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"Frankly It's A Gamble": What Happens When Middle School Students Compose their Own Schedules?

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ABSTRACT

This article describes what happened when a group of middle school teacher-researchers at the International School of Billund (ISB), Denmark, joined university-based researchers from the Harvard Graduate School of Education, to engage in a new qualitative methodology called "Playful Participatory Research" or PPR (Baker & Davila 2018; Baker *et al.* 2016). The goal of the inquiry was to explore some of the tensions that exist between play and school—in particular the paradox between the timeless nature of play and the timetabled nature of school. The experiment was an example of one of the principles of a *pedagogy of play* proposed by the research team, which suggests that teachers' collective and systematic study of artifacts of student learning (or "pedagogical documentation") helps them to navigate such paradoxes. The teachers decided to replace two weeks of the standard school schedule with a 'student-composed schedule', in which students were free to design their own programme. Although the experiment got off to a shaky start, as it progressed, many students capitalized on the opportunity to choose where and with whom to work; they began to see each other as intellectual resources; and they started to take more responsibility for their own learning.

KEYWORDS: *play, playful learning, pedagogy, children, teacher research, education, middle school, pedagogical documentation*

> [I]t's wrong to think of play as the interruption of ordinary life. Consider instead playing as the underlying, always there, continuum of experience ... Ordinary life is netted out of playing but play continually squeezes through even the smallest holes ... [W]ork and other activities constantly feed on the underlying ground of playing, using the play mood for refreshment, unusual ways of turning things around, insights, breaks, openings and especially looseness. (Schechner 1988: 16)

Much is known about the importance of play in children's development (Bateson & Martin 2013; Brown 2009; Froebel 1887; Frost *et al.* 2012; Hirsh-Pasek *et al.* 2009; Piaget 1971; Vygotsky 1978), yet little research has explored what it might mean to put play at the heart of schooling. Making room for playful learning in school can be a challenge, especially with older students. Numerous tensions exist between playful learning and the way most middle schools are structured. To those who consider play a central strategy for learning, resources such as time, space, and materials can seem scarce. To those who see play as frivolous, promoting playful learning interferes with educational policies that stress efficient coverage of mandated curriculum and externally determined standards (Mardell *et al.* 2016).

Indeed, incorporating play as a pathway for learning in school leads to a number of paradoxes:

- play is timeless with players often losing their sense of time, whereas school is timetabled;
- play can be chaotic, messy and noisy, whereas schools are places of order;
- play involves risk, whereas schools are places in which children should be safe;
- children are 'in charge' of play, whereas in school, the agenda is typically set by adults;
- play is unpredictable and full of surprises, whereas schools have a set agenda, often determined by forces outside the school; and
- through play children create culture, whereas schools are often places where culture is transmitted to children.

David Kuschner (2012) describes these paradoxes as a series of "unremitting contradictions" between the fundamental nature of childhood and children's play, and the fundamental nature of school. Although paradoxes are capable of providing meaning and deepening understanding, they can also lead to paralysis and frustration if ignored or attempts to resolve them proceed too quickly.

Foregrounding playful learning does not mean that all learning has to be playful, or that every moment of playfulness involves significant learning. However, play and playfulness possess significant social, emotional, and cognitive features that can powerfully assist learning in a variety of contexts (Yogman *et al.* 2018). Perkins (2016) has argued that sometimes these features help to make learning feel playful, whereas at other times they make the learning process more engaging and exploratory, without feeling playful as such. In this paper, we explore the question, *How can educators, students, and families create a school culture that facilitates playful learning - exploring new ideas, exercising choice, taking risks, making mistakes, and experiencing joy and wonder?* We begin with a description of the Pedagogy of Play Project (POP), a collaboration between researchers from Project Zero (PZ), a research organization at the Harvard Graduate School of Education, and the Lego Foundation, and define some key terms. Then we focus on an experiment conducted by seven middle school teacher-researchers in order to tip the balance of responsibility for learning to the learners themselves.

THE PEDAGOGY OF PLAY PROJECT

The Pedagogy of Play (PoP) project began in 2015 as a research collaboration between Project Zero researchers and the LEGO Foundation. Although the project was launched with educators from the International School of Billund (ISB)[10], Denmark, we have since expanded to research sites in South Africa and the US[11]. The goal of the project is to develop a systematic approach to the practice and study of playful learning and teaching in school (Mardell *et al*., 2016). In the first phase of our work, we identified eight key principles of a pedagogy of play based on a review of the literature, classroom observations, teacher interviews, and analysis of samples of student work (Figure 1). This study group experiment reflects Principle #2 (tipping the balance of responsibility for learning toward the learners), Principle #7 (creating a culture of trust and openness that allows adults and children to negotiate policies and rules), and Principle #8 (collectively exploring the paradox of time). Although culturally specific, some of the principles are likely to be relevant for contexts beyond ISB.

In March, 2018, a study group of seven middle school teacher-researchers at ISB took a calculated risk. In order to explore one of the paradoxes inherent between play and school—the often timeless nature of play, and the time-tabled schedules of most schools (but not all schools, e.g. Oltermann 2016), the teachers decided to get rid of the timetable for two weeks, allowing students the freedom to design their own schedules. Apart from meeting every morning and afternoon in reflection groups, students were able to choose when during the day to schedule their subjects. Teachers wrote up instructions for the assignments, along with estimated timeframes, and made themselves available for support upon request.

