The Four Hurdles to FLIPPING Your Class

By Jon Bergmann and Aaron Sams

We have been asked on a number of occasions about the hurdles to implementing a flipped classroom model. The four hurdles first appeared as a series of blog posts on Jon’s website, http://flippedclass.com, and the first hurdle was also posted on the Edutopia website, www.edutopia.org/blog/biggest-hurdle-flipping-your-class-jon-bergmann.

The biggest hurdle to flipping class is flipping the thinking of teachers about the best use of class time.

Stepping Back from an Old Model
When teachers flip their classes, they must ask one key question: What is the best use of class time? Is it information dissemination, or is it something else? Teachers need to get away from direct instruction to the whole group and instead use class time for richer and more meaningful activities and interactions. Why is this a big hurdle? It is because many of us have been “doing school” the same way for many years. We both spent many years as lecture and discussion teachers. We knew how to teach that way. In fact, we reached the point where if told the topic of the day, we could flick a switch and start teaching that topic without any notes. So in 2007, when we launched what is now known as the flipped classroom, Jon was the hesitant one. He didn’t want to give up his lecture time. You see, he was a good lecturer (or at least he thought he was). He liked being the center of attention and enjoyed engaging a whole group of students in science.

His class was well structured, and he liked being in control of all that was happening. So when Jon flipped his class, he had to surrender control of the learning to the students. That was not easy for him. But you know what? It was the best thing he ever did in his teaching career.

Teaching Learners
We started flipping our classes after a conversation with our assistant superintendent. She saw how we were recording our live lectures with screencasting software and told us how her daughter loved it when her professor at a local university recorded his lectures, because she didn’t have to go to class anymore. That’s when we asked the question, “What then is the point of class time if we make it so they can get all of the content by watching a
video?” The obvious answer was that we could make class
time more enriching and more valuable.

So as Jon reluctantly gave up control, he was relieved
to see students taking ownership for their learning. For
example, he had one student who during the first semes-
ter was not really taking class seriously. She struggled to
learn in our Flipped-Mastery Model because it required
her to actually learn the content. She wanted to just get
by instead of engage in the content. Jon insisted that
she learn the material before she moved on. Sometime
in January, he noticed a change in her. She was learning!
In fact, she was learning how to learn. During one
conversation with her, Jon commented on the positive
change he saw in her and told her how he was proud of
her newfound success. To that she remarked, “You know
what, Mr. Bergmann? I found it was actually easier if I
learned it right the first time.” Jon chuckled but also saw
great growth in this student as she was really learning
how to learn.

We realized in this encounter that maybe the best
thing we are teaching students is how to become learn-
ers. Our thinking flipped from our classes being about
the content to being about the process of learning. We
have said for many years, “We don’t teach science; we
Teach kids.” But today we want to change that and say,
“We don’t teach science; we teach kids how to learn.” This
was a seismic change in how we thought about our role
as a teacher. We realized that we needed to get away from
being a teacher who disseminates content and instead
become a learning facilitator and coach.

**Alternate Assessments**
Another way to flip your thinking about learning is by
allowing students to demonstrate mastery of content by
means of alternative assessments. The Flipped-Mastery
Model requires every student to pass each summative
assessment at a preestablished level. When we imple-
mented this, we were very rigid on students meeting this
benchmark. But as we embraced alternative assessments,
we were pleasantly surprised at how students were able
to show us what they had learned without having to
prove it on traditional tests. We had students designing
video games, making videos, and doing art projects. They
pushed us to rethink what assessment should look like.
Ultimately, we saw about 25 percent of our students who
regularly chose alternative assessments instead of the
traditional tests. Alternative assessments helped us flip
our thinking about assessment.

So if you are at all like us and have been teaching the
same way for many, many years, we encourage you to
rethink class time. We encourage you to flip your thinking
and give the control of the learning back to the students.
As you do this, you will find, as we did, how it affects
every aspect of your teaching. No longer will you be the
person who disseminates knowledge; instead, you will
become the learning facilitator of your classroom.

Once teachers have flipped their thinking
about class time, the second hurdle they need to over-
come is the issue of technology. Many teachers are not
completely comfortable using technology. The thought
of creating or curating video content for their students
is a daunting task, and many feel these steps are simply
too hard. And for many years, this has been true. Using
technology has not been an efficient way to teach, and
it seemingly hasn’t really helped student achievement.
There are too many buttons and too many steps for most
educators. They have been trained in child psychology
and development, pedagogy, content, and technology.
The problem with technology is that it is always chang-
ing. Keeping up with technological change is overwhelm-
ing for most educators, and they need simple solutions so
they can get to the important part of education, which we
believe is interacting and connecting with their students.

