"About as Educational as *Minecraft* Can Get": Youth Framings of Games and Learning in an Affinity Space

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Introduction

In this study, we addresses the ways that teachers, parents, and youth frame gaming activity in affinity spaces, focusing in particular on ways the popular game *Minecraft* are considered by both. As part of a larger study into how groups of teachers, parents, and youth interact around games in informal, online contexts, we aim to isolate the ways that language statements within these spaces reflect different goals, expertise, and intent toward games. If games and learning is to be consequential beyond the classroom, we need to better understand the ways that individuals with investments in instructional spaces consider and evaluate the potential of games.

This study focuses in particular on learning in terms of the relationships and interactions of *teachers* and *youth* within online learning contexts. As we are interested in investigating the sharing of knowledge and connections between these groups outside of instructional contexts, we focus on the *gaming affinity space* (Gee, 2005; Author, 2012b) as an informal situated learning environment, one which allows users to socially negotiate the meaning of phenomena (Barton & Tusting, 2005). By observing the interactions and communication of participants online, we examine how the sharing of knowledge and negotiation of terms related to *Minecraft* reflect different — and potentially consequential — framings of gaming activity.

Minecraft and Affinity Spaces

The open world game *Minecraft* (see Duncan, 2011) has become a surprisingly persistent hit with children and parents alike (Duncan, 2012a). With its relatively peaceful environment, large degree of freedom for the player to explore, create, and recreate the environment of the game, and multi-platform availability (originally personal computers, but also iOS devices, Android devices, and the Xbox), the game has been distinctly popular with young children in recent years. As such, projects such as Minecraft.edu (Levin, 2013) have attempted to leverage the game toward instructional aims, and the game has featured an intriguing interaction between those who have been interested in using the game to *teach* and those who have been drawn to the game to *play*. In the present paper, we argue that this interaction can provide us with an interesting window into the ways that instructional framings of games are more than just the purview of the teacher, and allow us to see how players (youth players, in particular) can become invested in the design of instructional uses of the game.

Affinity spaces give us a locus for these kinds of analyses, given the wide variety of participants who are drawn to them, and the range of potentially instructionally oriented discussions that have arisen within them. According to Gee, affinity spaces are important and understudied sites of situated learning. In these environments, "newbies and masters and everyone else" can interact with each other via correspondence over a "common endeavor" (Gee, 2004, p. 85). Also, he claims that the common endeavor of an affinity space provides a sense of unity through *anonymity* within affinity spaces, as participants do not have to share social factors such as age, geography, or occupation. We were curious as to how interactions changed when participants did share information regarding the instructional uses of games, and consequently focused on spaces in which participants self-identified as teachers, parents, or youth.

For this analysis, we have conducted analyses on textual interactions drawn from "/r/minecraft," a "subreddit" found on Reddit.com. Reddit (located at http://reddit.com) operates as an umbrella site for multiple discussion topics ranging from politics to gaming to pornography. Drawing millions of users from over the world, Reddit hosts what we argue are actually *multiple* affinity spaces, each denoted by a different /r/ prefix and addressing topics of wildly different scale (e.g., from /r/askscience and /r/politics, to /r/breakingbad or /r/frugalmalefashion). serving to curate and host a number of interesting and contentious interlocking discussion spaces (see Bergstrom, 2011; Massanari, 2013 for recent critiques of Reddit). Given its potential to host discussions of any sort regarding *Minecraft*, as well as allowing participants of many ages to participate, subreddits have been the focus of recent investigations in digital media and learning (Duncan, Huang, & Georgen, 2014), and as such /r/minecraft was selected in this study for further analysis.

As part of our ongoing study investigating the interactions of teachers, parents, and youth in gaming-related affinity spaces, we focus here on just the *teacher-youth interaction* around games, elaborating a case study of one observed thread from /r/minecraft.

Instruction and /r/minecraft

We sampled a thread from /r/minecraft from August, 2013, entitled "Help. I'm a middle school teacher that wants to start a *Minecraft* Club with her students." At the time of our sampling (in December, 2013), the thread contained a total of 153 comments, which had been upvoted by Reddit participants 85% times and downvoted 15% of the time, indicating a moderate degree of interest in the topic within the /r/minecraft community. Of particular interest was a discussion between the original poster (a self-professed, female teacher) and a respondent (a self-professed 9th grade student of indeterminate gender). We have pseudonomized both poster names, referring to the teacher throughout this paper as "literatemuse" and the youth respondent as "doinstuff."

literatemuse began the thread with the following (edited for length):