The middle school teachers were part of an emergent form of teacher research called 'playful participatory research' (PPR) (Baker & Davila 2018). PPR is both an approach to teacher research and a form of professional development. The middle school teachers met regularly to discuss ideas and practices related to playful learning, grounded in documentation[12] of student thinking and learning. We define teacher research as intentional and systematic inquiry carried out over time by those in the classroom in order to enhance understanding of teaching and learning (Borg 2003; Giudici, Rinaldi & Krechevsky 2001; Perry, Henderson & Meier 2012). Approaches like PPR enable teachers to contribute to, rather than merely receive, knowledge about teaching and learning (Cochran-Smith & Lytle 1999, 2009; Escamiller & Meier 2018; Krechevsky & Stork 2000; Weinbaum *et al.* 2004). At

[10] The International School of Billund (ISB) is an international school in Billund, Denmark, serving 400 students, ages 3-16. The school follows the International Baccalaureate primary and middle school years (designed for 11-16-year-olds) curriculum. One third of the students are Danish; the rest come from 50 countries around the world. The school's mission is to demonstrate the power of playful learning in a real-world setting. To learn more about ISB, visit www.isbillund.com.

[11] For more information about the PoP project, see www.pz.harvard.edu/projects/pedagogy-of-play.

[12] In this paper, the term "documentation" (sometimes called "pedagogical documentation") refers to "the practice of observing, recording, interpreting, and sharing, through a variety of media, the processes and products of learning, in order to deepen learning. (Krechevsky et al. 2013 p.74; Krechevsky, Rivard, & Burton 2010).

ISB, teachers participated in playful activities or provocations to foster their own creative thinking, and assumed a playful mindset to test ideas in the classroom, occasionally engaging students as co-researchers. Study groups met monthly to investigate questions of shared interest related to playful learning. Each group chose a research focus; collected, shaped, and shared documentation of student learning; used a structured discussion protocol to analyze the documentation; and identified next steps. Then the cycle repeated. Teachers posted samples of student work on a digital platform called *Padlet* so their colleagues and PZ researchers could share comments. Each spring, the study groups shared what they learned with the entire school community in a celebration of learning.

FIGURE 1: PROPOSED PRINCIPLES OF A PEDAGOGY OF PLAY

1. **Playing with an educational purpose.** Playful learning often situates curricular goals, content, and activities, as well as learners' lives and interests, within a larger purpose or inquiry.
2. **Learners leading their own learning.** Taking playful learning seriously means tipping the balance of responsibility for learning toward the learners. Playful learners are intrinsically motivated to reshape the world and to test the limits of their abilities without fear of failure.
3. **Experiencing choice, wonder, and delight**. Learners experience *choice, wonder,* and *delight* when they are learning through play and interacting with people, ideas, materials, or spaces. At the same time, what is playful to one may not be experienced as playful by another. Not all learning has to involve play, nor will every moment of play entail significant learning.
4. **Connecting life inside and outside the classroom**. Playful learning frequently invites a transfer of knowledge and experience between the classroom and life outside the classroom.
5. **Learners reflecting on playful experiences**. Learners need to reflect on their learning in order to learn through play. This can happen before, during, or after a learning experience.
6. **Cultivating a culture of playful learning for adults.** In order to create a culture of playful learning for children, there needs to be a culture of playful learning for adults. Playful learning benefits from teachers' capacity and disposition to find the extraordinary in the ordinary (whether materials, physical environment, academic content, etc.).
7. **Fostering trust and welcoming negotiation**. Trust at all levels (administrators, teachers, children, families) and a willingness to negotiate policies and rules are necessary in order for playful learning to flourish.
8. **Collectively studying the paradoxes between play and school**. Fostering playful learning entails navigating a set of paradoxes between the nature of play and the nature of school. Collaborative and systematic study of artifacts of student learning (documentation), can help educators navigate these paradoxes.

Play (like learning) is notoriously difficult to define. As play theorist Brian Sutton-Smith (1997) has observed, although all people play, and have a sense of what play feels like, when making theoretical statements about play, we tend to descend into "silliness". Zosh *et al.* (2018) argue that viewing play along a continuum, from free play (no guidance or support) to guided play and games (including purposeful adult support as well as play) is one way to clarify the relationship between play

and learning. Weisberg *et al*. (2016: 177) define *guided play* as "learning experiences that combine the child-directed nature of free play with a focus on learning outcomes and adult mentorship" (cf. Klahr 2013). We also see play as a negotiation between adult learning goals and student-led learning. We identified three indicators of what playful learning in school looks and feels like—*choice* (or agency), *wonder* (or curiosity), and *delight* (or satisfaction) (Figure 1, Principle 3). The indicators were developed from a review of the literature and collaborative, iterative analysis of semi-structured interviews with ISB teachers, classroom observations, video- and audio-recordings of classroom interactions, student work samples, and notes or recordings of study group and PZ team meetings.

This paper describes the genesis and results of the middle school group's experiment, the adults' planning process, and lessons learned. Teacher and student quotes were selected from semi-structured interviews (audio- or video-taped during or after the two-week period) with the seven teachers and two students, audio-recordings of study group meetings, teachers' written notes of student conversations, video-recordings of student interactions (and one parent-teacher meeting), and student surveys or written reflections. Other data included student work samples or interactions either posted on *Padlet* or shared by teachers in study group meetings, and meeting notes. The teachers identified two M8 middle school students, Amit and Anna[13], to follow throughout the two weeks because both students were enthusiastic about the idea, and they wanted a boy and girl's perspectives. Amit is from India and had been at ISB for almost a year. Anna is Danish and had been at ISB for two years.

> "What happens when middle school students compose their own schedules?
> Amit's response: "Frankly, it's a gamble"

TINKERING WITH TEACHING: "THE ONLY THING WE KNOW FOR CERTAIN IS THAT THINGS WILL CHANGE."

