

Pulling Agile into Education: Examples to learn by

Paul Magnuson Nicola Cosgrove

Draft: May 2020

We've been talking about and experimenting with agile in education since 2014-2015. In Summer 2016 we wrote the first sample lesson for this publication, intending to collect examples from other teachers interested in agile education. We didn't get submissions like we hoped for, so the project rested forgotten somewhere in the back of Google drive.

Almost forgotten. We reopened the folder and dusted off the files. This time we're pursuing this project more, well, agiley. We're contributing the first vignettes and posting them our research center's website, www.las.ch/laser. And we're inviting you, a teacher interested in agility, who is perhaps experimenting with kanban, scrum, or an agile mindset, to share your experiences in the same format. And then we'll iterate.

One of the earliest to apply agility in school, John Miller (<u>Agile Classrooms</u>) began experimenting with scrum in 2009. In 2011, Steve Peha shared a presentation at Yahoo called <u>Agile Schools - How Technology Saves Education</u> (Peha, 2011). In the presentation he correctly pointed out how initiatives like No Child Left Behind have failed in the US, and how agility, applied to education, may be a much more productive route.

In 2012, Willy Wijnands of Ashram College in the Netherlands, along with his colleagues, began translating scrum into <u>eduScrum</u>. Jeff Sutherland, co-creator of scrum and proponent for its application beyond the software world, referenced eduScrum in his book, *Scrum: The Art of Doing Twice the Work in Half the Time*.

It's Sutherland's mention of eduScrum that brought us in contact with both John Miller and Willy Wijnands in October 2014. Since that time both John and Willy have been on our campus more than once and we have, on separate occasions, visited Willy at Ashram College in December 2018 and June 2019. During those years, from 2014 until now, we've experimented with scrum, kanban, an agile toolkit for teachers, and agility in general in middle school, high school, and

Magnuson, P. & Cosgrove, N. (2020). *Pulling Agile into Education*, Leysin American School Educational Research, Leysin, Switzerland.

university classes, as well as in faculty meetings and for long term projects like curriculum review and school accreditation. We've also trained and published about agility.

Writing and talking about agility in education is rewarding, if only because it feels so right. Over time, though, we realized that we could share and teach better if we had a collection of solid examples of what you might call agility in education. Perhaps because our own focus was largely on the agile mindset, and not a fixed process, explaining exactly what we meant when we said agile this, agile that, wasn't always easy. We also may have felt a bit uncomfortable in our own clothes at some points when colleagues mentioned that "they did agile" or when agility was mistaken simply for flexibility, and so on.

At any rate, we determined that a set of short examples from a variety of contexts would support the conversation around agility very well. We created a few prototypes in Summer 2016, following some promising applications in a graduate class, and then asked others to share their examples.

The additional examples didn't come and instead of scaling down the project, which would have led to its completion, at least in an MVP type of way, we let the project drop. Beware the big plan! Luckily, our involvement in a push by the Scrum Alliance in Fall 2019 to create a specific certification for educators (the Agile Certified Educator) rekindled our interest, and now, with the proper scope for a first iteration, we are underway again.

Here is our first iteration of classroom, schoolwide, and organizational applications of the agile mindset, following a simple template, to share the agile mindset. The template suggests which agile concepts you might find in each vignette, and which of the 10 practices of EDgility (Magnuson, Tihen, Cosgrove and Patton, 2019), our own attempt at describing an agile mindset in education, are illustrated.

If you are interested in contributing lessons to this collection, please see the template in the appendix and write to us at pmagnuson@las.ch and ncosgrove@las.ch.

References

- Peha, S. (2011). YUI Theater "Agile Schools How Technology Saves Education," Retrieved February 18, 2020, from https://yuiblog.com/blog/2011/11/29/video-agileschools/.
- Magnuson, P., Tihen, B. Cosgrove, C, & Patton, D. (2019). Getting Agile at School. In Agile and Lean Concepts for Teaching and Learning. Parsons, D. & MacCallum, K. (Eds.). Singapore: Springer.
- Miller, J. (n.d). Agile Classrooms. Retrieved February 18, 2020, from https://www.agileclassrooms.com/.
- Sutherland, J. (2015). *Scrum: the art of doing twice the work in half the time*. London: Rh Business Books.
- Wijnands, W. (n.d.). eduScrum® Collaboration That Gives You Wings. Retrieved from https://eduscrum.nl/en.

