The Machines Around Us

Kaleidoscope Journal
/
Fall 2019

BY:

Alex Steinkamp
Senior Fellows

In spite of their enormity, engaging with the systems that drive education is an important part of teachers' work to support student learning.

"Just be careful that you don't lose your focus on the classroom. Ultimately, effective teachers are a rare commodity, and the work you do in the classroom has huge impact on students. The greatest impact you can have is by being the best teacher you can be for your students. Don't let all these meetings take things away from your classroom practice."

My colleague meant well, but as I walked to my afternoon meeting, I had no idea how to respond to this sentiment. I was humbled by my colleague's estimation of my effectiveness as a teacher and frustrated by his dismissal of the importance of my involvement in department- and building-level work.

I had multiple conversations with this same colleague about problems beyond our classroom (e.g., particular school policies and district mandates) that impacted our work in the classroom. Whirring, impersonal, illogical, machines encroached on each of our classrooms in subtle and not-so-subtle ways. These systems, these machines, were running in ways that disrupted the work of teachers and learning

of students, while carrying the label of educational reform and improvement. But the challenge is a cycle driven from both sides: no system would be intentionally designed to misserve students and teachers, and no reasonable person would like to engage with a hulking system that appears from their perspective to produce more harm than good. Disengagement only further stagnates systems in broken cycles, and broken systems only encourage further disengagement.

Knowing that these metaphorical machines are built by people just as real machines are, I am driven to understand the motivation behind their design and look for access points to fix them. This engagement is not a result of my benevolence, but a result of my experience. My time with the regional teacher observation group I helped organize helped me appreciate the importance of working with "machines."

How I came to see the machines around me

Sometimes, the work of a group is reliant upon the superhuman efforts of a few individuals manually catching every ball in the air and tying each loose end. There is no defined process; it is just "Alex's thing." Nobody really knows how he does it, but thank goodness he does! The group's outcomes are dependent on a few specific crank-turners; without them, nothing moves, and the group ceases. We all know these sorts of systems. Sometimes this is the only way in which a group functions. And we all know that when the crank-turner is no longer at the helm, substantial challenges arise.

This was the case in our regional observation group, Observe Northwest (ONW). Once per semester we organized a visit to a member's school to observe the host's classroom and those of their participating colleagues. The value for participants was huge: we had the opportunity to spend a full day in a new context, seeing different students, classroom structures, cultural expectations, and teaching practices. By the end of the day, we left with a fresh perspective on the challenges we faced in our own contexts, as well as discrete learnings that nobody could anticipate. In the beginning, our numbers were small—at most four or five teachers visiting on a single day.

When I started participating, Knowles Senior Fellow Mike Town was the primary ‘crank-turner’ for the group. He sent all the emails, double checked the dates, and submitted our grants. Mike had the good sense to hook me into the process and ensure that the organization continued to produce the positive effects for which we aimed. I became a co-crank-turner.

Over time, however, the group grew to over a dozen teachers visiting on a given day, and the logistical load began to weigh on us. Making sure everything was in order for all of us to arrive in the right classroom at the right school at the right time was a heavy workload, not to mention figuring out where and how to organize our work, securing a place to eat and inviting colleagues to join our group. Once I felt the first wave of dread at planning the next meeting, I knew something needed to be done. Mike and I were spending so much time chasing the loose threads that I couldn’t enjoy the learning and growth that came from our meetings.