In the spring of 2017, ISB science teacher and coordinator Ole Jorgensen found he could not sleep. His mind was occupied with thoughts about, 'What if…?'. What if middle school teachers dropped the traditional timetable, at least for a week or two? What if students were free to schedule their own learning? Would giving more choice to students help teachers to teach more efficiently? In the fall, Ole shared his thoughts with the study group, all of whom responded with enthusiasm. Lene Christensen, co-facilitator of the study group, was particularly interested. She shared with Ole her own experience at a school she had attended, in which several hours each day were devoted to students choosing what to study. The first step was to ask for the opinions of students. Ole posed the following questions to the M8 students in his science class, with students identifying potential benefits and raising concerns. Representative responses follow:

How do you feel about designing your own schedule?

[13] "M8" refers to 13-14-year-old students in the Middle Years Programme of the International Baccalaureate. Pseudonyms are used to refer to students throughout the paper.

I feel great!! No more useless lessons. I feel like there is a bit more freedom in life. I think this is a great idea. (Willy)

Nervous, apprehensive, unsure, and unprepared. It could be interesting. (Emil)

What positive effects do you see in designing your own schedule?

The positive effects I see from this is how we can turn down on our stress and make our schedule fit how we want it to fit. (Marc)

You know how you work best and it will be easier to work the way you work the best. You can have specific days when you work really hard and then have days you relax more. (Gayle)

What negative effects or difficulties do you see?

The negatives might be that I could get distracted, or if I'm the only one doing that lesson, it could become a little lonely. Some people might think they can just relax or play games, and then they won't work as well. (Angie)

Some of the negative effects are definitely that some people will not get anything done, because they are too lazy or it ends up in chaos. By chaos, I mean that maybe the schedule you planned might not go as you planned, because you decide to change it a bit throughout the week. Some people might also rush through the work, and it will not be as quality work as it might have been. (Helle)

Comments or ideas that can improve the model.

Maybe you could go together with a friend of your choice and make some of the lessons together so you're not that lonely. You don't have to do the same lessons as your friends, you can just sit together. (Angie)

Plan lessons with friends that can help you through the lessons and have fun with. Teachers help students to plan the best way possible. Try to do the hardest first in the week. (Gayle)

The students' responses revealed significant self-knowledge about working habits and potential pitfalls. They mentioned a desire to work with friends and the importance of blocking out time to meet with a teacher. They also identified potential challenges such as stress, loneliness, distraction, and procrastination. Students referenced concerns that adults often experience in their own work lives - things not going as planned, staying focused, getting tired, putting off things that are less interesting, and losing track of time. In response to these concerns, the teachers allotted collective planning time for students so they could coordinate their schedules with their peers. Teachers also created a structure for daily reflections so they could regularly check-in with students throughout the two weeks.

Ole observed:

> Some of them were talking…about how it could be a bit stressful for them to plan … Because it gives them more responsibility, they will also feel more responsible for making sure they learn something … You could say, the normal way we teach, we take more responsibility for their learning process, whereas in this way they know they are responsible themselves, and that might feel a bit hard on them. But I think that's also one of the important things about this project - that they feel more responsible for their learning.

Both Amit and Anna perceived that the 'student-composed schedule' or SCS was a way for teachers to 'test' them. Anna said, "I think they are kind of testing us in a way. Like to see how we manage our time …without them being there to keep quiet or to keep control over the classroom all the time". Amit said, "I think they want to know what we can do on our own, like how productive we can be, or maybe it's just an experiment to see if we can work well without much supervision". Like their classmates, both students thought that there would be a number of kids who would not get their work done and gave the following advice to their teachers:

> Anna: Watch us closely!
>
> Amit: Don't leave the students hanging because it's like a lot of people would have doubts and … there should also be these few teachers doing rounds so there aren't these kids sitting around and going on YouTube and stuff.

For Ole, students' individual differences posed another challenge related to the paradox of time. In maths, for instance, some students were very efficient in solving math problems; others were not. By allotting all students the same amount of time for a subject, either the faster students waited for the slower ones or, if you moved on, the slower students found it hard to catch up. In most subjects, it took a while to build up to a high level of engagement. Because of the fixed timetable, classes often ended soon after students became engaged, which meant teachers needed to start all over again next time. Ole hoped that increasing student choice would lead to more motivated, self-directed, and playful learning, and a greater chance of students experiencing 'flow' - the state of being fully engrossed in an activity to the point where you lose a sense of time, environment, and sometimes self (Csikszentmihalyi 1990, 2008).

Ole and Lene also posed a similar set of questions to their study group colleagues. Their colleagues were excited about supporting student autonomy and choice, but worried that the younger students would feel overwhelmed by the freedom and isolation. At the same time, the teachers wanted to challenge student assumptions about study, homework, and free time, and the perceived disconnect among the three activities. The teachers ultimately decided to give the younger students more time to plan their schedules and fewer assignments than usual. They also mixed grade levels in the reflection groups so that the older students could support the younger ones.

To solicit parental opinion and address potential concerns, Ole facilitated an informational session after school. "We live in an uncertain world that is changing rapidly", Ole began. "The amount of information available is steadily increasing; artificial intelligence and robotics will change society dramatically. The

opportunities to learn new knowledge and skills come from a variety of sources - YouTube and other Internet sites. The only thing we know for certain is that things will change, and this means schools need to prepare students to become lifelong learners". Ole linked the timetable experiment to evolution and adaptation - if a species does not adapt to changes in its environment, it will not survive. Self-management, in particular, is critical if students are to thrive in today and tomorrow's world, in and outside of schools. Ole also connected the experiment to the International Baccalaureate's Middle Years Programme (MYP) "Approaches to Learning"[14] skills of self-management, collaboration, and research.

