TEACHERCRAFT?

"We are currently at 4.85 million registered users and then out of those users, 8.1 million have purchased the game on PC and Mac platforms. We also have 5 million purchases on mobile devices, ios, android and amazon. We have 3.5 million copies sold on the xBox."

- Carl Manneh[1], Mojang | Co-founder and Managing Director

Minecraft for Learning

Minecraft[2] was released as a beta with little fanfare initially. With a dedicated and active fanbase it has grown into one of the most successful games on the market. Uniquely, Minecraft offers a space that can be infinitely recreated using a simple 'block' model interface in servers that users set up to play with friends. Minecraft is both a game and a tool for creation with your friends. Surrounding the game are a number of user-created modifications, forums, and communities that share, critique, and build new challenges for themselves. Minecraft is more than a game, it is a hobby and a community.

It is also getting used increasingly in classroom settings.

Like a blank sheet of paper and a box of crayons can be used for learning, Minecraft is begging creators to make any 3D object, building, or idea they can think of. It is a creation-media that is, and has been, quickly adopted and used in learning settings all over the world. Minecraft can serve teachers in the same way that a sheet of paper, a canvas, or a pile of building blocks can facilitate learner representations of understanding across topics, age levels, and learner ability. Interestingly, some early adopting teachers have been doing exactly that. They are using Minecraft for learning.

This book is built around a set of teacher interviews that describe the practices and perceptions of educators as they are adopting, modifying, and building learning environments that integrate Minecraft. They see Minecraft as an essential learning tool in

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[1] Interview with Carl Manneh on December 4, 2012.

[2] Copyrighted by Mojang. For readability, I will not insert © throughout the book.

both formal and informal learning environments. So this book is an effort to provide context, description, evaluation, and common threads across the interviews of teachers using Minecraft. More than a list of ideas, I am attempting to provide a rich description of how these teachers think about practice, the kinds of things they see when they look at an active classroom, and what matters to their crafting of lessons, their 'Teachercraft'.

Teachercraft is unique to the use of Minecraft in this book, but is not isolated. It has implications for the use of any digitally mediated learning space, the adoption of technology for learning, and more broadly a picture of how teachers learn. Using a tool like Minecraft for learning is clearly innovative teaching. I wonder how these teachers go about learning new ideas? Where did they find out about Minecraft? How do they gain knowledge of new software and validate its use for learning? How did teachers test new ideas? Appropriate Minecraft? What did they actually do with Minecraft in class? And how did they evaluate the effectiveness of Minecraft, as a digital experience within actual classroom expectations? These questions are at the core of this book and assume that teachers have relevant insights to share about how teachers go about innovative thinking, learning, and practical application.

Chapter Overview

Each following chapter answers a question related to Teachercraft. First, for context, I start Chapter 1 with a brief overview of 'Why Games?' are being used in classrooms for teaching and learning. What kind of learning game proponents are advocating for and what kinds of proposals are compelling when discussing the use of games for learning.

In Chapter 2, I'll provide an overview of 'Why Minecraft?' and present possible reasons why so many have chosen to place special attention on this game. Minecraft has four unique play goals that make it a benchmark learning product as the media matures: production, creative thinking, safe/limited social play, and modding. These four traits, in combination, provide teachers a unique classroom product that can be adopted to any subject or age level for a variety of applications, assignments, and amplifications of subject area learning.

But, Minecraft is first a game! Millions of players have booted up for fun, not school. So in Chapter 3, we will welcome Mike Cisneros, as my guide answering, "How do I Start Playing?" and hope that this will encourage any non-players to play before reading on. He provides a unique and charming insider's perspective to booting up, playing, and having fun with Minecraft; and even as a college student, he has a masterful and helpful touch in helping future builders.

Chapter 4 provides a short overview of the qualitative study this book is associated with. The chapter starts with a theoretical approach to understanding teachers that leads to this kind of study. That said, I have taken care to make this justification as readable as possible for

the non-academic audience, because it has very real implications for teacher professional development and training programs. The second half of the chapter explains the methods used for the interviews. These foundations of research for interviewing Minecraft teachers establishes the reliability and relevance of the rest of the stories in the book. Chapter 4 provides a glimpse of the cooperating teachers, how they were selected, who they are, and what context they are teaching within.

Chapters 5 through 9 will answer questions about Teachercraft. Chapter 5 asks how these teachers validate the use of Minecraft, or more broadly, any new digital technology, for their classrooms. This process of validation looks diverse, complex, and far more robust than simple approval of a new idea.

Chapter 6 explains a common validation approach for teachers that tried out their new ideas after school or in a 'club' before bringing Minecraft into classroom settings. This 'petri dish' examination is fleshed out with stories from the teachers about how they used the time for their own learning, tried out new designs, and finally, guest author Zack Gilbert gives a very practical guide for building your own gaming club.

Chapter 7 focuses on classroom lesson ideas used by teachers. More than just the ideas, however, teachers share their philosophy of learning, pedagogical strategies, and types of lessons that are applicable across subject and age levels. In the second half of the chapter, I attempt to sort additional lessons into subject specific ideas.

After seeing how teachers used Minecraft, Chapter 8 attempts to provide an insider's approach to evaluating whether or not those lessons were effective. I'm interested here in how using new mediums for learning has an affect on what measures are relevant to these teachers. What tools and approaches do they use to evaluate the tool, the lesson idea, and how can Minecraft be used as an evaluation tool?

Chapter 9 shows how Minecraft teachers used outside resources for classroom use. Minecraft alone, or 'vanilla Minecraft', is just the beginning for experienced Teachercrafting. Once they become familiar with the basic tool, students and teachers start to create new 'skins', 'seeds', 'maps', and 'servers' to meet particular classroom needs and further lesson ideas.

In Chapter 10, I welcome guest authors who have been using Minecraft as a research tool. While I understand that 'research tools' are not necessarily for classrooms, I think this chapter has much greater reach and shows how teaching and learning extends beyond the K-12 classroom too. The tone and pace of the book will be a bit more formal here, but I hope you find this as truly impressive and innovative as our research team did when we invited them to participate in the book.

All of these discussions together flesh out what the use of Minecraft for learning looks like in practice. This is interesting, with many, many more digital tools coming our way, to see what effective teaching with digital tools looks like; and it can inform how we practice, train new teachers, and support innovative teaching today. With so much to cover, we start with building a strong argument for using games like Minecraft in the classroom.