Table of Contents

Table of Contents

Classroom Activities

Peer Review of Academic Papers

Reviewing and tracking work completed

Quick iterations and frequent feedback

Demos

Translating traditional agile roles to education

The role of the Product Owner

Schoolwide Activities

Homeroom

Time to Find Your Way

Professional Development

Agile Toolkit

Teacherless Observations

Blended, Self-Paced, Mastery-Based Teaching and Learning

Tools

Kanban, Trello

Appendix A - EDgility

These are our values, the core of the mindset we're working toward:

Appendix B - Template for Conbributions

Title (Google doc "Heading 2")

Classroom Activities

Our examples of classroom activities span from middle school through to adults studying for their Masters in Education. Some examples read like a guide or synopsis of the lesson, some of them are first and foremost a reflection about agile principles that are supported by a classroom activity or unit.

Peer Review of Academic Papers

Agile Concepts

- Kanban board
- Timeboxing
- Iterations

EDgility Practices

- Collaboration
- Smallify
- Transparency

Learning & Teaching

In a week-long summer graduate course, four students wrote an academic paper of approximately 15 pages on a change process that they could implement in their own school setting.

The paper had a number of required sections, including abstract, introduction, background, problem statement, literature review, change framework, conclusion, references, and appendices. Students shared their papers, as a Google doc, with each other and the instructor to facilitate peer review.

The students each created a personal kanban board with four columns:

To write	Writing	Ready for peer review	Just reviewed

On Monday the students made a sticky note for each section of their paper and placed them in the "To write" column.

By Wednesday the students were ready to begin the process of critique and revision. This was their process:

- 1. Students updated their personal kanban boards. It was easy to see at a glance that all students now had some sections of their paper in the "Ready for peer review" column.
- 2. We agreed on a time-box of forty minutes. Students and the instructor, as peer reviewers, selected a section (a sticky note, which they initialed) to critique.
- 3. When a review of a particular section was finished, the reviewer moved the sticky note to the "Just reviewed" column and chose a new section, either from the same or a different scrum board.
- 4. Nearly all sections had been critiqued and reviewed when the time-box expired. Using a thumbs up, thumbs down (Roman) vote, students either decided to finish the remaining few sections or leave them for the evening outside of class time.
- 5. On Thursday, students reset their kanban boards, according to their progress from the evening before, and we redid the process.

Source

From a course taught for Endicott College, Prague, 2016

Questions: Paul Magnuson, pmagnuson@las.ch, Twitter: @zebmagnuson

Resources

Reviewing and tracking work completed

Agile Concepts

- Kanban board
- Iterations
- Collaborative planning

EDgility Practices

- Collaboration
- Transparency
- Trust

Learning & Teaching

Students in a middle school class had been working closely on using a kanban board in class and had good control over it and how it worked for them. They enjoyed making the plans for each lesson, which led me to introduce an end-of-lesson planning sheet. After each class, we left five minutes for planning time, which meant that students could suggest what they wanted to work on next class, based on what they had actually completed. When necessary, students made decisions regarding who would lead on certain activities. This was then noted on our sheet and posted on the kanban board.

The end-of-lesson planning sheet consisted of the following columns:

Date/Lesson	What will we work on next class?	Who will lead/what will we need
Lesson 3	Warm-upShot practiceFilm shotsStart tournament	Student ATeacherWe need our phonesStudent B

- Students were able to use the end-of-lesson planning sheet to help remind themselves, when they entered the class, what had to be set-up or ready to go.
- If the teacher or a student was absent, work could be easily seen and tracked by anyone on their return.
- Students had ownership of what they learned, how they learned it, and in what order.
- Collaboration with the teacher allowed for changes in the curriculum, and the time spent and the depth of activities were appropriate for the students.

• The sheet provided exactly what had been worked on, which served as a curriculum map for the teacher, as well as a visible learning journey for the students.