Some parents expressed concern that the students would misuse the freedom and "waste away the week". However, after looking at a sampling of student responses from Ole's science class in small groups, several parents noted that the students seemed excited and eager for the challenge. As one parent said, "He will maybe be a little bit out of his comfort zone, but that is good once in a while".

THE NITTY-GRITTY: 76 STUDENTS, 13 TEACHERS, 10 REFLECTION GROUPS, 11 SUBJECTS, 2 WEEKS, AND 95 TIME SLOTS

Months of conversation and preparation yielded a plan for a student-composed schedule that was introduced in March 2018 with five key features:

The schedule

Teachers instructed one group of students to schedule English, Language Arts (Spanish or German), Individuals and Societies ("IS" is an integrated humanities curriculum of the IB), and the Arts (visual art, drama, or music) during Week 1, and—Science, Math, Design, and Danish during Week 2. The other half were asked to reverse this schedule.

A planning period for students and teachers

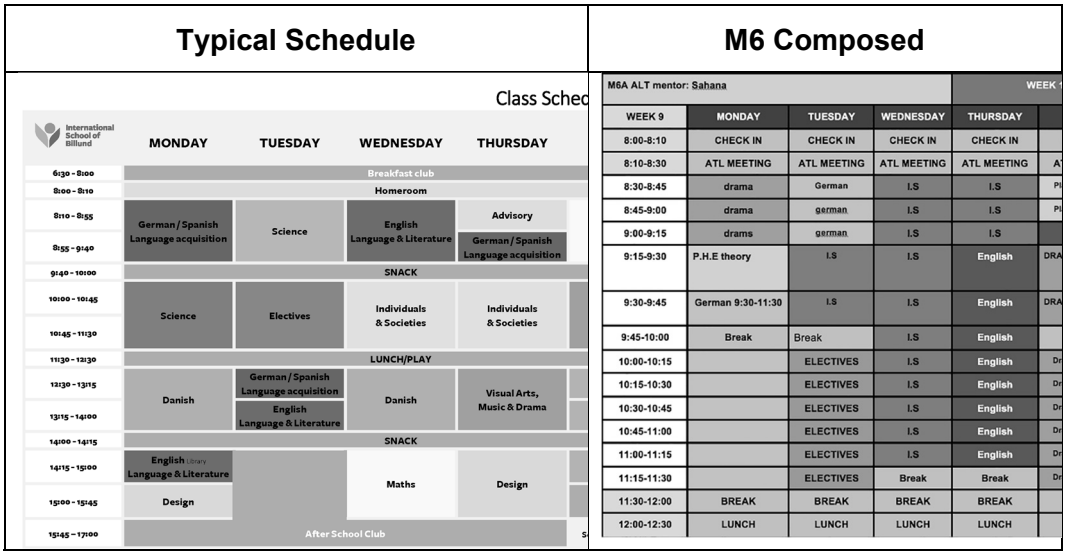
A week before the experiment began, with teacher support and guidance, M6-M9 students were given 90 minutes in the homeroom to design their schedules in "Google Classroom"[15] for the first SCS week. Most students chose to plan their schedules collaboratively with a small group of peers, parsing out 95 15-minute time slots across four subjects as they saw fit (Figure 2). Students considered what they wanted to do on their own, against what they wanted to do with others, factoring in such time considerations as when teachers were available and when to insert a break. Some students wanted to work hard for a long time and save up their breaks; others wanted to intersperse breaks and periods of hard work. Some chose to double up lessons, while others wanted to alternate. Each student also

[14] Approaches to Learning are cross-disciplinary skills, strategies, and attitudes that help students learn how to learn; they include thinking, communication, social, self-management, and research skills.

[15] Google Classroom is a free web service that helps schools move to a paperless system by combining Google Drive, Google Docs, Sheets and Slides, Gmail, and Google Calendar in order to streamline the process of sharing files between teachers and students.

identified a 'personal project"' - an area of interest they wanted to pursue or a skill to develop if they finished all of their tasks early.

FIGURE 2: SCHOOL SCHEDULES - STANDARD AND STUDENT-COMPOSED



Typical Schedule

Class Schec

International School of Billund	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
6:30 - 8:00	Breakfast club			
8:00 - 8:10	Homeroom			
8:10 - 8:55	German / Spanish Language acquisition	Science	English Language & Literature	Advisory
8:55 - 9:40				German / Spanish Language acquisition
9:40 - 10:00	SNACK			
10:00 - 10:45	Science	Electives	Individuals & Societies	Individuals & Societies
10:45 - 11:30				
11:30 - 12:30	LUNCH/PLAY			
12:30 - 13:15	Danish	German / Spanish Language acquisition	Danish	Visual Arts, Music & Drama
13:15 - 14:00		English Language & Literature		
14:00 - 14:15	SNACK			
14:15 - 15:00	English Library Language & Literature		Maths	Design
15:00 - 15:45	Design			
15:45 - 17:00	After School Club			