How do we overcome this barrier? First, we call upon
the makers of educational technology to make their
products “crazy-easy” to use. Manufacturers should
design their products with the end user in mind. Teacher
end users may not be “techies,” so please think through
the design.

What do you minimally need technologically to flip
your class? There are two types of technologies required:
video creation software and video hosting software.
When many teachers think of making a video, they think
of using a video camera that films them presenting con-
tent. And though we have seen effective use of video cam-
eras to flip classes, most teachers use computer software
to create the video content. Most use software designed
to screencast either their computer or their tablet. These
programs and apps record what you are doing on your

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to screencast either their computer or their tablet. These
programs and apps record what you are doing on your
device while at the same time recording your voice, and in some cases a webcam of the video creator. Below, we have listed some of the common tools we notice being used by teachers to flip their classrooms. This is not an exhaustive list, but it should get you started. We are often asked which is the best program to flip your classroom.

There are other sites on which videos can be hosted, such as screencast.com, vimeo.com, and teachertube.com. Each of these has advantages and disadvantages.

If you really want to make accessing your content easy for your students, which you should, we recommend that a school invest in a learning management system (LMS). There are many on the market such as MyBigCampus, www.mybigcampus.com; Haiku Learning, www.haikulearning.com; Blackboard, www.blackboard.com; Schoology, www.schoology.com; Edmodo, www.edmodo.com; InfoMentor (Europe), www.infomentor.net; Moodle, https://moodle.org; and a host of others. One other product we have been getting excited about is VersoApp, http://versoapp.com. This platform is not quite a learning management system, yet it has built-in interactivity. We like it because it is “crazy easy” to use. It is sort of the anti-LMS way to have students interact with your content.

We think of it in terms of this quick graphic we sketched out to help you think through the workflow:

<table>
<thead>
<tr>
<th>Screencasting Programs</th>
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<tbody>
<tr>
<td><strong>iPad Apps</strong></td>
<td><strong>Computer Programs</strong></td>
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<tr>
<td>Doceri</td>
<td>Jing</td>
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<tr>
<td><a href="http://doceri.com">http://doceri.com</a></td>
<td><a href="http://www.techsmith.com/jing">www.techsmith.com/jing</a></td>
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<tr>
<td>Free, but if you want to connect this through your computer it costs $30.</td>
<td>Free—Videos are limited to five minutes.</td>
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<tr>
<td>Explain Everything</td>
<td>Screen-cast-o-matic</td>
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<tr>
<td><a href="http://www.morriscooke.com">www.morriscooke.com</a></td>
<td><a href="http://screencast-o-matic.com">http://screencast-o-matic.com</a></td>
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<tr>
<td>$5</td>
<td>Free or $15 a year</td>
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<td>Show Me</td>
<td>Snagit</td>
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<td>ScreenChomp</td>
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<td>Educreations</td>
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<td>Coaches Eye</td>
<td>SMART Notebook</td>
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<td><a href="http://www.coachseye.com">www.coachseye.com</a></td>
<td><a href="http://www.youtube.com/watch?v=tbTcuO7o8bU">www.youtube.com/watch?v=tbTcuO7o8bU</a></td>
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<tr>
<td>Though designed for coaches, there are lots of great applications for making flipped class videos.</td>
<td>SMART Notebook has a recorder built in if you use SMART boards.</td>
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<tr>
<td>Active Inspire</td>
<td>Active Inspire has a recorder built in if you use a Promethean board.</td>
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<tr>
<td><a href="http://mrreddy.com/blog/2012/02/using-activinspire-to-make-screencasted-videos">http://mrreddy.com/blog/2012/02/using-activinspire-to-make-screencasted-videos</a></td>
<td></td>
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</tbody>
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and to that we respond, “The one you choose to use well.” Each one has advantages and disadvantages, and you can find out more about each of their features by visiting our website at http://flippedclass.com. Our ultimate recommendation is that you find one tool that works and learn to use it well.

You can also mix and match some of these tools and mash them up to create some really engaging video content for your students.

The second technology to master is hosting and posting your videos on the Web so your students can access them. If YouTube is not blocked in your school, you can create a YouTube channel and post your videos there.
From the students’ perspective, they just go to one place, the LMS.

What technology do you need to master when you flip your classroom? As you flip your class, figuring out which technology to embrace is hard. Choose one, learn it, and use it well.

The third hurdle is time.

Teachers are overworked and do not have enough time. When they first encounter the flipped classroom model, many feel it will just overburden them. It seems like one more thing to do. They have to grade papers, create engaging lessons, call parents, meet with students, and attend meetings, but now they’re supposed to create and/or curate all of these videos. It does take extra time, but the rewards will be great. Students’ learning will increase, and they will become more engaged. Teachers will get to know students better both cognitively and affectively.

