HOW DO TEACHERS USE MINECRAFT OUTSIDE OF CLASSROOMS?

Zack Gilbert and Seann Dikkers

"Within two days, we had 120 kids sign up so we blew through the requirements and had more sign ups for the program than any other topic ever offered by the school in its twenty year history."

- Minecraft Teacher

The Petri Dish Club

Validating a tool like Minecraft is closely tied to working 'with' and 'for' students. Likewise after our teachers made the decision to use Minecraft, eleven of them chose to organize, (or let students organize!), a club *outside* of their classrooms and their narratives pause to elaborate and emphasize how instrumental these experiences were for them. For our teachers, outside of class time with learners was essentially a kind of petri dish for cultivating and growing new ideas.

We too will spend a chapter unpacking why teachers choose to organize 'clubs', what they think about that time, and how they begin to tie emergent activities into classroom learning experiences. Outside of class time also serves to train the teacher, provide ideas, and allow a natural process of testing, organizing, and developing group management around a piece of software. Broadly, understanding why and how teachers build clubs is an essential aspect of understanding professional learning processes.

This chapter first reviews narrative insights provided by our 17 Minecraft teachers and the end of the chapter includes a step by step guide to starting your own Minecraft club. Guest writer Zack Gilbert brings his experience explaining how he thinks about and goes about planning for a new club. First though we will explore why you might want to invest the time to start a club.

Why Start a Club?

Across the narratives in this study, teachers spend time explaining why they felt it was important, or essential to them, to start a Minecraft club. Clubs, in general, are good because they provide a safe space, build community, provide common ground for students, challenge them, and they are fun. Together, Minecraft teachers added their own professional development, lesson ideas, digital literacy, balance, and escape from curricular goals as core reasons why they invested time into meeting with kids outside of class.

Our teachers started explaining how important it is to try things out in a club first. Notably, for non-gaming teachers, playing in a play space helps them to learn the 'language' of gaming without the burden of curricular goals. To this end, knowing gaming terms, styles of play, student interest, basic mechanics, and rhythms of play are a form of literacy worth getting more familiar with as a teacher.

> "As games explode and become the cool thing that a lot of teachers want to try out they all just think that they can… not all, but many, and they don't have any background… you need to know the language of it. I think teachers can bring so much as long as they are approaching it from a gamer point of view or lens."

> "I think teachers have to learn to get out of the way and let the kids play the games and see where they can fit the learning in. Once teachers start trying to cram the learning into the game, you will kill the game and the game won't be fun."

If they are not, teachers are prone to colonize the game space with goals, assignments and forced actions that may not fit with what is fun (and compelling) about the game itself. This particular teacher went on to explain that teachers who aren't familiar with digital environments tend to 'assign' work and tasks that are out of alignment with the tool. This can actually have an adverse effect, rendering the tool powerless for learning. It is essential to make time to be able to watch students and integrate, not take over, learning spaces. Other teachers take time, without playing themselves, to see student actions and behaviors outside of the classroom:

> "We took a little time to think what could we do with this and how could we use it and to come up with ideas… The more I saw, the more I realized what you could do. I admit I probably have only played it 10 minutes myself."

> "The whole jumping into the game and not really knowing how to play the game is actually part of the game and part of the fun because they start out and a lot of them don't even know how to walk… So, I think the best advice I can give is to just jump into it."

Where teacher playtime varies between the teachers, they are essentially all seeking the same thing outside of class. They are trying to negotiate how the digital tools can be used, how they should be used, how their goals and the goals of the players can be balanced between learning and play.

> "I still try when I'm creating a new activity to find that balance, to give them a sense of purpose, to give them a goal but also include segments of game play where you are just playing Minecraft."

Another reason for starting an informal club for students is to escape the need to justify time spent. Classroom time essentially is set aside for learning a curriculum. Teachers, arguably, need to be able to explain each lesson and how they expect it to lead to learning. Currently, efforts to evaluate and quantify 'value-added' puts even more pressure on ensuring each moment in class serves the curricular goal.

> "I have curriculum to deliver and assessment to do and recording to get done. I can not just let them play. I don't know if that is short sightedness on me or whether that is just a fact."

Yet outside of class…

> "That argument can't hold up against when it is extracurricular, when it's enrichment, and supplemental, and we're still doing exactly what we've done before in the classroom."