M6 Composed

M6A ALT mentor: Sahana — WEEK 1

WEEK 9	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
8:00-8:10	CHECK IN	CHECK IN	CHECK IN	CHECK IN
8:10-8:30	ATL MEETING	ATL MEETING	ATL MEETING	ATL MEETING
8:30-8:45	drama	German	I.S	I.S
8:45-9:00	drama	german	I.S	I.S
9:00-9:15	drama	german	I.S	I.S
9:15-9:30	P.H.E theory	I.S	I.S	English
9:30-9:45	German 9:30-11:30	I.S	I.S	English
9:45-10:00	Break	Break	I.S	English
10:00-10:15		ELECTIVES	I.S	English
10:15-10:30		ELECTIVES	I.S	English
10:30-10:45		ELECTIVES	I.S	English
10:45-11:00		ELECTIVES	I.S	English
11:00-11:15		ELECTIVES	I.S	English
11:15-11:30		ELECTIVES	Break	Break
11:30-12:00	BREAK	BREAK	BREAK	BREAK
12:00-12:30	LUNCH	LUNCH	LUNCH	LUNCH

Self-directed assignments

Teachers wrote up assignments and learning outcomes along with time estimates on Google Classroom so the tasks could be carried out with limited or no direct instruction (i.e. whole-class teacher lectures or presentations with minimal student participation). Teachers were also available for consultation during the two weeks; students were invited to contact them via email. If teachers decided they needed whole-class teaching time, they could book a classroom for 15 or 30 minutes, which students then needed to include in their own schedules. To minimize additional work, Ole and Lene instructed teachers not to change the lesson plans they had originally planned for the two weeks. Just as in their regular schedule, students were not given more than 30-45 minutes of homework per week for each subject.

Physical layout

Teachers designated a teacher hub, a common area, and two quiet rooms where students were allowed to talk quietly in small groups. Teachers occasionally circulated through the different areas to check on students.

Reflection groups

Small groups of students from different grades met for 20 minutes with a teacher adviser at the beginning and at the end of each day in ten "Approaches to Learning" reflection groups. Students completed online reflections with regard to planning or reviewing the day. Sometimes, they shared or debriefed experiences, problem-solving as needed.

INTO THE WILD: STUDENTS LEADING THEIR OWN LEARNING

A rocky start for some; on the right track for others

Week 1 did not start well for all students. Megan, a design and maths teacher, commented,

> I would say that it started out a bit stormy, a bit chaotic … the younger students found it more difficult to get themselves off the ground and started with ... lots of them asking lots of questions, coming to the teachers.

Students were asking questions like, "What should I be doing now? When should I take my break?" In Megan's view, teachers usually dictated those things, so it was natural for students to ask about them. There were also a number of practical challenges with charging laptops and related issues, even though students knew where the charging points were. Several parents raised concerns about the technology glitches and the stress their children were feeling. In fact, students were not used to problem-solving in this area because teachers had always managed the technological problems.

For other students, the week started out more smoothly. Anna said, "Day 1 went pretty well. I followed my plan. I was surprised by how serious people were taking it. I didn't see teachers, just Ole for science. I was "close" to seeing Merete [maths teacher], but I figured it out with my friends". Amit said, "In the morning, when I came to school, it didn't feel like school. Before, everything was so quiet. Now there is no silence. A lot more people are around. It's busier ... and better to have no silence because it gives you a feeling of doing something..."

Ole and Lene observed skills and capabilities for the first time.

> Ole: I'm a bit surprised that nearly all the students have actually tried their best … Because I had feared that some of the students might just, after a half a day of work, they would have tried to hide around in the corners, but I don't think that's actually an issue.
>
> Lene: Not at all. I've been sitting out there in the cluster, and it's quiet, and they're working, and they are getting back on track after breaks as well. I'm really surprised.

Week 2 was more stressful for some, due, in part, to the number of summative assessments, e.g. an in-class essay in Individuals and Societies, a final drama performance, and a written portrait of a writer in Danish. By the end of the week, students were taking responsibility for what they were supposed to do. In fact, teachers were surprised to see students persist with figuring out task instructions - looking back at the instructions on Google Classroom or relying on their peers - *without* turning to the teacher. Students seemed to enjoy teaching each other to a degree that their teachers had not anticipated.

Learning from and with peers

In general, teachers trusted students to lead their own learning, and the students responded positively. When one student was out sick, her classmates called her

on a cell phone during ‘class’ to solicit her perspective on a project. In the science room, M6 students worked side-by-side with M9 students. Ole said, “Peer-to-peer learning worked well in science. You could see the younger students were interested in what the older students were doing. The younger students were more focused, and it gave the older students an opportunity to review and reflect on topics learned earlier”. Informal learning and the presence of wonder increased as students asked and responded to questions about what their peers were doing.

In Danish and English, students helped each other across grade levels. Lene said she had not anticipated that students with Danish or English as a first language would be called upon to help students with a different first language. This gave some students who often found classroom assignments challenging an opportunity to share knowledge and help their peers. Megan remarked, “Students loved helping each other. They became more engaged when helping each other. It gave me ideas for how to use that in class.”

Amit said he thought he would work alone, but found himself doing almost everything in a group. However, group work also had its drawbacks:

> Day 1 was fine. I did everything according to plan. Day 2 was not good. I was behind. It was like a blank. I was talking with friends so I don’t know…I had thought you couldn’t just sit around and do nothing, but, surprisingly, no! It’s not hard because you’re not just sitting alone. Day 3, I had to work a lot more, and now I’m almost done with everything.

Later, he added that he enjoyed sitting with friends, even when they were doing different things, because you could still talk about what you were doing and get their perspective.

Students also seemed surprised by the work habits of their peers. Anna commented that her peers were taking learning more seriously than she had thought they would. “I think of learning in a new way. Everyone learns differently. You learn about yourself and others by sitting in clusters”.

