

TRACING STUDENTS' MATHEMATICAL IDENTITY IN AN ONLINE
SYNCHRONOUS ENVIRONMENT

BY

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ABSTRACT OF THE DISSERTATION

There is a need to research teaching practices that encourage student accountability and empowerment in the mathematics classroom. Researchers' have investigated students' mathematical identity in the classroom; however, none have examined students' mathematical identity in an online environment. With the increased demand for online courses, it is important that we understand how students' mathematical identity can be affected in a synchronous computer networked classroom

The research project, *eMath*, observed several students' mathematical behavior over the course of one school year, conducted during their regular class time, as they worked on mathematics, collaboratively, in a virtual environment. This study focused on tracing the evolution of students' mathematical identity as they worked in a collaborative team solving open-ended mathematical tasks.

The data for this dissertation include the transcripts of students online written discussions and whiteboard activity from one team of four boys as they solved five combinatorial tasks, as well as researcher notes recorded during the sessions and afterward taken during weekly meetings of the research group.

Analysis of the data revealed that the students displayed accountability to the community, accountability to the mathematics, and empowerment. As they worked in small groups to solve open-ended mathematics problems they shifted away from individual competitive work to more group cooperation and collaboration. The study shows that students achieving accountability in mathematics can be an empowering

experience and may affect their mathematical identity in the sense that they develop a stronger relationship with the subject of mathematics.

This study contributes to mathematics education research by providing mathematics educators with a better understanding of how approaches to learning online can offer students new opportunities to expand their mathematical identity.

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1 Introduction

1.1 Mathematical Identity

Learning begins with the exchange of information between an individual and his or her environment (J. S. Brown, Collins, & Duguid, 1989; J. S. Brown & Duguid, 1991). Piaget considered the child as the natural born scientist, actively seeking knowledge with complete agency. Vygotsky proposed the notion of the child and adult engaged in joint activities where the child was still the agent but required the more knowledgeable adult in supporting learning (Boaler, 2002a; Hannula, 2004; Vygotsky, 1978). Both theories are rooted in the idea that cognitive functioning requires the exchange of information between the individual and his or her environment. The need to comprehend self, others, and the world one lives has been proposed as a basis for identity formation and self-development (Boaler, 2008; Erikson, 1968; Hannula, 2004; Wenger, 1998).

The conjecture that identities are crucial to learning suggests that they can act as self-fulfilling prophecies (Sfard & Prusak, 2005). If a student's success in mathematics has to do with their relationship to the subject, then to what extent they have developed a commitment to, or see value in the subject, will be realized in the classroom (Cobb, Gresalfi, & Hodge, 2008). While many students are capable of doing mathematics, some reject learning the subject as it may run counter to their developing identities (Boaler & Greeno, 2000; Boaler, Wiliam, & Zevenbergen, 2000; Wenger, 1998). Students in traditional mathematics classrooms view the subject as narrow and ritualistic which contradicts their developing identities as creative and verbal (Boaler & Greeno, 2000).

Traditional classroom activities typically consist of lecture, discussion, and modeled problem solving. Traditional classrooms that focus on students' learning of procedural knowledge can alienate students as it limits their access to understanding (Boaler, et al., 2000; Ernest, 1998, 2002; Grootenboer & Jorgensen (Zevenbergen), 2009). Boaler and Greeno (2000) contend that students reject the subject of mathematics, not because of likes and dislikes, but because they wanted to pursue subjects that offered opportunities for expression, interpretation, and agency. They indicate, "Students leave mathematics because they do not want to author their identities as passive receivers of knowledge" (p. 187). By studying a student's mathematical identity we might be able to develop classroom teaching environments that promote mathematical participation (Civil & Planas, 2004).