> *I'm a seventh grade social studies teacher who is currently working throughout the summer (woohoo summer school!) A few of my students have asked me if I'd be willing to help them establish a Minecraft Club for the upcoming school year. I'm a little familiar with the program but I'm not sure how I can incorporate it with education. I've asked the tech coordinator at school but he hasn't been much help. I thought I'd ask Reddit for help in setting this up.*
>
> *A few questions:*
>
> *-Where can I learn more about Minecraft?*
>
> *-Can it be used in an educational setting?*
>
> *-What's the cost to run a program like this for 15 students?*
>
> *-Is there any way the "world" they create can stay private?*
>
> *Not sure if this makes sense, but any reasonable suggestions help!*
>
> *Thanks :)*

The thread received many responses, including a rather detailed response by "doinstuff," presented in in an excerpted form below:

> *Hello! I am an incoming 9th grader, so I'll see if I can be of help.*
>
> *Minecraft in education is normally limited to team-building through construction projects, and used at an elementary school level. Seeing as you are a social studies teacher, you may see my idea as fit. If you are teaching the same material as my 7th Grade SS teacher, you may at some point want to do a social experiment with your students, and Minecraft could pass as a tool for that. But before I explain the experiment, you will need to know how to set up a server… [doinstuff describes technical installation issues]*
>
> *Now for the experiment: Start the server and get all the players online. Then use the /spreadplayers command to distribute them evenly across a map. Then let the games begin. The students will have to gather resources to survive, which is normal to Minecraft, but the interaction between the players becomes a social experiment to see how people would survive in an anarchical society: will they team up and start towns? Will they fight off eachother till the last man alive is all that is left? Will they burrow away and avoid all "human" contact? The interactions are all up to the students. After what-ever period of playing time, I suggest you have a discussion with your students about events and interactions ingame and the motivations behind them. This may not be as educational as you might hope, but it is very fun and interesting and about as educational as Minecraft can get.*
>
> *This whole idea is very similar to a public server i play on called Civcraft (/r/civcraft) that has basi-cally the same setup and idea but with many modifications and plugins into the game and at a more intensive level, with cities, alliances, economy, and lots of drama. It is very hard to organize anything with friends on this server because the beginning spawn is completely random, and your friends on the server are the first few people you meet. In addition, most people on this server are between the ages of 14 and 17, but with plenty of young adults up to ages in the low 30s, so the maturity level is much higher and people often are assholes to each other and language you don't want 7th graders hearing is thrown around like nobody's business…*

While detailed and rather lengthy, this response reflected a degree of involvement from the self-professed 9th grader that was atypical for the thread, and served as an unusually eager contribution to the teacher's original request. We make no claims regarding the typicality of this response, nor do we have concrete evidence that doinstuff is actually a 9th grader or that literatemuse is a teacher. The post was the only response we could identify from a self-professed youth Redditor on this particular thread, and we are taking both the teacher and youth self-identifications at face value for the purposes of this analysis. Regardless, we found many of the forms of speech and specific instructional contributions of doinstuff in this post to reflect interesting insights into the ways that the players' lived experiences with the game (and school) influence instructional recommendations given freely in affinity spaces.

Discourse Analysis

In order to better understand doinstuff's post, we find ourselves in need of an approach that will allow us to investigate the specific framings of instruction and gaming that are present in the post. Due to space limitations, an analysis of just doinstuff's response will take up the bulk of the remainder of this paper, which we provisionally analyze using Gee's (2010) "big-D Discourse analysis" approach. According to Gee, beliefs, social roles, and cultural commitments can be revealed based on the language moves found in spoken and written text. Utilized widely in games and learning research (e.g., Steinkuehler's, 2006, classic, deep Discourse analysis of an eight-word utterance drawn from the game *Lineage*), Discourse analyses provide a window into meaning-making within gaming communities. In particular, they help to illustrate the ways that meanings of games and learning are negotiated and contested through a "deep read" of gaming-related text. We thus apply a Discourse analytic approach to the doinstuff post, as a method intended to draw out the engaged youth perspective on games and instruction in this context, as well as to highlight the ways in which the framing of the activity by the youth participant in the affinity space reflects perspectives on gaming and on students' roles in game-based learning environments.

We broke parts of doinstuff's post into stanza form, first isolated by utterance per line. Our intent was to isolate patterns and shifts in the use of his or her language throughout the excerpt, as a means of identifying how language marks shifts in conceptions of *Minecract*. doinstuff's "experiment" paragraph was of most interest — and most clearly a prescription for a specific form of instructional experience based around *Minecraft* — and so we present it here, broken into four thematic stanzas, presented below:

Stanza 1: Setup

line 1 - Now for the experiment:

line 2 - Start the server

line 3 - and get all the players online.

line 4 - Then use the /spreadplayers command

line 5 - to distribute them evenly across a map.

line 6 - Then let the games begin.