Life lessons

Students discovered a great deal about their time management abilities or lack thereof. As Amit said, “I get distracted very easily, but this took it to a whole new level… a personal low… I was lost. What did I do? How could I spend so much time doing nothing? I’m not used to this much freedom!” Many students figured out that on Friday afternoon, they should not be doing maths or science because of the concentration required; they modified their plans from Week 1 to Week 2 accordingly. Students also discovered the advantages and disadvantages of learning in a group. Some were able to reflect on their choices and adapt if they detected a problem. One student chose to sit alone, saying, “Yesterday I didn’t do anything because I got distracted all the time, so today I’m alone”. The teachers also learned about balancing and sequencing individual and group learning. Teachers had expected that students would choose to work collaboratively. However, it became clear that students also needed to be alone, using this quiet time to consolidate knowledge and think hard to solve problems.

Some students contacted Sahana (Individuals and Societies and German teacher) on Google Classroom to pose a question, and started an online chat. Before SCS, students reached out to Sahana only when they saw her in person, which sometimes resulted in students waiting to say they did not understand the task until the day it was due. Additional points of contact meant students were able to spend more time on the "right" assignment. Sahana reports that students' willingness to check with the teacher outside of class has continued beyond SCS. Indeed, many teachers see the SCS as a "disruptor" that led to more effective engagement during the "normal" school schedule; however, Ole believes SCS should be the new norm--at least for older students.

Choice of setting

Many students appreciated the freedom to choose where to work. Anna mused, "I think the fact that I can sit wherever I want, that it makes me feel more calm, …[it helps me] focus more than I would sitting in a classroom". Anna often surrounded herself with her friends. They would choose a table outside the front office as their main study location, "I like that it's not crowded, like if you sit in the MYP [area] … At the office, it's just you and the office … Even though there are children … you don't really notice because you have headphones". Visitors to the school commented on how quiet and focused the students were. Even when students veered off-task, or someone would tell a joke, they returned to work relatively quickly.

FIGURE 3: THE EVOLUTION OF VERSAILLES

In the M8 classroom, three M9 students started to build an office space out of some tables. Over the course of a morning, the structure turned into the 'Bastille', and ultimately 'Versailles'. Having just finished a history unit on the French Revolution, the M9 students challenged themselves to add something new to the castle each day (Figure 3). 'Versailles' elicited a range of reactions. Some students felt like the castle excluded them from the classroom since it used up most of the chairs. Others thought it was a creative act and did not mind the lack of seating.

Tue, the MYP Coordinator, suggested that perhaps MYP students should be offered more materials for creating their own study spaces.

Reflecting on playful learning

Asking students to plan and review their days with the same reflection questions each morning and afternoon did not prove as generative as the teachers had hoped. The teachers realized that reflection should be critical part of the learning process, rather than separate from content learning. Throughout the week, Tue observed students on the way to a lesson regularly engaging each other in conversation: often, the subject was academic. When M9 student Carl passed his classmate, Per, on the floor in the corridor outside the science room with an apparent stomachache, Per spoke up:

> So Carl, you remember when I told you that some places in Africa, Coca Cola is cheaper than water? ... The Coca Cola company has managed to raise the price of water, so they sell more cola. It's of course bad for health. It has to do with the large aluminium content ... not of the cola, but of the cans … so there is a lot of aluminium available from the empty cans. This is also not good for the environment...

In these exchanges, students were applying what they had been learning by verbalizing and explaining to each other their new knowledge or discoveries. Tue dubbed this type of reflection 'corridor learning'. In the common room, several groups were working on German and Danish, while Andreas and Oliver were working on maths, when the following exchange ensued:

> *Teacher:* Ladies and gentlemen, please keep it down a little bit. Others are working.
> *Andreas (M6):* Ohhh, I know, it's just … this is really exciting.
> *Oliver (M6):* Yes, we are trying to simplify numbers that are even less than zero.
> *Andreas:* Yes, isn't that funny … simplifying such small numbers that they are not even zero.
> *Oliver* (in a very excited voice): Yes …and we are not even supposed to do this … We just felt like it.

Project Zero researcher Ben Mardell articulates the 'sweet spot' between school and play as the point when what the teachers want the students to be doing is exactly what the students want to be doing. The atmosphere created by the SCS seemed especially hospitable to fostering this type of overlap. Students were able to pursue individual areas of interest not directly related to the task at hand because they were given more responsibility for setting the time frame, and hence the task parameters. The motivation for this learning came from the students more than the teachers; satisfying their curiosity was more self-driven than teacher-driven.

In addition, teachers began to clarify for themselves the possible audiences (e.g. students, teachers or families) and purposes of reflection (e.g. for students--to solidify content or acquire procedural knowledge or to understand oneself as a learner; or, for teachers--to gain insight into a student's level of understanding). Teachers also experimented with different formats for student reflection (e.g.

collecting oral or video testimony, in addition to written submissions, or asking for group as well as individual reflections). The teachers hoped that this analysis of reflection would enable them to become more effective facilitators of reflection in the future.

The paradox of time

One of Ole's initial motivations for creating the SCS was to increase the opportunity for 'flow'. The teachers designed the template for SCS assuming that students should give equal time to each subject, but the opportunity for students to allot different amounts of time to different subjects was an important factor in creating 'flow'.

In his art assessment, Amit had drawn a bus that stretched from one end of the page to the other, like in a cartoon. He described his work as, "fun while you're working on it, but when you stop, you realize you really don't have much time left … It was fun sitting there sketching things and, like, coming up with really weird, extreme ideas". He thought the SCS schedule allowed him to be more creative – to take risks with his drawing - that the regular schedule would not have allowed. He added that it was really helpful to have eight periods for the art summative assessment so, "… you could do your own research more than … you have to".