Moving outside the classroom, then, is a clever way to experiment with new learning tools, without having to explain them. Often teachers will see the relevance of digital media in the classroom and ask where to start making changes to their classes. For these teachers, the answer is to leave the classroom alone and get to know Minecraft outside of classes.

Another small benefit to outside of class exposure was shared by one teacher that had tried classroom adoption first, and then saw the benefit of training a small, highly interested, cohort of players first, then bringing the game to the classroom.

> "I tell you what the first two weeks where you are trying to teach 15 plus students at a time how to play a game, that may or may not have had experience with computer games, that is awful. However, it pays off. As soon as they learn how to play, then they start teaching each other and then it gets much easier."

Similarly, using Minecraft outside of the classroom allows a teacher that is not technologically savvy to gain knowledge. For teachers that are new to games, virtual environments, or managing a classroom with computer users, this can be a safe place to learn and understand.

"I mean it doesn't have to be as big of a thing as I've made it for my kids. It can just be a day a month or something like that, where maybe the teacher doesn't understand as much about it technologically but can run it in the classroom, but just open to... reaching students who have a variety of learning styles."

"I don't know enough about how these kids will react to the game so I really felt it made sense to start with something that was really close to the original Minecraft experience."

Our teachers also explain that they organize time outside of class because it fulfills them. This is not necessarily new, teachers have coached, advised, and opened up their classrooms after school for decades because kids can just be fun to spend time with - especially around a high interest activity.

"It is really fun to have these big epic wins with the students. I feel like it has made me a much happier teacher."

These weren't the *most* important reason why to start a club however. Most commonly, playing with students served as a petri dish for understanding how to use the tool itself. Teachers explained that they would invite the kids in, step back, and watch them. Their advice is to relax, play, and spend more time with the people that love and embrace the software. As a teacher, with expertise in the content areas, you should be able to see natural fits between the tool and your curriculum.

"Having the teachers not be afraid to fail in a club is good. Failure is okay for teachers and students. When teachers feel pressure to teach the prescribed curriculum, failure seems to be a time waster, when in many cases it leads to deeper understanding."

The theme of failure carries over into classroom use also, but those teachers that started a club explained clearly that informal spaces allowed them to try more unique and experiential learning ideas without the pressure to cover content - until they were adequately convinced that the informal learning space presented results that measured up to their expectations in the classroom.

Stepping Back

Stepping back is actually a strategy for professional learning. Teachers explain how relevant and important it is to simply watch students. To these teachers, this process is a starting point, not an evaluation of new ideas. Instead of generating a great lesson idea and testing it, they start by stepping back.

"One of the first things… is to allocate some time to just see what the kids do."

"We were just going to see exactly the kids could do with this game and what direction they wanted to take it in and what direction we wanted to take it in."

"Working in these virtual spaces over the past few years, I have discovered the best way to develop robust programs is… simply playing with the kids BEFORE creating curriculum."

Notice the goal for the teacher in this space is to watch, listen, and learn. Consistently teachers sought to communicate how important it was to approach new tools by enjoying them and letting ideas come naturally. In this sense, the teachers role is to actively and purposefully enjoy a game first.

We also see teacher framing their role as one of supporting the player goals, or helping students to fully enjoy the game:

"I'm mostly just watching the girls and seeing what they do and what they like to do and then trying to help them be successful at it."

"We took a view of stepping back to see where kids would take this sandbox if they were in control of it and so our role in the space was to… support them in what they would like to do with the server…"

Stepping back is not a passive activity. Observation of students playing Minecraft is a fast track into expert design. "Notice that what these teachers often condition as "stepping back" is actually a significant learning activity for the them. This is much more relevant than they make it out to be. First, notice that they are choosing to tell these stories as part of a larger narrative on how they came to use Minecraft. "Just watching", then, is relevant enough a year or two later to share in a formal interview setting. Second, notice that their work after "just" is very specific; they "see exactly" what students do, what their preferences are, and matching this to "direction". Stepping back is actually instrumental in moving forward.