We challenge administrators to help elicit change in their schools because administrators hold the key to time. Here are a few suggestions for administrators to get time for their teachers to effectively implement the flipped classroom in their schools:

- Focus in on just one or two initiatives at once. Teachers are overburdened by initiative fatigue. The leadership team is trying to do too many things at once and not focusing in on a few key changes. And then the next year there are new initiatives, and the old ones are forgotten and never really accomplished.

- Rethink professional learning community time. If a school has professional learning teams, this would be a great use of that time. So instead of having meetings in which teachers are sitting and getting from somebody, put them in active teams creating content. To read more about this, see Jon’s post on flipping the PLC, http://jonbergmann.com/flip-plc.

- Use substitute teacher days. Another way administrators can give back time to those teachers who want to flip is to hire substitute teachers for a day. What if your principal hired two substitute teachers and you and a colleague spent the day creating flipped video content?

- Other creative uses of time. There are also other ways to “give” teachers time. Do you need two teachers in every room when you are doing mandatory testing? Could teachers be released to work on flipped learning projects? If there are two teachers who are implementing flipped learning, could they be given common planning time to work and prepare the content?
We once worked with a school district that received a grant in which teachers were paid extra money if they worked for the grant. The grant was to implement mastery learning (especially the Flipped-Mastery Model). They realized that time was the critical variable. So each teacher who was in the program clocked his or her hours making flipped content, and the teachers were paid some extra money for their work.

Ultimately, the issue of time comes down to priorities. What a school emphasizes is what gets done. So, for those administrators reading this, we encourage you to make flipped learning a priority and then you will find ways to give teachers the time necessary to implement this with excellence.

The Fourth Hurdle: Training

Training is the fourth hurdle. Many teachers and schools need professional development in the area of flipped learning. In the fall of 2012 the Speak Up survey polled teachers, and 3 percent of them stated that they had started to flip their classrooms, but 18 percent wanted to start. Twenty-seven percent of administrators reported that they were interested in starting some sort of a flipped learning pilot (Hamdan et al. 2013, 13).

John Diamond from Harvard conducted research about what influences teachers to change their practice. Essentially, teachers change when they hear from other teachers, not from administrators or even the standards. Bringing in outside experts is not always the best idea and is often met with skepticism and resistance (2007).

If you want systemic change, you need coaches who can come alongside teachers and provide necessary training. This is especially true with flipped learning. It is a new teaching method with a limited number of practitioners, and many schools don’t have enough teachers who have flipped their classes.

The train the trainer model is the best way to address this need. Get a small group of teachers to flip their classes and then expand the program using the success of your pilot. So, how do you train your trainers? There are several options:

- Bring in a teacher who has successfully flipped his or her classroom and has been trained to help others do it well.
- Send teachers to conferences and workshops where flipped learning is being taught. You can find many of these on our website: http://flippedclass.com.
- Lead a book study of *Flip Your Classroom: Reach Every Student in Every Class Every Day* (ISTE/ASCD, 2012), *Flipped Learning: Gateway to Student Engagement* (ISTE, 2014), or some other book on flipped learning.

Conclusion

As teachers and schools transition from the traditional classroom to teaching practices like flipped learning, we encourage you to think through these four hurdles to help ensure a successful implementation. The first hurdle is the starting point. You must convince teachers to rethink their face-to-face class time. Make sure you have the appropriate technology in place along with a usable production workflow that is “crazy-easy” for teachers. Then, provide or make the time necessary to implement the changes. Finally, identify lead teachers who are transforming their classes who will, in turn, become your best trainers and advocates of this model.

References


John Bergmann, MAEd—along with Aaron Sams—is considered a pioneer in the Flipped Class Movement. He spent 24 years as a middle and high school science teacher before becoming the lead technology facilitator for a school district in the Chicago suburbs. He helped found the Flipped Learning Network, which provides resources and research about flipped learning, and he is the chief learning officer of Flipped Learning LLC. He coauthored *Flip Your Classroom: Reach Every Student in Every Class Every Day* and *Flipped Learning: Gateway to Student Engagement*. In addition, he hosts The Flip Side radio show.

Aaron Sams, MAEd, is the president and CEO of Sams Learning Designs, LLC. An educator since 2000, he is currently the director of Digital Learning at the Reformed Presbyterian Theological Seminary in Pittsburgh, Pennsylvania, and board chair of the Flipped Learning Network. He is coauthor of *Flip Your Classroom: Reach Every Student in Every Class Every Day* and *Flipped Learning: Gateway to Student Engagement*.