Source

From a middle school course at Leysin American School, Leysin, 2019 Questions: Nic Cosgrove, ncosgrove@las.ch. Twitter: @agileinthealps

Quick iterations and frequent feedback

Agile concepts

- Iterations
- Burndown chart
- Review and Retrospective

EDgility Practices

- Growth Mindset
- Redo
- Transparency

Learning & Teaching

Bill Tihen (IT) and Dan Patton (STEAM) taught a 6-week course to middle school students called 3D Nautical Design. Students, in groups of three or four, created boat building companies. The final product was to be a small plastic boat that (1) went straight on the water surface when flicked with a finger, (2) carried weight (coins), (3) withstood wind from a fan, and (4) withstood waves when a weight was dropped in the tub of water.

Accompanying the physical boat was advertising for the company and a group sales pitch (as a final assessment) that was presented with a demonstration of the boat in front of an audience. Audience members played the role of investors, allocating their play money to the company(ies) of their choice.

Iterations: The students were learning to use the 3D printer. To make the project accessible, they were first instructed to make a small box. Once successful, they added a triangular prow. When successful they worked on the hull so it wasn't simply flat. They then played with more advanced designs. This is one type of iteration, what teachers recognize as scaffolding a task.

Burndown chart: A second type of iteration came in the form of quick teacher feedback, aided by a burndown chart. As students left class, they showed a chart, on the outside of a folder (with relevant materials, sketches, and handouts inside the folder), to the teachers. This "ticket out" set up a cadence that reminded students each class period that making progress was important, as well as giving everyone a chance to recognize successes and acknowledge obstacles.

Review: In addition to the daily review (a sprint review of sorts) and the overall "Shark Tank" review as a final gamified assessment of the final products of each boat company, Bill led a retrospective for all students about the six-week learning process. Each student gave and

received feedback, sitting in a circle, referencing their ability to collaborate, how they addressed dysfunction, how they accepted ideas from one another, which designs did well, and what they would do next if the class were longer, among other topics.

Source

From a middle school course taught at Leysin American School, 2017.

Questions: Bill Tihen, bil.tih@container4.ch

Further Resource

To read more about this particular class, see

Tihen, B., Magnuson, P., & Patton, D. (2018). Designed to float your boat, *Global Insights*, The Education Collaborative for International Schools, April 2018, 9-12.

Demos

Agile Concepts

- Review
- Retrospective
- Feedback

EDgility Practices

- Transparency
- Value
- Uplift

Learning & Teaching

When we developed the LAS middle school before the 2016-2017 school year, we decided early on to change the assessment policy (from traditional A-F to 4-1 based on teacher-set standards) and to share student work instead of requiring final assessments.

In exhibition style, students chose what work to present and how to make the presentation interesting. Generally half of the students presented, like at a conference poster session, while the other half of the students moved from presentation to presentation. Faculty, the children of faculty members, and the parents of students (if they were visiting the boarding school) were invited as well.

The emphasis on demonstrations for summative assessment also influenced assessment in individual classes, particularly the more creative, exploratory subjects. Thus, in 3D Nautical Design, as described in a different vignette, used a Shark Tank style presentation, while a class like Escape Room Design brought participants directly into their projects. Art classes, and other classes with projects (including English, Reading & Writing Workshop, DIY Language, and the Ideal School) also incorporated student demonstrations and sharing as summative events.

Similarly, since 2016 we have hosted an annual student conference with poster and breakout sessions. The conference has grown each year, from its original science focus, with internal participants only, to a whole school focus with a number of invitees from other schools. Central to the conference is the creation of a venue for students to share their work with their peers, across schools, and adults.

While we've had some success with more formal feedback during these types of public student sharing, we suspect that simply creating an environment where student work is public, and where students need to stand next to their work and explain what they have done, has a washback effect for how they approach their work in the first place. Feedback is nicely distributed over a number of individuals, all of different experiences and age ranges, all with different perspectives.

Source

From Leysin American School, since 2016 if not earlier Questions: Paul Magnuson, pmagnuson@las.ch

Resources

Globe Day at LAS

Translating traditional agile roles to education

The role of the Product Owner

Agile Concepts

- Product Owner
- Scrum Master

EDgility Practices

- Collaboration
- Transparency

Learning & Teaching

A hole in the schedule permitted the inclusion of an experimental world language class. One of the long term projects was the creation of an iBook, almost half of which was dedicated to student-created activities in language awareness (e.g. are there really dozens of words for snow in languages whose speakers live in snowy areas? Does the unequal representation of male pronouns in a language contribute to making that language's speakers sexist?). Students researched topics, made videos, created classroom exercises, and in general tried to make interesting classroom activities as if they were linguists and curriculum writers.