Expectations and Student Wait Lists

If you choose to start a Minecraft club, you may be in for a surprise. Another common story thread across teachers was that they did not quite expect the enthusiastic response that they got. Quickly, students would promote, recruit, and fill capacity in Minecraft clubs. Here are a few of these story snippets:

"I was originally thinking it would be kind of a club kind of thing. An optional activity that I'd get some kids who are already huge video game fans that would join in after school… I've had, just this year, about 150 students from our middle school playing. That is about 1/2 our middle school population."

> "I invite eighth grade students into my lab during their recess time… 15 students a day because I only have about 15-16 computers. We switch off on a weekly basis. I actually have to make a list that we rotate through because I couldn't allow everyone who wanted to come in to come in."

These stories convey a sense of pride that students are showing up, but also serve as a kind of quantitative validation for the tool itself. Teachers point out that half of their students are playing because it is an expression of the relevance of the media, the broad appeal it has, and combined with previous validation elements, they are further convinced that this can serve to engage learners.

Individual students with special needs may also be part of these spaces and benefit from them. One story explained how Minecraft became a sort of intervention strategy for a student.

> "The teacher approached me and said could the student please be in your Minecraft club because he doesn't care about anything else except for Minecraft and he got to the point where we did some related assignments with Minecraft and he'd actually ask to stay in at recess so he could finish it."

If you plan on trying out Minecraft outside of the classroom, plan on a crowd. If you do not want a crowd, think ahead about how you might filter or manage access to your club.

Settings, Constraints, and Goals

The overwhelming approach to after school clubs was to allow students to play as they saw fit. For all the reasons in Chapter 2, Minecraft offers plenty to players all by itself. Open play also facilitates much of the learning explained above. Stepping back, is therefore the most common approach among our participants, however we did have teachers that explained a more organized experience outside of class. Sometimes this was a follow up to open play, and other times they started out with more structure to guide students toward the kinds of things they wanted to do in the classroom later.

First, and very simply, one teacher explained that he wanted to see how Minecraft could be used for student design and exposition of their ideas. He wanted to be able to give players some constraints, (the 'box' in sandbox), and let them create within those borders.

> "I put them in creative mode in the same world, the same map on creative world. I'm going to partner them up or triple them up and they are going to build essentially their dream house. A house they would be proud to show their parents. That is what we did."

In another interview, a teacher explained that a little structure was a reaction to student distractions. His players were a little younger and took on projects to build. In-game, monsters were distracting his students and frustrating their efforts.

> "I did change things. I mean that was the beginning of Minecraft in that early state. You could pick and choose features of the game to add and subtract… I also wanted to minimize distractions in the game… What I did was that I made it so that players couldn't die. They could not be hurt or killed in the game. I turned off monsters."

This minor change freed up his players to enjoy their projects and effectively engage with Minecraft. This approach requires some knowledge in how to set the play mode, how to setup the server. The teacher also put students into groups, which is fairly uncommon in this study. When asked why, the teacher explained that they had a limited number of available computers and trying out the groups would further help him to understand what Minecraft might later look like in classes. So the teacher was watching their group behaviors in addition to how they designed.

Another group of teachers built an external set of awards, badges, and community building tasks in front of their players (over 500 of them):

> "We layered over the game and the kids helped design some of those challenges. As in a normal game structure they get progressively more complex and require more collaboration as you go farther in that structure of badges so you can do lots of small things individually when you first join as a spore but then, as you level up, you are required to do more collaboration and much more complex tasks and more use of building complexity in the space."

Before you panic, this was designed by a team of teachers with the intent of inviting students from all over Australia. Their uncommon structure still allowed students to play as they saw fit, but acknowledged and communicated activities that were valued by the community, like helping a new player, learning new things, and building impressive projects. Individual teachers that used badges could do so with simply 'blocks' within the game:

> Yeah, it's something that I've developed more recently in the past couple of months. Badges. So as they walk around this world they find info blocks and it's a blue block with a white letter "i" on it. Underneath on a post is a piece of paper and if they click on that they get information.

Or 'rules' can be added outside of the game. The teacher often would challenge players to only play with certain tools, on certain settings, or gave them a narrative framework to play within. Teachers that liked to build at home could set up elaborate challenges.

> "[I] decided that I needed to give them some structure so I made my very first purpose filled Minecraft world which was, the first thing I did was create a border… I put a castle up on the hill for them too. It was a puzzle how to get inside."