Stanza 2: Social Experiment

line 1 - The students will have to

line 2 - gather resources to survive,

line 3 - which is normal to Minecraft,

line 4 - but the interaction between the players

line 5 - becomes a social experiment

line 6 - to see how people would survive

line 7 - in an anarchical society:

Stanza 3: Research Questions

line 1 - will they team up and start towns?

line 2 - Will they fight off eachother [sic]

line 3 - till the last man alive is all that is left?

line 4 - Will they burrow away

line 5 - and avoid all "human" contact?

line 6 - The interactions are all up to the students.

Stanza 4: Classroom Implications

line 1 - After whatever period of playing time,

line 2 - I suggest you have a discussion

line 3 - with your students

line 4 - about events and interactions ingame [sic]

line 5 - and the motivations behind them.

line 6 - This may not be as educational as you might hope,

line 7 - but it is very fun and interesting

line 8 - and about as educational as Minecraft can get.

First, even before Stanza 1, it becomes clear that doinstuff has a technical understanding of the game (described in detail in the paragraph deleted for space considerations), which carries through to the theme of Stanza 1, which we label a *Setup* stanza. It is interesting that, in Stanza 1, line 1, doinstuff casts this not as "instruction" or even as a class exercise, but as an *experiment*, one that could put youth in a role not necessarily as learners or students, but as participants. For doinstuff, one of the implicit values of using *Minecraft* in the classroom does not necessarily appear to be to impart knowledge or practices through the game, but to delimit some form of "experimental" space in which students can perform (and presumably also be studied).

Also note (in lines 2-5) that the focus is upon technical positioning, using at least three levels of technical knowledge about the game — (1) "starting the server" (line 2), requiring knowledge of installing and running the software the creates a *Minecraft* server; (2) "getting players online," involving managing not just the server, but each student's client software (line 3); and (3) then using "/spreadplayers" within *Minecraft* itself, in order to arrange students's in-game avatars in ways that would be efficacious for doinstuff's scenario (lines 4-5). doinstuff very quickly runs through several levels of technical requirement that may be rudimentary for a player who has been involved with *Minecraft* servers in the past, but is perhaps a bit presumptuous regarding levels of technical expertise that a typical teacher may have.

In Stanza 2, the tone of doinstuff's discussion shifts away from setting up the game and experience, and toward describing a "social experiment" that provides the core of doinstuff's suggestions to the original poster. In Stanza 2, line 1, it's interesting that doinstuff originally frames the "experiment" in terms of what the students in the classroom will do, then switches to a framing of "players" (line 4) and with implications of what will be learned about "people" (line 6). The free-form "social experiment" proposed by doinstuff amounts to an interesting negotiation between these three plural nouns — it is at once clearly intended to be an instructional experience of some kind (hence Stanzas 1 and 4), while also valuing that it leverages something "natural" about *play* in *Minecraft*, with the intent to discover something about how people interact, in general. And, perhaps because of this valuing of play as modeling some element of an "anarchical society" (line 7), doinstuff's framing of the experience is as a "social experiment" (line 5) that will yield knowledge about their "interaction" (line 4), rather than about the imparting of knowledge to the students.

In Stanza 3, this "social experiment" takes on an even more directly scientific framing, with a number of overt "research questions" proposed. For each of the three distinct questions proposed (line 1, lines 2-3, and lines 3-4),

the questions are not "how do students learn X?" but "what will happen when players are put into this situation?" doinstuff implicitly views *Minecraft* play as, essentially, a platform to simulate social dynamics, reifying Stanza 2's framing of a "social experiment" with questions that are descriptive in nature, and provide the potential of using the game to understand human interaction rather than to address an overt curricular need. Ultimately, "interactions are all up to the students" (line 6), again indicating his or her framing of the experience as "experimental," but also notable in that it presents an extraordinarily *student-centered approach* to game-based learning. For doinstuff, apparently games such as *Minecraft* are implicitly useful to educators for what they reveal about how people play and interact, not for the delivery of content, nor even for their role in promoting more amorphous digital literacy skills. doinstuff privileges gaming over instruction with *Minecraft*, and then apparently seeks to find a way to advocate for taking a genuine gaming experience into a classroom.