After struggling with the course's organization for several weeks, I joined forces with the IT office and began running the class in two-week sprints, in groups of four or five students, with the eduScrum guide clutched in my fist. Each sprint students selected the outline of a possible language awareness lesson from the backlog (one-pagers with an idea and any details I had thought might be useful). Following a template, they then created the activities for that lesson, for use in unspecified world language classes, for example.

In each student group there was one leader, which I called the ScrumMaster at the time. This person was, however, mostly a group leader, who was generally the student I felt I could rely on to ensure that the work on a language awareness activity over two weeks would actually make progress. To some extent these leaders also served as ScrumMasters, helping their groups through short standups and reviews - some aspects of Scrum that are easily visible.

I imagined that my role of teacher was as a Product Owner. My "customers" were the hypothetical world language teachers who might someday use the language awareness activities in their classes. I was representing their needs in my communication with the ScrumMasters and the review of each group's work. A summative review - at the end of each sprint - included a presentation of the language awareness activity by the group, to me.

My IT colleagues and I spent plenty of time that year trying to tease out the Scrum roles in an educational setting. Was I as teacher really the Product Owner or actually the ScrumMaster? Or a little of both? Or ... neither? To what extent were the students ScrumMasters or was that just forcing a new terminology on an existing model of project-based groupwork?

In hindsight, five years later now, I feel less insecure than I did that first year. I don't feel confident that these questions are answered (and I encourage everyone adopting Scrum in a classroom context to consider for themselves what the roles mean, who plays them, and what significance they have). Folks who have been pulling agile into education for quite some time still debate what these roles mean and how they are meaningfully applied.

It's the conversation that drives the thinking forward, perhaps. So ... what is the role of a product owner in Scrum used in school? A ScrumMaster? How is it the same and different than in contexts outside of school?

Source

From a high school course introducing linguistics at Leysin American School, 2014-2015 Questions: Paul Magnuson, pmagnuson@las.ch, Twitter: @zebmagnuson

Resources

Delhij, A., van Solingen, R. & Wijnands, W. (2015). *The eduScrum Guide*.

Magnuson, P. (2015). A Year of Language Learning. LASER, Leysin, Switzerland.

Magnuson, P. (2014). *Teaching with Duolingo*. LASER, Leysin, Switzerland.

Magnuson, P. & Skelton, E. (2015). *Language Awareness: Thinking About Language*. Apple Books.

Schoolwide Activities

Homeroom

Agile Concepts

Self-regulation

EDgility Practices

- Collaboration
- Exploration

Learning & Teaching

Middle school 'homeroom' consisted of 30 minute slots, two times a week. These slots were given to allow time for free learning to happen.

The only condition was that students had to 'post' what they were working on during the time given. The use of an adapted Kanban board, gave them the opportunity to put a task next to their name, either written or pre-populated with a sticker or magnet. Teachers were then able to easily see what was happening in the room, at a glance.

What became interesting was that students liked to take on board a range of activities. Students didn't necessarily copy each other, but they worked in small groups without any indication from the teachers around them.

Students chose the following:

- Home/Class work
- Learning a language
- Reading, writing, drawing etc
- Building (Use of Lego)
- Board/Card games
- Teacher and student conferences- often in small groups or 1 on 1.
- Peer tutoring

The atmosphere in the room during those times was a buzz of activity and the ability for students to learn, even if it wasn't the traditional class or home work. Many students felt like this

was 'free time' for them, yes it technically was, but actually they were developing valuable life, social and academic skills all in one. Sure, there were times when students were not on task, but this was a time for experimentation, rather than structured time for working on a specific piece of work.

Source

Questions: Paul Magnuson, pmagnuson@las.ch, Twitter etc @zebmagnuson

Resources

Magnuson, P. (2017). 35 Minutes of Homeroom, The International Educator Online, (March 22).