Naturally, teachers also reported that players would do this themselves or request a certain server setting for a session of Minecraft. Player styles often led to preferences and multiple servers being set up as the clubs refined over time. Some players enjoyed building and wanted monsters shut off and others wanted them on for survival and exploration.

Moving Toward Classroom Use

In all of these cases, the constraints and goals were more to enhance the experience than to monitor or 'manage' youth. Later, I'll talk more about social contracts, and how Minecraft provides a context for student behavior coaching and guidance. For now, it is worth noting that discipline is not present in the narrative accounts. Students are painted as enthusiastic, anxious to be in the good graces of the club advisor, and wanting terribly to see Minecraft be used in classroom settings.

> "Then from there, the word sort of spread like wildfire throughout the whole school and everyone was asking about it so I began to incorporate it into some of the other classes."

Across cases, the teachers themselves tell their stories outside of class as context for how they saw potential in the classroom. Fulfilling the goals of learning the game, watching students, gaining technical skill, and sorting out group organization outside of class, some teachers began to use the clubs to experiment with curricular implementations prior to attempts in the classrooms.

One saw the differences in student play styles (from above) as an opportunity:

> "I was trying to tie it into the elections this year in terms of because we have all these girls on the server and they all want to do different things. Some of them want monsters and some of them don't monsters and we have three servers because of that."

Where some may see a conflict, this teacher saw a real world opportunity to engage passionate players in a democratic resolution. This is worth unpacking a bit. Instead of teaching 'democracy' from a text, and taking a test, Minecraft cultivated an actual difference to arise between 'citizens' of a kind of digital 'country'.

When I was in the classroom, I encouraged students to visit a real city hall meeting because I wanted them to see how a city is run. Yet, even a visit to a city hall meeting may not engage student learners that do not necessarily have strong feelings about, say, where the new stop sign should be located. Students often returned to class saying it was, "Okay, but they were mostly talking about 'stuff'". That stuff was interesting to adults, (like new levies, water quality, traffic issues), but we forget how abstracted these issues are to youth—they do not yet own a home, pay bills, or drive. But In Minecraft, they do invest their own energy, time, and efforts to building a world, with other people, and they are immediately influenced by 'rule' changes the group wants to agree on. Further, students often have strong, strong opinions about them. To the teacher above, this wasn't a problem, it was the link he was looking for - real feelings, around real civic decisions, in a virtual world. We will cover a whole list of these kinds of ideas in the following chapter.

A second key story that supported moving toward the classroom included the student representation of knowledge. As students in the school become familiar with Minecraft and what things can be done within the 'blank slate' space, they often offer up alternative ways to present their work to teachers around the school. This is truly a bottom up process of technology adoption in schools.

> "The 5th grade is planning to use Minecraft because every year they build
> ziggurats out of cardboard and glue and stuff. Now they have the option to build
> the ziggurats in Minecraft."

This afterschool club is able to influence a formal classroom because the students themselves approach the teacher and ask them if they could have permission to build the ziggurats digitally instead of physically. Student choice in learning, within subject parameters, creates a powerful intrinsic tie to the work and outcomes of the class. Because the media is not essential to the experience the teacher is assigning, the swap out seems to be natural, exciting, and supporting of student interests. The same teacher points out the school wide effect of this one class adoption:

> "We are slowly working it into the school and finding ways to do things in
> different classes."

You may not start a club because you are trying to send out student advocates, yet when they get excited about their work this will likely happen.

Finally, for a few of our teachers, outside of classroom time with Minecraft *is* actually the goal. They advocate that this open time complements the highly structured classroom time during the school day. Informal learning provides an essential opportunity for youth to develop ideas, design, socialize, and connect with digital skills.

In the following chapter, we will take a look at narratives that integrate Minecraft into the classroom itself.

Starting Your First Minecraft Club

The remainder of this chapter is largely the gift of one amazing Illinois teacher and co-host of EdGamer, Zack Gilbert. I asked and he obliged to share his experience and suggestions for building a club of your own. His club ran after school, however, his guidance serves any informal youth time before school, on lunch breaks, or for a summer program. This chapter winds down then with practical guidance on starting your own club.

Zack validated the club effort, first, via his personal hobbies and conversations with a colleague.