Teaching environments that emphasize group collaboration, classroom discussion, initiative, and creativity have the potential to empower students and strengthen their mathematical identity, according to Ernest (2002). In the mathematics classroom students should learn more than mathematics. They should become participants in the community of mathematics and practice mathematics like mathematicians (R. Davis & Maher, 1990). As students practice mathematics with agency, they will learn a set of practices that will come to define their knowledge. This knowledge has the potential to build a stronger foundation that will enable the learning to be transferable, partly because of the knowledge, and partly because the learner will have developed an active and productive relationship with the mathematical ideas (Anderson, 2007; Boaler, 2002b). A positive relationship with the mathematical ideas has the potential to develop a positive and strong mathematical identity. This study investigated the relationship between

student engagement with mathematical ideas and the development of student accountability to community and mathematics ,an area of research that has important implications for teaching practices.

1.2 Personal significance

I have been teaching high school mathematics for the past ten years. Each year one or more students will enter my classroom and respectfully explain to me that they do not understand mathematics, they do not like mathematics, or they wish they could succeed in mathematics but it is not a possibility for them. As they become more comfortable with me, they want to share past mathematical experiences. Their experiences can include failing, trouble with teachers, and or getting lost at one point and never being able to redeem themselves. Whatever the reason, it is usually not just one experience but an accumulation of many experiences that creates a negative opinion of the subject of mathematics.

My success with these particular students has been the most rewarding role of my teaching career. My classroom has always been about active discourse and the open sharing of solutions. By encouraging and listening to my students as they justify their solutions, they would slowly come to realize that they were just as able to solve the tasks as other students. If given an equal opportunity to share their ideas they would become increasingly confident in time and the mathematics became possible for them once again.

As a graduate student I was given the unique opportunity to participate as a teacher/researcher on a project using the network computer program Virtual Math Teams (VMT). My students worked in a virtual mathematics chat room solving open-ended questions with students from another school that were not co-located. During our initial

focus group interviews my students voiced their concerns about their level of mathematical knowledge, issues with collaborative group work, and lack of experience with technology in their education. However, over the course of a school year, the students thrived working in the VMT. Their participation grew as well as their enthusiasm for the mathematics. During our final focus group interview the students expressed that they felt free to make mistakes and take chances. They enjoyed the opportunity to collaborate with their teammates solving open-ended problems and appreciated the lack of contemporaneous teacher intervention.

Observing my students' enthusiasm as they solved mathematical tasks in the VMT environment influenced my decision to study and understand how their mathematical identity was influenced.

1.3 Research Questions

The research project, *eMath*, followed several students' behavior over the course of one school year, conducted during their regular class time, as they worked on mathematics, collaboratively, in a virtual environment. My research focused on tracing the students' mathematical identity. The data for this dissertation includes the work from chat rooms discussions and whiteboard activity and solutions from one team of four boys. The research was guided by the following questions:

- 1. What aspect of a students' mathematical identity is transformed from their involvement in an online computer environment?*

2. *How does the collaborative group create a sense of belongingness to the group that can be realized through a shared social identity between group members?*

2 Review of the Literature

2.1 What is Mathematical Identity?

Along with race, class, and gender, identity provides researchers with an additional lens through which to view and understand students' motivation for learning. The notion of identity can be used as an analytic tool for studying important trends in mathematics practice and reform (Gee, 2001). Mathematical identity could then be described as how a student feels about him or her self as mathematics learners, and as an accumulation of this student's experiences in mathematics throughout their educational years. Mathematical identity is not stationary or fixed, but is malleable and dynamic (Lave & Wenger, 1991; Wenger, 1998). How a student learns mathematics involves the development of this student's identity as part of a mathematics classroom community (Anderson, 2007). In essence, a student's mathematical identity can change from moment to moment and from year to year in the context of this student's interaction with other students and with their mathematics teachers, as well as with different mathematical topics (Gee, 2001).

Learning can be looked at as a social practice, and specifically, as a situation where we come to know who we are (Lave & Wenger, 1991). As students participate in the classroom, they become members of that classroom community. As they attempt to make sense of that community, they develop a sense of self in relation to that community of practice (Boaler, 2000; Wenger, 1998). In a mathematics classroom, students should learn more than procedures and facts; they should learn to be part of a community of practice and become participants in the mathematics being practiced (Boaler, et al.,

2000). It is the students' experiences in the classroom that will shape their view of mathematics as a subject and as themselves as mathematics learners (Anderson, 2007). For some students, there is a positive connection to mathematics and for others, there is a sense of rejection, and consequently, little sense of identity with the community of practice (Boaler, et al., 2000; Wenger, 1998). The students' identity includes their perceptions of their experiences with others in the classroom, including with the teacher, as well as how they view their aspirations. In this way, the mathematical identity of students is formed as a result of their relationships with others and their experiences in the mathematics classroom (Anderson, 2007).