In Stanza 4, doinstuff seems to acknowledge that literatemuse's curricular need should be addressed, and that a social experiment is probably not what was sought when she started the thread. As a means to instruct in some fashion, doinstuff suggests a "discussion" (line 2) with students, regarding "events and interactions" (line 4) that occurred within the game environment. doinstuff seems genuinely interested in having the game foster a discussion of these interactions and having the gameplay serve as a shared experience that can drive a meaningful classroom discussion relevant to the students (e.g., discussing "motivations"; line 5). But, doinstuff is sanguine in his or her assessment as to whether or not this kind of experience fits an "educational" framework as much as the teacher might wish; using *Minecraft* "may not be as educational as you might hope" (line 4), and this is "about as educational as Minecraft can get" (line 8).

Let's pause and review those last three lines in Stanza 4, which are remarkable statements in a number of regards. First, they reflect an assumption (perhaps false) of what the *teacher* will view as educational experiences — that a shared experience of a "social experiment" (in doinstuff's terms) followed by an in-class discussion is "not as educational as you might hope" reflects an assumption by doinstuff that for an experience to be "educational," something other than discussion of a play experience must be at the center. It is unclear if doinstuff's assumption is that an "educational" experience is related to the delivery of academic content in some form, or is related more strongly to the forms of knowledge and practice captured on standardized test, or reflects some other assumption about instruction with games. Regardless, doinstuff implies that freeform play followed by discussion may *not* be seen educational to a teacher, and as a consequence this statement reflects a telling bias regarding the forms of instruction he or she expects within a school-based setting.

But also, doinstuff implies limits to the very applicability of *Minecraft* to a school setting. While doinstuff's elaborate and detailed post seems to indicate that he or she is excited at the prospect of aiding a teacher in this enterprise, "about as educational as *Minecraft* can get" shows that he or she believe that there are limits to using *Minecraft* in classrooms, or at the very least, limits to the particular conception of "*Minecraft*" that he or she values. What is "*Minecraft*" for doinstuff suddenly comes into question — clearly, doinstuff acknowledges that people use *Minecraft* in classes. Is doinstuff indicating that what counts as "*Minecraft*" for him or her is different than for a typical teacher? That the valuable experience that is "*Minecraft*" play is not necessarily the same thing as the digital artifact "*Minecraft*"?

We argue that doinstuff's conception of "*Minecraft*" must be much closer to the naturalistic forms of play with the game (based on his or her "social experiment") than it is to many adult *Minecraft*-in-schools advocates (such as Levin, 2013; e.g., conducting experiments in *Minecraft* or using Minecraft.edu modifications to apply to instructional units). doinstuff consistently privileges naturalistic forms of play in his or her brief post; the "social experiment" framing of the activity around the game involves only minimal intervention by a teacher during its conduct, and the instructional locus of the experience seems to come only afterwards, where the teacher helps to unpack it with students. For doinstuff, *Minecraft* is an open-ended environment for players to interact in, first and foremost, and therefore one can only incorporate such spaces into instructional contexts so much and in limited ways, without somehow violating why *Minecraft* is. The phrase "about as educational as *Minecraft* can get" refers to "*Minecraft*" not as the digital game itself, but as the concomitant *forms of play* that are fostered by the digital game.

Finally, though not part of the formal Discourse analysis presented here (due to space limitations), please note the final full paragraph of doinstuff's original post, listed above. Within it, doinstuff declares that his or her "whole idea is very similar to a public server i play on called Civcraft (/r/civcraft)." This supports the interpretation that doinstuff is not only suggesting an instructional use of *Minecraft* that matches informal play with the game, but that it is reminiscent of a specific server's form of play. The informal-yet-formal approach to school instruction proposed by doinstuff is interestingly mirrored by a similar formal-yet-informal approach to *Minecraft*; Civcraft's subreddit (linked to by doinstuff in the post) indicates that there are social structures that support social organization even in these "informal" forms of play. Civcraft represents a form of socially-organized play "in the wild" (Hutchins, 1995), and as such, we can intuit that doinstuff may view preferred forms of play and instruction as being those inspired by the

activities in existing online communities.

Discussion and Future Work

This brief analysis highlights several provocative insights that can further help us to understand (1) the instructional assumptions that some youth bring to the application of games in the classroom; (2) the forms that authentic game-based instruction take to some youth; and (3) the limits to game-based learning with games such as *Minecraft*. We will unpack each of these in turn, and then discuss future directions for this work.