> I always wanted to bring games to my students… Students knowing my love
> of games have asked me for years to start a club. What really pushed me to bring
> a gaming club to my school was my [friend]. He had started his game club early
> in the 2012-13 school year and he was putting a lot of pressure on me to get
> started. Gerry's success within his high school finally convinced me to get
> my club started.

Getting started means organizing who, what, where, when, establishing a 'why', and agreeing with students on how your club will be run.

Who to Involve?

Planning your club is essential. With this in mind, being aware that you are never operating alone is important. Those outside and within school should be involved in the discussion. Make a list of those that need to be considered stakeholders in your club and start having those conversations. In order, talk to the following people to get a feel for how your club might shape up:

- *Your Family.* Start involving those loved ones close to you. Will the club be taking time away from them? Are they supportive of your club idea? Can they help or be involved? If you are already a workaholic, the investment in a Minecraft club may be an idea better shared with another teacher.

- *Administration and IT Support.* Talk to Administration before talking to students. Exciting students before getting approval can lead to awkwardness and disappointment. Talking with administration early on allows them to help shape the club as part of the overall development of goals, suggest ideas to you, and address any concerns they may have. Their support is essential and will help with each following step. Depending on your administrators, you may get

wholehearted support or you may need to slow down and do some persuading over time. Your IT support will have much to say if you are using digital applications or school computers in the club - make sure they are excited or at least willing to support you as needed.

- *Students.* Start with those students that you know already play Minecraft and run the idea past them. Do you have a core group of students? Are they willing to take on leadership roles? Promote? Clean? Organize events? Student enthusiasm will help to get things started, but it also will help you sustain the program over time. If they can serve to manage and lead, then it is much easier to bring in substitute supervisors if you need a day away. Zack noted he was selective in starting with a small group of students first, and building from there.

- *Fellow Teachers.* Your colleagues will be those subs. Before starting the club, take some time and check in with other teachers in your building to see if they have any interest, would be willing to help out on occasion, or if they have ideas for the club. Other teachers can help to promote the club and/or provide challenges that could tie into classroom lessons.

- *Parents.* Finally, it's time to visit your local Parent Teacher Association, send a note home to parents, or chat with them during parent-teacher conferences. You can possibly check with parents to see if you have any other adult volunteers, if they might be willing to donate or bring gaming devices (especially if your school is in short supply), or if they may be willing to financially support the club.

What should Your Club be About?

Minecraft can easily support a club, however you may want to broaden your focus to be a gaming club, game making club, or include board games or developer tools. A club can serve to challenge youth to move from high interest applications like Minecraft, or World of Warcraft, to tools that add to their gaming experience. Later we have a chapter about modifying Minecraft, but mods are common to digital gaming now. You can also show students free developer tools like Blender (3D objects), Unity (3D world building), or Scratch (entry level game logic) that can also support learner interest in a club setting.

When you choose what you are going to be doing these will lead to key planning questions.

- *Board and Tabletop Gaming.* Do you have enough space and tables? Do you have extra chairs to enable students to sidle up to game spaces? What games do you currently have? Which are your students wanting to play? Are your games appropriate for the challenge and complexity levels of your students? Do you have key players that can teach others?

- *Digital Games.* Do you have access to school computers? Do you have storage space for students to bring laptops and safely keep them until club time? Can students log into the school network? Do you need parent waivers for student play and access? Will IT need to pre-load the games or set up accounts? In the case of Minecraft, many of our teachers had IT do most of the set up (either Local Area Network or an open server) in a school lab setting.

- *Digital Production.* Moving from games to production often means upping the requirements for your processors and memory space. Will students save work on thumb drives, in the cloud, on computers, or on a server? Always check the software requirements with your school computers, or ask your IT support to check if the computers are current enough to run the software.

- *Physical Production.* Closely tied to the game design and coding communities are the maker communities. If you feel you might want to move in that direction, consider your proximity to appropriate shops, the outdoors, kitchens, janitorial support, and tools. How flexible is the space, furniture, and storage space? Do you have open floor space? Finally, you may want to double check each activity with maintenance and administration prior to starting.

Where Should You Meet?