Affecting the mathematical identity of students can be done by teacher actions or classroom practices that seek to empower learners (Ernest, 2002). Empowerment in the mathematics classroom can be divided into three domains: mathematical, social, and epistemological (Ernest, 2002). Mathematical empowerment concerns the gaining of power over language, skills, and practices set forth in the mathematics classroom. Social empowerment comes from being able to use mathematics in a social situation or setting. Epistemological empowerment concerns the individual's growth in confidence: the development of a personal identity so as to become a more personally empowered person. To foster the empowerment of a student, an environment must first allow students to overcome internal inhibitions and perceptions of inadequacy. The classroom needs to promote a discourse where a student can freely question the teacher and the mathematical content. Emphasis of problem solving processes and de-emphasis of correct answers empower students' to become more confident and to take risks in their mathematical work. To gain epistemological knowledge, students need to personally engage with

mathematics so that it becomes an integral part of their identity as a learner. Students need to be confident in their mathematical knowledge and skills, in the application of these skills to problems with non-routine solutions, in their self-image of themselves as mathematics students, and in their personal ownership of mathematics in the sense that they feel capable of being creative in their engagement with mathematics (Ernest, 2002).

A good starting point in the classroom to help students gain confidence in mathematics would be the use of open-ended mathematical tasks, questions, or projects that have multiple responses or one response with multiple solution paths (Kabiri & Smith, 2003; Maher & Davis, 1995). An emphasis on problem solving and a de-emphasis on correct answers will enable students to become more confident in taking risks in their mathematical work and sharing ideas with the other students in the classroom. In addition, collaborative group sharing and a rich variety of mathematical tasks will give students more opportunities to take initiative in generating ideas and to use their creative powers in helping to solve problems (Ernest, 2002; Hannula, 2004). Collaborative projects and rich classroom discourse will also give space for students to satisfy their need for self-development, which requires a positive mathematical identity (Ernest, 2002; Hannula, 2004).

2.2 Identity in Mathematics Education

Just as a person's identity is not constant or easily defined, it is not a simple task to define the term identity or for that matter, mathematical identity. Several of the following characterizations helped to shape my definition. Some of the explanations relate to identity purely as a personality trait while others focus on identity as it is shaped in the classroom.

Gee (2001) believes that identity is an entity that is controlled by the forces of nature and society. Gee has four different strands to describe a person's identity: nature or N-identity, institution or I-identity, discourse or D-identity, and affinity or A-identity. He defines N-identity as something that is controlled exclusively by nature. For instance, you may be a twin, or have attention deficit hyperactivity disorder (ADHD), but this part of your identity is not in your control and it is recognized by society as a part of your make-up.

I-identity is the part of your identity that you have attained for yourself such as a degree or job. In the case of the student with ADHD, that student is part of a child-study team and may be the recipient of special services that other students do not receive. The influence of the I-identity is forced upon us from our accomplishments or from our N-identity.

The third form of identity is D-identity, in which the D stands for discursive identity. The power that determines this form is the discourse or dialogue with other people. The power source is not nature or institution but interaction with other people. If people view you as fun or intelligent, it is through your actions that you have attained this identity. The D-identity of the child with ADHD in the classroom may depend on the teacher's perception of him or her, since the child's action may vary depending on the classroom environment in which he or she is placed. In a chaotic or unsupportive classroom, the child may misbehave; however, in another classroom, this same child may be recognized as creative and behave completely differently. Certainly, the D-identity is more of an achievement under certain circumstances.