Time to Find Your Way

Agile Concepts

- Self-regulation
- Experimentation
- Trust

EDgility Practices

- Trust
- Value

Learning & Teaching

A hallmark, if you can call it that, of academic programs developed by LAS Educational Research is built-in, unstructured time, during which students are allowed to self-direct ... or not. As Peter Gray put it, "we are putting more responsibility on our children or you could say we're giving our children more freedom, but those things are two sides of the same coin. Freedom requires responsibility" (Gray, 2020).

In other words, without freedom, how are students going to practice responsibility?

We've experimented, as we've worked with the agile mindset, in two related programs - related in that the first program, the progressive middle school, was an early iteration of the second program, called LAS *edge*.

Middle School (grades 7 and 8). While we tried to release responsibility (and therefore give freedom) in general, two areas stand out, Homeroom (see *Homeroom* elsewhere in this publication and Project Innovate.

Project Innovate was a 5-week class during which students chose a focus and worked on it. Though we initially tried to write a curriculum with more detail than that, in the end the curriculum was, more or less, "do stuff!" With that freedom came responsibility, or the opportunity to learn responsibility, which some students did of course better than others. We teachers often said to each other that we had to trust that what we were doing was good for the children - even if not terribly visible at the moment.

LAS edge (grades 8, 9 and 10). Building on the middle school experience - both its successes and its return over time to a much more traditional school philosophy, we built a new curriculum

for older students in several disciplines (e.g entrepreneurship, STEAM, the arts) which focused on skills first and content second. Another way to express this is that the content of the disciplines was necessary in order to practice skills of self-regulation. We trained with agile games, encouraged pull systems, autonomy, and pursuing individual interests. Student feedback during the second semester consistently mentioned feeling lost at first, struggling with the notion that "the teacher wasn't going to help you" and that "the teacher lets you do anything." While both sentiments are expressed in stark teenage terms, this is basically correct. For one of their eight class obligations, at least, students had to learn how to identify an interest and pursue it. In this way LAS *edge* is similar to Project Innovate in the earlier grades.

Source

From programs created by LAS Educational Research, Leysin American School, staring in 2016 Questions: Paul Magnuson, pmagnuson@las.ch, Twitter: @zebmagnuson

Resources

Gray, P. (2020). On Being Free to Learn During COVID0-19, Podcast: Modern Learners (April 1).

Unschooling. Wikipedia.

Professional Development

Agile Toolkit

Agile Concepts

- Iterations
- Retrospective
- Collaboration

EDgility Practices

- Adaptability
- Exploration

Learning & Teaching

From the first time hearing the word 'Agile' I began to think about what this means in education and how it can be implemented. It took some time to research and really find out what Agile means, but what really struck me is that there were not many resources available for schools. Here began the birth of an 'Agile Toolkit.' The aim of the toolkit was to give teachers what they needed to start implementing Agile practices into their classes. Over two years, the delivery and tools have been built upon and updated, working in an Agile way of course! Amidst this development, a handful of teachers were involved in an initial implementation using a book of resources. After some trial and error and iterative phases, it was decided that teachers who wanted to try Agile in their class would start right away with a visit to their lessons. From there, discussions would begin to help the teacher input Agile in a way that suited their students and their lessons.

Fast forward to today, and there are resources developed to show how Agile can fit into classes, a website, blog and twitter handle for ways to connect all things Agile. Teachers at LAS are using Agile in many ways in the classroom and in residential life and continue to consult and keep the conversation going.

Source

From the 'Resident scholar' program, LAS Educational Research Questions: Nicola Cosgrove, ncosgrove@las.ch and @agileinthealps

Resources

Agile in the Alps website

Teacherless Observations

Agile Concepts

- Self-regulation
- Student agency

EDgility Practices

- Trust
- Value

Learning & Teaching

In the first years of our small, combined grades 7 and 8 middle school, we were quite intentional about giving students as many chances to practice self-regulation as we could. Sometimes we were implementing a plan and sometimes we stumbled into new practices quite by accident. One of these was teacherless observations.

One morning, my colleague DeLona Allers was away from school and I was subbing her class. Before we started I asked the students about the Kanban board at the back of the room. This particular board had the basic categories of To Do, Doing, and Done. There were several flat magnets on which were written the classroom tasks that tended to repeat each week. In fact, they were some of the same ones I had on the agenda from DeLona, in addition to the day's lesson.

