccer game, the dad who plays golf with his buddies. I went to their place of employment and talked to them, and said, when your student walks out the doors of the high school, what skill set do you want them to have?

They described this, went back and said, what do you think I'm going to schedule this way. And they were our forces driving behind us. So we had all the support before we decided this is what we were going to go ahead and do. So we spent a year planning then.

And then the following year, yes, it was difficult at first. So we did a 90-day feedback board in each one of our work rooms, and said, we're going to try this for 90 days. Put your problems on these boards. What's happening? What isn't working? What is working? That kind of deal. People started answering the questions for each other.

So Dave might come into work room and pose a question up there, or a frustration that he has teaching this model, and Marc would walk in an hour later and see this, and he's already solved this, and he would write underneath his solution to this. And then for our PD, what we did is we just sat back. We put all PD on hold for the year. All we were going to do is worry about flex mod.

So our first PD day, we just sat back and had departments share out what's going well, what isn't going well. Next department came up and shared theirs. And they solved each other's problems for each other. That was a big part of it. But what we had to do is have teachers shift from paradigm, right?

They had one foot in one paradigm of teaching, and they had another foot in this new paradigm. And we had to encourage them to take the leap of faith, leaving the old paradigm for the new. And once they did that they weren't trying to teach two different ways anymore, things took off.

DAVID YANOSKI: Do you think that what you did would work with smaller schools, smaller fewer teachers? Could you make this schedule work in a smaller school?

TOM SCHMIDT: We have five schools in our surrounding area, rural schools that have 80 students, grades 7th through 12th things, of that nature. Up to 400 students grades 7 through 12. And they've adopted this. And we worked with them to help them walk through the process. And they're doing it just as well. They're doing really well with it. So it's doing well in small schools.

Here's what I tell folks. You come see how we're doing it. You can't emulate the same model, because it's not going to work for you. Just like the schools that we've looked at doing, we can't emulate what they're doing. So [INAUDIBLE] going to work in your building.

If you want this to work, you'll find a million reasons to make it work. If your staff doesn't want it to work, they're going to find-- oh, it's not going to work because of this. It's not going to work because of this. If you want it to work, you'll say it's going to work because of this instead. So that mindset needs to be there as well.

But yes. Does it work for small schools? 100%. We've got a school, like I mentioned, 60 miles to the north of us. They implemented this year. They're doing really well. A school 200 miles to the east of us. They implement about three years ago, and they're doing really well with it as well. And they're much more small schools. So there's different things you need to do in terms of your staff and your student population. But they're easy hurdles to cross.

DAVID YANOSKI: Well, great. Thanks, Tom. And thank you, Suzanne. And thank you, Marc and Jeannette for sharing your experiences, the research, your expertise in this area. We really appreciate it. And I'm sure that the audience has appreciated it as well.

So just a couple of things to sort of wrap things up. We will make the recording available. It'll take us a couple of weeks to go ahead and get it finalized. And it'll be available on the REL Central website. We will send out an email to all registered participants to let you know that that recording is available.

We had a question about making the slides available as well. I do believe that is an option, that we could post those on the REL Central website. And all the resources, the study, the infographic, all of those things that we mentioned are also available on the REL Central website.

As you exit our webinar today, you will be sent to a web page with a request for you to fill out a feedback survey. We really highly value that information from you. We would really appreciate you taking two, three, four, up to five minutes to fill out that survey for us, and give us a little bit of feedback so that we can move forward and take it into consideration for our next webinar.

But again, thank you, everybody, for joining us today. Thank you to all of our presenters. And I hope everyone has a wonderful weekend and a wonderful Thanksgiving break.