The fourth perspective on identity is the A-identity or affinity perspective. This source for identity development is not from nature, institution, or discourse with others but your personal affinity to a group. The allegiance to this group is a set of practices in a shared culture. An A-identity can focus on a club affiliation, to being a member of a street gang. Experiences and time engaged with a particular group sustain the allegiance as a member. To refer back to the student with ADHD, being a member in a support group or advocate group would establish part of your A-identity (Gee, 1999, 2001). Although Gee clearly defines what he calls the four faces of identity, it should be noted that a person is made of many parts of identity and what might be labeled an affinity attribute in one person might be labeled an institutional attribute for another. Also these identities perspectives overlap and co-mingle to make up a unique person, however, most traits can be mapped back to his four core identities (Gee, 1999; 2001).

Sfard and Prusak (2005) describe the notion of identity as a set of experiences, “Identity is a set of reifying significant endorsable stories about a person” (p. 14). The authors do not suggest that identity is about finding expression in stories rather, they seriously mean it to suggest that identity refers to the stories themselves. In addition, Sfard and Prusak indicate that identity is thought of as man-made and constantly created and re-created in the interactions between people. This definition refers to the students’ endorsable stories or experiences in their mathematics’ classrooms that shape their mathematical identity. Moreover, critical stories or significant emotional events lead us to change; therefore, we are constantly negotiating current identities in favor of a newer model. For that reason, Sfard and Prusak distinguish between an actual identity, which

is one that you currently have, and a designated identity, which is some sort of a change for which you are hopeful or striving for.

Cobb, Gresalfi, and Hodge (2008) agree with Sfard and Prusak that identity is the accumulation of experiences or endorsable stories; however, they further define the notion of identity as having two central constructs: normative identity and personal identity. Normative identity is established in the classroom and is what constitutes doing mathematics in a particular classroom culture. It is a collective or communal notion rather than an individualistic notion. Personal identity would be what an individual student develops as she participates in a classroom setting. A student either identifies with classroom obligations, merely complies with classroom obligations, or resists classroom obligations, and thus develops an oppositional identity (Cobb, et al., 2008). Therefore the normative identity a student establishes in the classroom will have an effect on their personal identity with the subject.

Boaler and Greeno focused on the students' beliefs or affiliations with the mathematical activity in order for them to find success; in effect, identity was how a student viewed their participation in the mathematics classroom for their success (Boaler & Greeno, 2000). The three components to participation were a sense of belonging to a group; a sense of achievement within the norms of the group; and particular behaviors associated with belonging to a particular group. All components represent key aspects of identity and builds on the theory that identities develop in and through social practice (Boaler & Greeno, 2000; Boaler, et al., 2000).

Like Boaler and Cobb et al., Anderson (2007) also believes that students may attain a positive identity as a result of taking responsibility for learning and participating

in the discussion of ideas. Anderson writes about the four faces of identity as engagement, imagination, alignment, and nature. First, engagement refers to direct experience in the classroom. Learning mathematics in the classroom involves engagement with one's teacher and peers, and one's own perception as to how you fit into that community. If the teacher engages in direct instruction and students work independently on short, single-answer exercises, then students may see mathematics as a puzzle. However, if students are able to develop their own strategies and meaning, then they tend to view themselves as mathematics learners.

Second, imagination goes beyond engagement and involves how students envision classroom activities fitting into their everyday lives. For students to have a positive identity in a mathematics classroom, they must imagine the mathematics fitting into their future lives beyond college acceptance.

Third, alignment refers to how students view the importance of mathematics. For some students, mathematics may be a means to obtain honors, status, or to achieve acceptance into a university.

Finally, nature is an explanation that some students are just better at mathematics. This provides a rather unsound and unfounded explanation for students' participation; however, it is the one most used by teachers and parents. According to Anderson (2007), the nature aspect of identity needs to be discounted while mathematics reform needs to concentrate on the first three components (Anderson, 2007).