First, doinstuff's assumptions about what are expected uses of games in classrooms and what are not reflects an experience with schooling that begs further empirical study. While the freeform "experiment" proposed by doinstuff is one that appears to have been inspired by experiences with Civcraft and previous instructional experiences, do-instuff seems (reasonably) wary that a teacher he or she encounters in an online affinity space will be immediately receptive to such an approach. That is, doinstuff operates initially out of caution — even in an anonymous, online discussion space — given, perhaps, his or her age and the presumed power differential between a 9th grader and a teacher. Or, perhaps, this simply reflects that, for doinstuff, the kind of proposal he or she is making regarding using *Minecraft* for a "social experiment" might be seen as too alien to a teacher not already versed in the game. While there is a consequential power differential between a youth and a teacher that may have affected this dis-cussion, one could view doinstuff's statements as indicating acknowledgment that many teachers are tech-averse and unfamiliar with informal uses of games. The role of schooling and the instructional biases of teachers rears its head here as a feared impediment that doinstuff feels the need to account for and to acknowledge.

Additionally, the openness of the "social experiment" proposed by doinstuff is interesting. For many in the games and learning community, the utility of games for learning are often in the ways that games can serve as "educational technologies" and be connected to concrete learning goals. For doinstuff, a self-professed 9th grader, this seems to be of little interest. Rather than utilizing *Minecraft* to deliver academic content, *Minecraft* seems to serve as a "platform" (Author, 2012) that would allow a "social experiment" to occur. In other words, *Minecraft* may have its educational uses, but they seem to be as substrates upon which other experiences can be layered. For doinstuff, these other experiences are less about instruction and more about *experimentation* — using the game to provide a learning experience rooted in play and questions about behavior (Stanza 3, above).

To reiterate: doinstuff seems to mean something very different by "*Minecraft*" than literatemuse means, and that we as a games and learning research community often mean. doinstuff delimits discussion of the technical aspects of setting up the game, never referring to *Minecraft* in what we've broken off as Stanza 1. In subsequent Stanzas, the meaning of the term *"Minecraft"* reflects a perspective focused almost entirely upon the game as a means of fostering freeform play, and as a platform that will allow for social experiments to take place that can serve as the basis for inquiry into human interaction (Stanza 3's "research questions"). For doinstuff, *Minecraft* is not an "educational technology" by any means, but is a *game*, one that fosters its own unique forms of play and can reveal something about human activity, but is not a tool with which to *deliver* educational content.

Finally, doinstuff's post seems to indicate a perspective in which there are limits to game-based learning using games such as *Minecraft*. He or she states that the "social experiment" approach is "about as educational as *Minecraft* can get," again reflecting that his or her conception of *Minecraft* is predicated in some way on freeform play and social interaction. This clashes distinctly with many forms of advocated *Minecraft* play in formal and informal instructional contexts — Minecraft.edu's approach to layering instructional tools into the game through server modifications reflects a common intent to take the game and reshape it to fit within an instructional space. If one conceives of the game as the digital tool, this seems reasonable and feasible; for doinstuff, since the conception of "*Minecraft*" is about the forms of play fostered by the game, there are limits to this approach.

As we further develop this line of research, we wish to balance Discourse analyses such as these with "deep reads" of teacher posts in online affinity spaces, perspectives from the parents of *Minecraft*-engaged youth, and then the interactions between all three of these perspectives. Only so much can be gleaned through a view of online affinity space text, of course, but these do give an interesting look at "in the wild" conceptions of games, instruction, and the relationship between them that may be difficult to glean from other sources. While we aim to supplement these analyses with further interviews in the future, we note that the online affinity space presents as close as we have to understanding the conceptions of games and learning of children outside of interview contexts, in which interviewer, parental, and teacher influence may yield very different results. In an interest-driven, open space such as /r/minecraft, no one (apparently) is forcing doinstuff to share his or her thoughts on *Minecraft*, and we should acknowledge these volunteered opinions as a piece of the larger puzzle of understanding youth conceptions of games and learning.

And, while a Discourse analysis of a single post may have limited utility in terms of describing generalizable insights regarding attitudes of players, youth, and teachers toward instruction with *Minecraft*, it also serves a *generative* role in terms of defining questions to investigate for future analyses. One final insight that we found most provocative in doinstuff's proposal regarded not just the meaning of the word "*Minecraft*," but the particular path that he or she took in his or her brief proposal. We glossed this path in the Discourse analysis as four stages:

Setup → Social Experiment → Research Questions → Classroom Implications.

In future work, we wish to explore these potential stages, and investigate if there are generalizable patterns here in the ways that youth discuss potential instructional approaches with games and learning. Do youth focus on the technological impediments first? Do they frame the instructional activity before they frame the questions that will be yielded by the activity? Do they have common approaches to addressing classroom instruction with games? As we further refine and develop game-based learning, we find ourselves returning again and again to our conception of "games." doinstuff's argument reflects that there is still much work to be done in understanding youth conceptions of both games and instruction, but also there is much reflection to be done by games and learning scholars and practitioners to uncover the hidden assumptions about games that may be guiding the field.

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