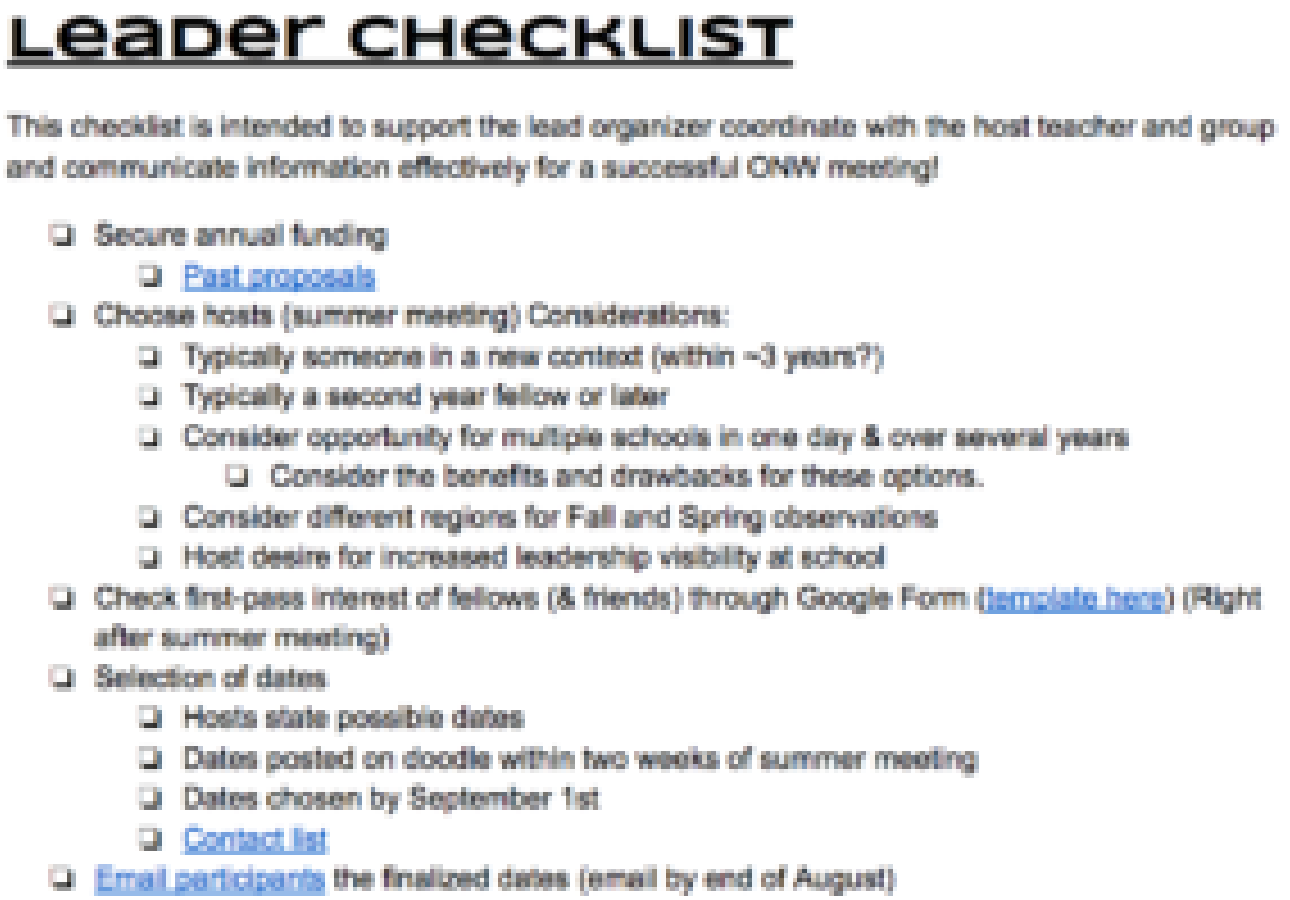
Building our machine

Through this difficulty, Mike and I realized that much of the behind-the-scenes work did not require any particular skill or talent, but was simply a lot of individual tasks that needed to happen. That work could have been done by some system, but that system didn’t exist. We knew this information could be externalized, but the time we spent thinking about the group was always around actually doing our observation meetings. The additional task of ‘record and explain what you’re doing’ was infeasible for both of us.

The machine had to be built, and building the machine had to be considered as work separate from the goals of the group. It served a higher purpose: to allow the observation group to continue to function in the absence of individuals who knew how to juggle all the balls.

Just as Mike brought me into the fold, I brought Kylie Bertram into this challenge to help us distribute our knowledge and efforts. Mike, Kylie, and I planned a day separate from the group to spend time recording and creating frameworks for how to run our meetings. We needed to carve out time for ourselves to focus on articulating all of the things that we ran around doing, and making them approachable and understandable by anyone. We wrote a grant to support one full

day of in-person time for this work. We created timelines, email outlines, spreadsheets, agenda templates, and checklists, as shown in Figure 1. Read more about ONW's leadership transition in "Benefits of a Teacher Observation Group" by Kylie Bertram (2019).



Leader Checklist

This checklist is intended to support the lead organizer coordinate with the host teacher and group and communicate information effectively for a successful ONW meeting!

- ❑ Secure annual funding
  - ❑ Past proposals
- ❑ Choose hosts (summer meeting) Considerations:
  - ❑ Typically someone in a new context (within ~3 years?)
  - ❑ Typically a second year fellow or later
  - ❑ Consider opportunity for multiple schools in one day & over several years
    - ❑ Consider the benefits and drawbacks for these options.
  - ❑ Consider different regions for Fall and Spring observations
  - ❑ Host desire for increased leadership visibility at school
- ❑ Check first-pass interest of fellows (& friends) through Google Form (template here) (Right after summer meeting)
- ❑ Selection of dates
  - ❑ Hosts state possible dates
  - ❑ Dates posted on doodle within two weeks of summer meeting
  - ❑ Dates chosen by September 1st
  - ❑ Contact list
- ❑ Email participants the finalized dates (email by end of August)

Figure 1. Sample OWN document. An excerpt of the master checklist created to be used by the primary organizer of the observation group. Links lead to associated documents to keep everything in one place.

> Does your group need to set up a "machine" to help it work? Machines can help reduce mental load and allow for transfer of knowledge. If you decide you need one, consider how you can carve out the time to create it.