Amit also enjoyed the close relationship between the English summative assessment (creating a diary entry) and the summative assessment for Individuals and Societies (adding historical facts to the entry). He thought his experience of wonder was enhanced by the additional time that he allocated to research in depth and his doubling up of courses:

> Amit: I was studying about World War II in IS, and … while I was working on the IS summative, we also had a project in English, and I had to research this guy called Vidkun Quisling[16] … I think it gave me more insight on what happened in Norway. And it was interesting working on English and then IS because it's really related, closely related …
> PoP: Couldn't you have done this in the regular schedule?
> Amit: I think it's because I have so much time that I can actually go in depth with my research, because otherwise I had to, like, stay with the main topics, the major things that happened.

Mario, a Spanish and music teacher, noticed a distinct shift between Weeks 1 and 2 with regard to time-management and self-regulation skills:

> Students were more willing to sit down and get things done because they knew the relationship to time you waste and future frustration. For many of them, it was very easy. They just do whatever they had to do. But … for many students, they usually feel in their comfort zone during lessons because they have teachers there to answer their questions. They are really good at following instructions, [but] they have a difficult time giving themselves tasks, or understanding … how they were supposed to take advantage of their time

[16] Quisling is the name of a Norwegian wartime politician who led a Nazi collaborationist regime in Norway during World War II.

or how to use the spaces, because they are used to being told where, how, what, when, and why.

Two surprises

One unexpected benefit for teachers of SCS was that they experienced a rare opportunity to work one-on-one with students for longer than the typical schedule usually allowed. Teachers were able to spend more time getting to know students - especially those who struggle with academic work - and their personal learning strategies. The SCS context was more relaxed because there were not 19 other students waiting for the teacher to finish. The relationships and information were invaluable when returning to the regular schedule because teachers were more aware of each student's particular strengths and weaknesses. Merete, the maths coordinator, found talking to students about their learning process especially revealing. Moreover, after returning to the regular schedule, she was able to refer back to the students' experiences of success during the one-on-one SCS interactions to remind them of what they were capable of.

Another unexpected benefit for teachers was increased communication with their colleagues because of the shared 'hub' space that they used when they were not working with students, or sitting in the common space. Newer teachers had a chance to observe and get inspired by seeing their more experienced colleagues work with students. Lene, for example, was struck by Megan's flexibility and comfort when helping two students working on different subject matter. Lene commented, "I was very inspired by Megan sitting in the cluster with all these kids around her not doing anything she knew about, but still acknowledging all of them, and at the same time, being able to help these two kids, and … all of that without being stressed by it, but just being there". Students were also able to observe their teachers working together.

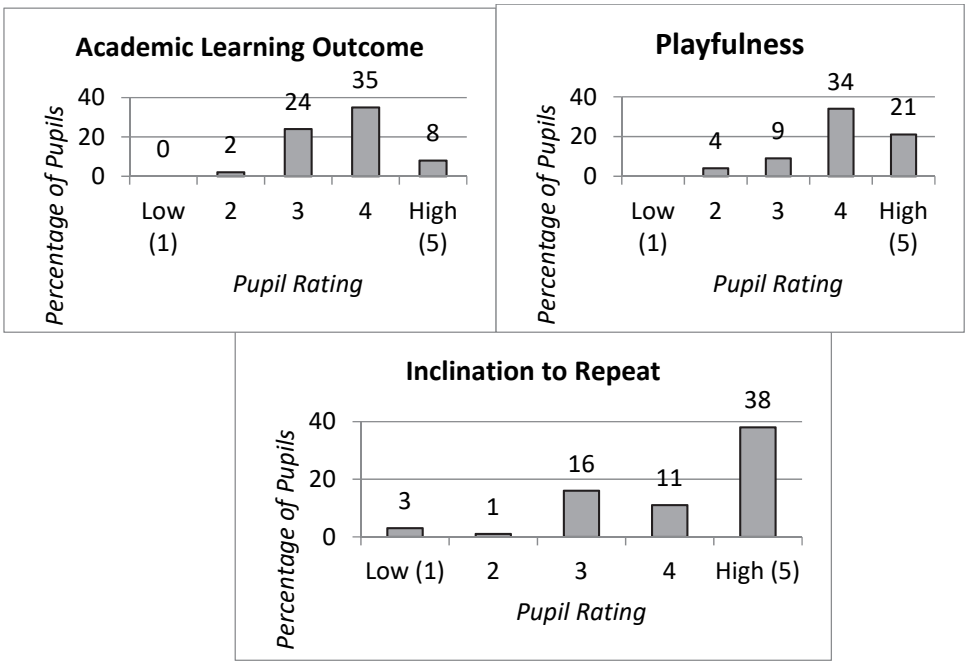
"My learning is for me and it's me who takes it into the future"

The SCS experiment enabled teachers to play with the paradox of school and time. Teachers were able to challenge students to take responsibility for their own learning in the typically controlled setting of school. They hoped that students would discover their own identities as learners, outside of the typical 'student role'. As Amit said, "I stopped looking at school like school. [SCS] is very different from school … [It's] pretty fun". An M6 student was even more enthusiastic, "You were the queen of your own kingdom … which was really cool because you were in charge of yourself and you learned and enjoyed a lot". Her classmate added, "It was like a university. I felt like I was a higher age and … we're so smart!" In a sense, the weeks of the SCS afforded students an opportunity to role play being a college or university student.