On a whim I told the students that I would simply project the substitute plan for the day on the wall and that they should run their usual class, just without Ms. Allers. I decided to take running notes, minute by minute, of what I saw.

You've guessed the ending already: the students ran the class, some showing even a little pride that they knew what each next step was. A few students veered of course or had stretches of inattention. Nothing new there. Sometimes their peers helped them get back on track. That seemed promising. At the end of the lesson I shared the notes via Google Classroom with DeLona and thanked the students. The teacherless observation was born.

Later in the year Nic and I wrote up another teacherless observation. This time it was about one of Nic's middle school Physical Education classes. I observed for nearly 90 minutes as students set up the gym, warmed up, taught a lesson, practiced, rearranged themselves into teams, and ran a badminton tournament. And they cleaned up at the end before heading to the locker

rooms. At that point I shared my running notes and packed my bag. On the way out of the gymnasium I ran into Nic, who was coming in for her next class. "How was my observation?" she asked. "Great!" I replied.

How do teacherless observations fit the agile mindset? We think first and foremost that agile without trust is hardly agile. There isn't much self-regulation if you can't trust your students (and to extrapolate, our staff, your colleagues, your spouse, your children). Trust has got to be one of the cornerstones of an agile mindset. And in this case, the teacher has to trust the students to run the lesson, and the observer to simply observe - and the observer has to trust that the lesson will work (lest the observer becomes an unprepared substitute teacher)!

The other piece of agility here is of course student agency. You have to let them practice it if you claim you are teaching it.

You can read more about this particular lesson and the benefits of teacherless observations in a chapter that Nic and two of our colleagues co-authored, *Getting Agile at School*.

Source

From the LAS middle school, Leysin, Switzerland, 2017-2018 Questions: Paul Magnuson, <u>pmagnuson@las.ch</u>, Twitter: @zebmagnuson

Resources

Magnuson, P. (2017). <u>Teacherless observations</u>. The International Educator Online (12 December).

Magnuson, P., Tihen, B. Cosgrove, C, & Patton, D. (2019). Getting Agile at School. In *Agile and Lean Concepts for Teaching and Learning*. Parsons, D. & MacCallum, K. (Eds.). Singapore: Springer.

Blended, Self-Paced, Mastery-Based Teaching and Learning Agile Concepts

• Self-regulation

Student agency

EDgility Practices

- Growth Mindset
- Trust
- Uplift

Learning & Teaching

The Modern Classrooms Project trains educators in a research-based model built around three core practices:

- Blended Instruction: Teachers create high-quality instructional videos to replace in-class lectures. This allows students to learn at their own pace, and frees teachers to provide targeted individual and small-group support in class. This also allows students to continue learning outside of class.
- Self-Paced Structures: Teachers design self-paced classroom structures, which allow students to control their own learning while meeting essential learning objectives and deadlines. Self-pacing helps students develop important study skills, while allowing for authentic collaboration between students.
- Mastery-Based Grading: Teachers create "mastery checks" for each lesson, which give students credit only once they've demonstrated full understanding of content and skills.
 This prevents learning gaps from forming, and ensures that every student truly masters essential content and skills.

To date, The Modern Classrooms Project has trained 33 Modern Classroom Fellows at 10 public and public-charter schools in Washington, DC and Northern Virginia, as well as over 2,000 educators through its workshops and online courses.

Source

From: The Modern Classrooms Project

Questions: Robert Barnett, robert.barnett@modernclassrooms.org, Twitter @modernclassproj

Resources

- <u>Building Modern Classrooms</u> (interactive online course):
- Exemplar Units from Modern Classroom Fellows

Tools

Kanban, Trello

Agile Concepts

- Pull systems
- Kanban Board

EDgility Practices

- Adaptability
- Collaboration
- Transparency

Learning & Teaching

One of the more influential mind shifts for me, since developing an interest in agility, was thinking in terms of pulling work instead of pushing work. This is easily demonstrated with a kanban board, where you only pull a new task into the TO DO column when you have cleared out the previous task in the TO DO column.