The challenges we faced now feel almost trivial. I have hesitated to write about this process partly because I worried that I was making a mountain out of a molehill. Remembering the reality of the near-burnout for multiple members of our

group, though, reminds me that this work had value.

While it felt somewhat silly to be able to articulate all of this ‘hard work’ we had been doing in a finite set of simple documents, it would have been impossible for us to create those documents from the outset. We wouldn’t have even known what we needed.

It took us running the whole system for multiple years before it was even possible to know not only the different challenges and obstacles that the system needed to handle, but also where the system could be less explicitly defined. Rushing to create a mechanism too soon would have been a misuse of our energy, as we would have undoubtedly spent our focus on things that were less essential to our work.

Challenges in maintaining our machine

These tools have helped keep our observation group running. They have also helped hosts feel less stressed about organizing. Our hope was that leadership could easily shift among members, without many hiccups in the effectiveness of the group’s work. There is still the need for a person to be at the helm, pulling the right levers in the right order.

The challenge is that from outside the driver’s seat leadership can seem intimidating, because while the machine is handling a lot of things, the end product can look like it was produced only by costly superhuman effort. Until you sit in the controller’s chair, you might not realize that the system just needs you to follow a checklist. I am still reflecting on ways to make more transparent the way in which our tools support the work of the observation group to help others feel capable of running the machine. The underpinnings of the machine need to be understood by the users. It is a thing within their control.

> Are you operating a machine? Consider how you might make visible what moves you still have to make manually and what moves are taken as a function of the machine.

With a complex system, making any changes can seem daunting because the system required effort to construct and now exists beyond any individual. It took us all of this work to get things set up; will changing things require a full rebuild? In our group, we are starting to reflect on how much structure should be imposed on our observations and how much direct feedback should be given to those who were observed. In spite of this being a pretty foundational question to the work of the group, the part of our machine that focuses on the observations themselves can be tuned and changed independently of many of the other parts. We are able to do this only because we carefully took the time to understand each part of our process, and created spaces where each part is delineated from the others.

This part-swapping still needs to be treated as machine maintenance and not just a part of the functioning of the group. It is important to address this change in a time and space that allows for thoughtful consideration on how one change will impact other functions of the system: Will using one observation structure over another change what the individual is taking away from the day? Does this well-intended shift create undue mental load on participants?

These questions cannot be answered well while the machine is doing its work, just as real machines cannot be repaired while they are running. Machine maintenance requires an operator to intentionally step away from its operation. Otherwise, maintenance can feel disruptive, dangerous, and difficult. When a system disrupts rather than facilitates the work of a group, the buy-in of the participants may be lost, and the entire system may slouch towards breakdown.

Whose responsibility is it?

I enjoy analyzing machines like this. I like designing them, I like building them, and I like maintaining them. Many teachers, like my colleague from the start of this piece, see these machines as heartless and harmful, and believe that it is better to shield yourself and your students from a poorly running system than to spend the time trying to fix it.

> Do people fear a particular machine? Their perspective and understanding of what is happening at the ground level may be able to identify places to help the machine function.

I understand that instinct. Without a doubt, there are times when a system is put in place without fully considering the impacts it may have on the stakeholders. Even with the best planning and careful consideration, machines sometimes create unintended consequences. And in other cases, a machine comes into existence without anyone realizing it (“Oh, I thought that was just the way we had to do it”). Those unintentional machines can be destructive, and it is natural for teachers to shield themselves and their students from those systems.

At the same time, because teachers are often the ones who most directly experience and observe the impacts these systems have on our students, we have information that the system may not be able to detect on its own. I believe that paying attention to how those machines work is crucial to the functioning of our educational system at all levels, and I want to help those challenges be seen and addressed.

I want to ask these questions:

- Is there a machine running? Is there a need for one?
- How was it designed?
- Has a machine been built without anyone really knowing it, and thus is producing results that aren’t what people want?
- What do we really want this machine to be accomplishing?
- What is its current output?
- Who relies on the different parts of this machine?

I don’t know whose job it is to ask those questions. So far, in my experience, it hasn’t been anyone’s job. While it feels overwhelming at times, I want to continue to engage with these challenges because systems, often unintentionally or because they come into existence without purposeful planning, can get in the way of learning for both teachers and students. Regardless of their origins, these machines exist around us in education, and they require careful consideration to function properly. I don’t think we should be afraid of machines, and I want us, as teachers, to help adjust them to better meet our needs and the needs of our students.

If you are interested in the particular problem of organizing a regional observation group, I am glad to share our supporting documents. Please reach out via email. Learn more about ONW’s leadership transition in this article. (link needed)

CITATION

Steinkamp, A. (2019). The machines around us. *Kaleidoscope: Educator Voices and Perspectives*, 6(1), 25–28.