Many teachers meet in their classrooms so they can move between desk work and being with students smoothly. However, not all teachers have computers in their classrooms to support a gaming club. Check what you are planning, and who is bringing devices, and make sure you have the right space for it. Zack also recommends a few 'comfy' chairs, couches, and open floor space to allow for diverse activities. If the right space means moving to a computer lab, cafeteria, the school library, or off site, you will need to include more people in the loop and start those conversations too. Also check the space for practical needs:

- Table spaces - with room to grow.
- Chairs - a variety for different kinds of activities.
- Outlets, extension cords, and/or surge protectors.
- Display projector/s - for group conversations and display of accomplishments.
- Online connection - WiFi saves you a lot of connectivity setup, but is a bit slower than cable/corded connections. Both will work for Minecraft.

Also think about variable conditions for the space:

- Lighting - Check that the room lighting is appropriate for computer use, reading, and design work.

- Snacks - Will you have snacks? Are vending machines in the building? Can students eat or drink in this room? What rules will you put in place?

- Garbage - Regardless of snack rules, your design work will fill a garbage can quickly. How accessible is the garbage to students? How far do they need to walk to throw something away?

- Supplies - Does the room have blank paper, graph paper, pens, markers, white boards, and other supplies for doing prototype design work? If a learner has an idea, can they get it on paper quickly and share it? Do they have access to tape or staples to hang flyers? Do you need a budget? If so, seek out parents, community organizations, businesses, or internal funding for supplies.

- Work space - If you are in another space, do you still have a place you can settle in and work when needed? Space to meet with kids away from the group? Space for small groups to plot, plan, or design together?

When Should You Meet?

Zack took considerable time sharing how important this question is.

> Your time as a teacher is important and you need to evaluate what you can handle. This will be time away from other responsibilities you have with school and your family. I believe the time I give is very important and it also helps that I thoroughly enjoy the time I spend at game club.

Carefully consider morning, lunch, after-school, summer, or even weekend times in conversation with colleagues and family. Zack used occasional Saturday 'events' for larger competitions or presentation times that parents could be more easily involved in and regularly settled into every other Friday after-school from 3:00-4:45.

Attempt to avoid conflicts. For Zack, Fridays were not a school night, so this allowed for occasionally hosting longer game nights. Consider regular community organization times, like girl scout nights, church confirmation meetings, and others. Do you need to work around these? Ask your students to check for these kinds of conflicts too. Also, check the school calendar and make every effort to avoid conflicts with other groups and events.

Set a cap on the time and communicate it up front with students. If they are unable to respect that time and get you out the door (after logging out, cleaning up, and helping to pack up) then make it clear that the club will be short lived. Sustainability is tied to your time. Part of getting you home on time is making sure that parents know the pickup time or that your group ends in time for the activity bus - especially in the middle school where students can get stranded and you are responsible to stay with them.

Make sure you communicate when the club meets effectively. Use school announcements, flyers, posters, and classroom reminders. Many of the clubs have a game club website with a calendar of events and other community assets. One group used this web site to share badges and leaderboards in the club. Also, plan to gather and use phone numbers, digital email groups, listservs, or instant messaging to communicate with parents and players when needed.

Communicating a 'Why' and Establishing a 'How'?

The front end of this chapter is primarily about why eleven of our Minecraft teachers used time outside of class to explore Minecraft. When you start a club, Zack suggests that these reasons should be clearly and consistently communicated to everyone involved. Common understanding of why you are meeting together helps to establish common goals, choose activities, and head off potential problems.

Zack started with an outline for the first students meeting to establish why they were there and how it would be run.

> "Meeting with the group for the first time was very exciting. These kids want to be here and they are coming after school to work. I don't think they realized how hard it would be to create a club, but that did not stop them. I tried to stay out of the discussion as much as possible. I wanted the students to work through the process. I did give them the outline below and told them that they can't work on any other steps until they figured out their goals for the game club."

Here is his 'first meeting' agenda for the students:

- Mission statement (Focus and goals)
- Student expectations
- What games and platforms
- Time
- Advertise and announcements
- Sponsorship and assistance

Students worked through the agenda and together agreed on their mission statement to, "Enhance learning, have fun, create, and socialize." As the core group agreed, they were establishing a culture that could be clearly communicated with other future members. They also contracted a code of behavior:

Zack's Club's Behavior Code

- Respect, Responsible, Safe
- Attendance
    - Communicate to inform the teacher you are attending
    - Parents pick up on time
- Clean up
    - Put away games appropriately with all pieces
    - Account for all pieces and inform the teacher if there is a problem

In essence, this process allowed Zack to build and communicate why they were meeting and work out how they would move forward - establishing a positive culture for the club. When there they were questions or when students had new ideas, they knew to frame them within the club goals.