2.3 Studies on Identity in Mathematics Education

Cobb, Gresalfi, and Hodge (2008) conducted a study of 11 eighth grade students from an urban middle school to document the normative and personal identities that these

students developed within the context of two different mathematics classrooms. Seven students were African American, three were Caucasian, and one was Asian, and all of them were members of two different mathematics classrooms. One classroom was a design experiment focused on statistics. It was held during the last period of the day and taught by a researcher. The other class was a regular Algebra class conducted in the middle of the day by the students' regular teacher. The focus of the study was to document the normative identities established in the different classrooms and the personal identities that developed during the 14-week study. The Algebra class was conducted in a very traditional format. Each day the class would begin with homework review, then a new concept would be modeled by direct instruction from the teacher, and then practiced by the students with a new homework assignment. The design experiment class was more of an open discussion classroom. Each day would begin with data creation discussions, followed by discussion as to how such data could be analyzed, followed by analyzing the data and creating computer-supported graphs to view the data. The final phase each day would be to discuss the graphs created by different student groups as they related back to the original data. Their goal in analyzing the data from the study was to document the students' general classroom obligations with a specific focus on the forms of agency that students exercised.

The primary difference between the two classrooms was that in the algebra class the teacher was the authority figure, whereas in the design class, the students had positions of authority where they were asked to justify their reasoning, clarify questions to one another, and offer clear arguments when disagreements occurred. The students were interviewed in groups of three to discuss their experiences in both classes. Their

responses indicated that their obligation to the teacher was most important in the algebra class. The teacher modeled the concept on the board and it was their job to take notes and recreate the exact procedure. In the design experiment class, the students' obligation was to themselves, as the thrust of the lesson was in asking questions to further their own understanding and engaging in discourse with their peers to negotiate meaning. All eleven students gave positive evaluations for their participation in the design experiment class and indicated a sense of affiliation with the mathematical activities in the classroom. All eleven students reported viewing themselves as successful in the design experiment class and only four students described themselves as being successful in the algebra class.

Interestingly, the authors report that personal identity could be made traceable for empirical purposes. In the algebra class, the students clearly stated that authority and success was based solely on the teacher and most of the students viewed themselves as unsuccessful in the course. The overall opinion was disenchantment and frustration with the mathematics in the classroom. However, in the design experiment class, the obligation to themselves was clear. They felt it was important to take responsibility for their learning and understanding. They viewed themselves as being successful as mathematical students in this classroom even though no assessments were given and the teacher never indicated whether they were correct in their analysis (Cobb, et al., 2008).

Boaler has conducted several studies designed to observe a change in a student's mathematical identity from experiences within the classroom. The first study occurred in England with two classes of 13-year-olds from two different schools (Boaler, 1997). The cohort of students, approximately 300 in all, were observed, interviewed, and assessed over a three-year period. One school used a traditional method of teaching

based upon direct instruction and student practice, while the second required students to work on open-ended projects that lasted 2-3 weeks. Although the students' mathematical attainment showed no significant differences at the beginning of the study, the group that learned mathematics in the open-ended format outperformed the first group on the end of year national assessment, even though the test was far unlike anything the students had ever encountered. In this study, Boaler found the notion of identity to be important as the students were developing connections to themselves, the mathematics, and the environment in the classroom. Through interviews the students in the traditional classroom felt that mathematics conflicted with their developing identities and therefore had no place in their lives beyond school. They considered the subject of mathematics to be a situation that positioned them as receivers of knowledge. Students in the discussion based classroom found mathematics required them to contribute more of themselves as they were called upon to contribute ideas. Their participation was active and consistent with their developing identities as young adults. The students had developed an active and productive relationship with the discipline of mathematics that served to strengthen their identity within themselves as mathematicians (Boaler, 1997).

Another significant study by Boaler and Greeno (2000) collected data on 48 students from six schools in Northern California and 72 students from six schools in the United Kingdom, all of which were enrolled in AP Calculus. Through a series of interviews and questionnaires, students from four of the US schools and four of the UK schools described their past experiences in mathematics, which was remarkably consistent between the two countries. Both were oriented towards fact collection, being rigid, not allowing them to exercise agency, and did not give them opportunities to