"My friend and mentor Bill Tihen liked to tell a story of his boss rushing into the office with a new project that was 'top priority.' Bill walked him to the Kanban board and said, 'OK. Which of these other tasks in the TO DO or DOING column should I take off the board?' 'No, no,' the boss exclaimed, 'those are all top priority, too.' 'But that doesn't work," Bill answered, pointing at the board. 'There's a limit to what we can work on at one time. You'll have to choose the *top* top-priority" (Magnuson, 2020).

Bill got me going with Kanban, and Scrum Boards (or "flaps," in eduScrum terminology). We experimented with different columns, different lanes, using color-coded stickies, trying matrices to support prioritization. Before long another colleague in IT introduced us to the online version using Trello, which more or less proved itself over time, popping up in the admissions and student life offices, in residence halls, classes, and for organization of large-scale projects like reworking the school's assessment policy and re-accreditation.

While the features of Trello are excellent, the simple, tactile use of a physical space with sticky notes is highly effective, both for personal and group use. More than one of our visiting scholars (e.g. most recently Adrian Fritschi) has commented on how surprising it is to see so much pen

and paper work displayed in a wealthy boarding school that provides laptops and phones to every student. That, in addition to its adoption in several different areas of the school, speaks to the usefulness of a Kanban board.

We hope, of course, that the quick visualization also supports transparency, good management of work in progress, a brake on the temptation to multitask, and a more agile mindset.

Source

From LAS, Leysin, Switzerland, starting in 2014 and earlier in the IT office Questions: Paul Magnuson, pmagnuson@las.ch, Twitter: @zebmagnuson

Resources

Magnuson, P. (2020). Why Kanban? In Teach Your Way Around the World, a blog of *The International Educator*.

Appendix A - EDgility

In our chapter Getting Agile at School in *Agile and Lean Concepts for Teaching and Learning,* four of us LAS faculty members presented what we felt at the time were the central tenets, for us, of an agile mindset in education.

We expanded on the core by describing ten practices of the agile mindset. Drawing on early presentations of agility, particularly the <u>Agile Manifesto</u>, we thought that if educators were aware of certain thinking associated with agility, they could, when given the choice, do a little more of this over that. For example, when presented with the opportunity to structure work, aim for a collaborative instead of go-it-alone mindset; when creating class rituals, aim for a bit more trust than control, and so on.

Below is the core, as we conceptualized it in 2019, and the ten practices. Note that even in the article we suggest we may have missed some key practices. But we think these do a fairly good job of getting one started in a fresh mindset about education.

The Core of Agile in Education

These are our values, the core of the mindset we're working toward:

- EXPLORATION Exploration and play over tests and perfection;
- GROWTH Growth and rework over assessment reports without corresponding mechanisms to improve identified weaknesses;
- SELF-REGULATION Student-driven reflection and improvement over teacher directives; and
- LIFE WORTHY LEARNING Learning that supports additional learning over detailed course content.

Our 10 practices

- EXPLORATION Exploration over fixed content
- GROWTH MINDSET Growth over stasis

- TRUST Self-regulation over teacher control
- TRANSPARENCY Visibility over obscurity
- ADAPTABILITY Flexibility over rigidity
- SMALLIFY Quick, workable iterations and feedback over big plans
- VALUE Valuable learning over convenient assessments
- COLLABORATION Working together over competing against
- REDO Reflection and progress over right and done
- UPLIFT Problems as opportunity over problems as problems

Reference

Magnuson, P., Tihen, B. Cosgrove, C, & Patton, D. (2019). Getting Agile at School. In Agile and Lean Concepts for Teaching and Learning. Parsons, D. & MacCallum, K. (Eds.). Singapore: Springer.

Appendix B - Template for Contributions

A template for contributing agile-infused lessons and other education-related efforts.

Please use the template below and contact Paul Magnuson (pmagnuson@las.ch) and Nic Cosgrove (ncosgrove@las.ch) to include your vignette in the next iteration of these examples.

TEMPLATE

Title (Google doc "Heading 2")

Agile Concepts

- · Agile concept or tool
- etc

EDgility

- EDgility practice (see Appendix 1)
- etc

Learning & Teaching

In approximately 250 words, what was the lesson? Illustrate the concepts from agility.

Source

From [course], [place], [date] Questions: [name], [email], [Twitter etc]

Resources