

## **IP&T 371: PICRAT for Effective Technology Integration in Teaching Transcript**

[00:00:00] When new technologies are invented, they often provide many new ways of thinking and doing things.

[00:00:05] For example, how have smartphones changed the way we live and work, or tablets, or even the internet.

[00:00:11] However, one problem we have as humans is that, often, we can't imagine very well the new possibilities available from new technologies. So, instead, we use them just to do the same things we have always done before.

[00:00:23] Teachers struggle with this too. We often teach the way we were taught and struggled to think of how we could teach better based on the technologies we have, that our teachers did not have.

[00:00:34] Richard Culatta, former director of the Office of Educational Technology for the U.S. Department of Education, shared the following concern.

[00:00:42] Here's the issue. If we are not careful, if we are not super cautious about all the decisions we make in a very short amount of time, by the time the freshmen that are in this room have graduated, we will have a complete digital replica of the traditional practices that are not working today. And we will have everything that we have now. It will just be on a screen, instead of on paper, and it will be just as ineffective. And it will cost a whole lot of money and will be just as stuck as we will, and not have another ticket to play to be able to make a change.

[00:01:07] Our goal is to help you think critically about the technology you'll use in your classroom and to begin to see the potential technology has to transform and engage students in the learning experience in new ways.

- [00:01:19] To begin, we're going to show you a technology integration framework. Frameworks are tools we used to begin conversations. In this case, conversations about how we should use technology to improve student learning.
- [00:01:32] Let me introduce the RAT Model.
- [00:01:33] The first letter "R" represents "replacement." Replacement can mean the following: one, changes the appearance or dressing of our practices, but not the practice itself, making digital copies of traditional practices, recycling instruction; two, it doesn't affect teaching or learning practices and behaviors; three, can still be a useful use of technology, because it can increase access.
- [00:01:57] For example, a digital worksheet won't get lost or eaten by your dog, but it doesn't really impact or improve learning.
- [00:02:04] The "A" in RAT equals "amplifying." In other words, technology improves the efficiency of tasks or introduces new functions to original tasks.
- [00:02:13] The "T" in RAT equals "transforming." It introduces new activities and learning that are impossible without technology. Take away the technology, take away the learning too.
- [00:02:24] Next in our PICRAT model is the PIC portion. "P" equals "passive." In other words, students are observers, bystanders in their learning. The "I" equals "interactive." Students engage in material in an interactive way. They are active learners. The "C" equals "creative." Students are creating materials themselves. They are creative learners instead of passive or active ones.
- [00:02:47] This is the apex of student engagement and students often learn deeper when they have to create something using the content.
- [00:02:55] By combining PIC and RAT together, we create a matrix of the many different ways. Technology can influence teaching and learning.

- [00:03:00] You could use a technology that replaces a face-to-face conversation and where students are passive learners, such as a video lecture, or where they get to interact back through technology, such as a video-conversation or where they get to learn by creating their own videos in a way that completely transforms the way you typically teach.
- [00:03:18] The PICRAT model is a great tool for helping you to think about your teaching and how you use technology in the classroom.
- [00:03:25] None of the squares on the matrix is necessarily a bad way to teach.
- [00:03:29] Sometimes, it's good to be a passive learner, for example, and listen to others, such as in this video. But, a good teacher will continually evaluate their practice and think how they can improve.
- [00:03:39] Using the PICRAT model, it can help you think about what kinds of ways you could use technology. That will help students be more active and creative as learners in ways that transform your teaching to levels you hadn't considered before.
- [00:03:53] So, when you hear about a new technology, don't just ask what it can do for you that you already are doing anyway, think "PICRAT." And see if there's a way this technology can help you transform your teaching in positive ways.