Zack also assumed that his students would lead. We had a variety of teachers in the study in this regard with different attitudes about student leadership capacity. Part of why Zack is a good example of organizing a club is that by leveraging student work and input, he effectively makes the club sustainable for himself. His students figured out advertising, communications, permission slip gathering, sought out sponsors, and recruited volunteers for larger events. Students not only get the benefits of gaming in this approach, but they learn to create, organize, and work for a community group - otherwise known as civic engagement and leadership.

Meeting Times

Zack had a basic outline for how the time would be organized at the club. A few of the Minecraft teachers resisted this approach and argued for open play time. They would say that the more time the teacher structures, there is a direct loss to valuable generative time for players. Both kinds of teachers would vouch for the success of their programs.

In Zack's case we get a closer look at how time can be organized:

Basic Outline for a Game Club

- Start up (5 min):
    - Attendance.
    - All book bags and coats are left in their locker. All they need to bring is themselves. There will be time to go to lockers after club.

- They can bring any or all of the following: Laptop, tabletop game, pre-approved digital games, hand-held devices.

- Large group discussion (10 min):
  - Share new games brought and who will teach them (pick locations for each).
  - Encourage students to try something new each time they attend. If you normally play tabletop games then try a digital game. If you mainly play digital games then try a tabletop. Most students choose digital games, but are surprised at how much fun they have playing a tabletop game.

- Choose which game we will play and move to a gaming spot (2 min):
  - All students have a laptop and that makes it easier and does not force us to a lab, but we expect them to settle into a location for the time.

- Gaming time (90 min):
  - Once things get going the club is very simple to manage. The students are always engaged. You will have to monitor and make sure students are able to smoothly move from one game to another. Most will play one or two games.
  - If I get a chance, I play along with the students. I show them a new game or they can teach me a new game. We all learn best when we teach each other and this happens to many students at each game club. The students become the teachers.
  - Look for chances to lead players to higher end challenges, more complex games, and looking up ideas found in the games. Have them write and share strategies, make machinima (video re-creations), and/or research game ideas online.
  - Look for chances to lead players to design tools. Fascination with gaming often provides ideas for making their own games. When you hear, "It would be cool if…", be ready to move on that! They can make 'cool', right now. Gradually become familiar with Scratch, Game Makers, Unity, Blender, Photoshop, Illustrator, and other design tools.

- Wrap up (20 min):
  - Give a clear 20 minute warning before you expect players to log out or pack up. Games generally are designed for 15-30 minutes of action between reposes. If you 'unplug' suddenly, you can lose significant progress, planning, and even let down fellow players online (which hurts their very real reputations by being rude). Let them know that you know this rhythm of game play and that you expect that they can find a 'checkpoint' roughly every 20 minutes in a game.

- After 20 minutes, students should have started cleaning up, logging out, and generally 'leaving the space better than they found it'. If you are in your classroom, they can say 'thank you', by cleaning whiteboard, running errands, and generally helping manage the space with you.

- Those still on the computer , after 20 minutes get a 1 minute warning. After 1 minute, you can fairly power them down. Do not let fellow students do this because this is essentially a discipline situation. Talk with the student privately about the group norms and ask them to make an effort to abide by them.

- If everyone has successfully logged out without the 1 minute reminder, consider praising or rewarding this to reinforce the logout expectations. Take time to discuss the games. What did they figure out? Any good puzzles or achievements happen? Do they play or plan to play it at home? What are they going to work on next time?

- Make sure students have rides and get home on time!

Again, Zack's plan is not the only one, but it should serve to get you started, help you avoid some common pitfalls, and guide your planning a bit. If the club is organized and run well, you should get some time to play too. Try out new gaming media, challenge the students to bring you games that might work in your classroom, and shamelessly recruit students to give you lessons.

Finally, note that these clubs were often a form of validation, but they were also serving as appropriation for classes. Outside the class, you can watch students for new ideas, for natural ways to enjoy the software, and seek out student ideas as they play. After watching, listening, and building with students, teachers eventually saw an opening for their classroom ideas.