Although student reactions to the two weeks varied, many students embraced the new role and successfully navigated the freedom and responsibility that came with it. Sixty-nine students completed the final student evaluation of the SCS weeks, a 90% response rate. Students were asked to rate SCS relative to a 'normal' schedule on two factors, academic learning outcomes and playfulness. They were also asked if SCS should be repeated and, if so, how often. As Figure 4 demonstrates, the evaluation was strongly positive with very few students rating

SCS negatively on the five-point scale for academic learning and playfulness, and the majority rating it positively, rather than neutrally. Unsurprisingly therefore, there was robust support to repeat it again. However, students did not want the SCS to happen too frequently. In response to the question, "How often?" to have SCS weeks, one-half of students said "four times a year" and one third suggested either once or twice a year. Based on these responses, and talking to their other middle school colleagues, the teachers committed to repeating SCS twice in the coming year.

FIGURE 4: SCS STUDENT EVALUATIONS, RELATIVE TO 'NORMAL' SCHOOL DAY



In their 2001 review of the literature of play behaviour in animals, the American ecologist and evolutionary biologist, Marc Spinka, and his colleagues propose that (pp.141-142):

> … play functions to increase the versatility of movements used to recover from sudden shocks such as the loss of balance and falling over, and to enhance the ability of animals to cope emotionally with unexpected stressful situations. To obtain this 'training for the unexpected', we suggest that animals actively seek and create unexpected situations in play through self-handicapping, that is deliberately relaxing control over their movements or actively putting themselves into disadvantageous positions and situations. Thus, play is comprised of sequences in which players switch rapidly between well-controlled movements similar to those used in 'serious' behaviour and self-handicapping movements that result in temporary loss of control.

The SCS experiment functioned, in part, as a *training for the unexpected* for teachers as well as students. Neither group knew where the adventure of shifting the balance of structure and freedom would lead. What reflection questions would

best support learning in this new configuration? How would the parents respond? Would students be able to recover from plans gone awry?

More than two months after SCS, Anna comments that she feels like she is still controlling her own time management across tasks, even if a teacher is in the room. Anna likes planning her own time because she can motivate herself to finish one task in order to move onto another. Anna thinks her teachers are more likely to let students choose with whom and where to work. This affects her attitude toward school because she feels 'even more free', despite the return to the normal schedule. Anna believes the SCS experience has changed her understanding of what learning is about, "My learning is for me and it's me who takes it into the future. And it's taught me I need to put in effort". Anna still considers teachers to be important, as she notes, "They are there to help and you can always ask them a question even if they're not in the same room". Anna says the SCS helped make her more confident to approach teachers, "even if they're talking … it's not dangerous to go and ask them to help you". With regard to learning through play, Anna says, "I feel [SCS leads] to more playful learning … because we have our own schedule, and we are wherever we want with the people we want, it's … playful because you're just having a great time with a lot of different people". For Anna, and perhaps other students, choice seems to engender delight.

Like Anna, Amit thinks his time management is better, "… because it was very terrible. Now I actually plan stuff out. Before, it was like an hour of this or that, but now … I can sit down at math … and one hour will do". Amit also describes the SCS weeks as playful, "We were not just sitting staring at a wall. Everyone was talking and we were joking, and spent the better part of two lessons joking … but I got my work done ... and we'd help each other with different kinds of things".

CONCLUDING THOUGHTS

There are numerous implications of the SCS experiment both for the next time the teachers decide to implement the SCS and for regular classroom practice. In the future, the teachers report that they will more often expect students to figure out assignments on their own during the regular schedule. They will repeat instructions less and trust students more to take responsibility for knowing what to do. As the study group acknowledged, "Sometimes less is more when it comes to teacher control, directions, and guidance". The teachers will also be more open with regard to students choosing their own work setting during the regular schedule. They will create more opportunities for 1:1 support for students needing extra attention. The teachers also believe the feelings triggered by being in charge of one's own learning during SCS will serve as an important touchpoint for students and teachers alike during the more traditional schedule.

With regard to the paradox of time, the teachers learned that although they often provide a lot of individual choice to students in their regular lessons, ultimately, responsibility for the learning process is only truly experienced when *time* itself is also subjected to choice. In the future, the teachers plan to incorporate two SCS two-week sessions across the school year. Instead of asking students to design their schedules based on 15-minute time slots, they will ask them to plan based on the tasks of each subject, and when they might need teacher support. The teachers understand that they will need to present a better balance between closed- and

open-ended tasks, and between formative and summative assessment. One option being considered is to use one SCS week to focus on interdisciplinary tasks, and the other to focus on supporting students' experience of 'wonder'—a PoP indicator of playful learning that often seems to be overlooked, given the pressures on teachers in most schools to cover the curriculum (Figure 1, Principle 3).

Ole's observation at the parent meeting about the need for people to adapt to change also holds for schools. The student-composed schedule is an example of responsible experimentation in a changing world. Can the development of a pedagogy of play lead to a greater integration of students' passions and interests and more self-directed learning in a standards-based curriculum? Given the proliferation of high-stakes tests and the narrowing of the curriculum, one could say future prospects do not look encouraging. Perhaps the practice of 'playful participatory research' carried out by the ISB teachers holds out hope for creating new possibilities. As the maxim goes, "Yesterday's science is today's common sense and tomorrow's nonsense".

What is Anna's advice for the future? "Put in fewer tasks". Amit's advice to other schools? "If they do it, they need to learn to improvise because even though you plan out your schedule, things don't always go according to plan". Ole's recommendation, "Put on your risk-taker hat. Planning is a bit different and your role is different. You will need to trust students to handle the chaos".

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