discuss their work. Two of the six schools from both the US and the UK were using an open discourse strategy, and the students from those schools reported that they enjoyed mathematics and felt more of a connection to the subject because it was not quite so procedural (Boaler & Greeno, 2000). The students from the open discussion based class described their classroom as a family environment and that the open discussion gave them more agency. A description such as this suggests that relationships in the classroom are important and foster an atmosphere ready for discussion and debate. Their normative identity was positive and open in nature. In the didactic classroom the students' participation was defined by textbooks, rules and procedures and essentially ignored the social nature of learning. Boaler states (2000), "why would anyone want to be successful at something as abstract and dehumanized as the traditional diet of secondary school mathematics" (Boaler, et al., 2000). As students are developing their identity, why would they connect to a subject that is procedural and give them no room to move. Discourse and agency need to be a part of school mathematics (Boaler, 2002a, 2002b, 2008).

Sfard and Prusak (2005) used their definition of identity as a lens to understand the salient differences between the mathematics learning styles of two groups of students. Specifically, they looked at the mathematical learning process of a group's of 17-year-old immigrant students from the former Soviet Union and compared them to native Israelis. The Soviet Union students' learning was ritualized and motivated by a wish to adhere to the rules of the game. They viewed education as a need for success away from their immigrant status and importance was inside the classroom. In contrast, the Israeli students strove toward a learning whose effects would outlast the classroom. They

thought that their mathematics skill would be something they would need throughout their lives. They approached the mathematics differently because of their different backgrounds. Sfard and Prusak's study emphasized the students actual identity, consisting of the stories about oneself that represent their present state of mind, and their designated identities which are stories that one strives to become. The students in the study have an actual identity of being either an immigrant or a native Israeli student, and for that, approached the mathematics differently. The native Israelis reported feeling very comfortable in their status and viewed mathematics as a subject to be learned that would facilitate their future careers, while the immigrants viewed mathematics as a subject to be mastered to improve their status as students. The Israeli students far out performed the immigrants in problem solving.

Civil and Planas (2005) conducted two research projects to look at the negative effects of identity construction when there are stronger students dominating the classroom discourse. The first study looked at a group of bilingual fifth graders in Tucson, Arizona. Their focus was on two different groups that might be called high status: the athletes, which were considered popular, and the GATE (gifted and talented education) students, which were considered by the other students as intelligent. Students in GATE were pulled out of the regular classroom, when the non-GATE students were practicing mathematical procedures, to work on open-ended mathematical projects. This process could be viewed as widening the gap between the non-GATE and GATE students. Comments that were made during the interview process of non-GATE and non-athletic students were, "If GATE is to make us more intelligent, how come I don't get to be in GATE so that I can get smart?"(p. 10). It was observed that during the regular math

course when the students were kept together that the GATE and athletic students dominated the classroom discourse. When the students had to vote or grade one another's projects, the students often voted for the athletes or the GATE's students work. Research indicated that the students who were not part of these clubs felt that the GATE and athletic students were more capable than themselves. (Civil & Planas, 2004).

Civil and Planas' second study observed sixteen year olds that were pulled out for special needs in reading and math. Several of these students were ESL (English as a second language) and felt their accent created a barrier that stopped them from participating in the classroom discourse. They remarked that they did not want to add to classroom discourse in fear of slowing down the discussion or looking foolish. They talked about writing down their ideas and waiting to get back to their special needs teacher to discuss it there where they felt more comfortable. In both studies, it was evident that groups with a stronger status dominated the classroom discourse, therefore leaving behind the weaker students (Civil & Planas, 2004).

2.4 Discussion

Several of the studies mentioned above have similar components. They were all comparative studies, analyzing the differences between two different classrooms environments. Cobb, Gresalfi, and Hodge looked at the differences between an algebra class conducted in a traditional format and an open-discussion, design experiment class. Boaler conducted several studies using this same theme, comparing the students' mathematical identities in classrooms using different teaching methods. Civil and Planas did two studies, one comparing the gifted students to the regular education students, and the other comparing the ESL students to the regular education students. Sfard and Prusak

compared two groups of high school seniors in the same Calculus classroom but from extremely different backgrounds. All studies used interviews to learn about the students' mathematical identities before and after the completed research. In all studies, the classrooms were either teacher directed or teacher centered.

In contrast to these studies, my study differs in several aspects. I look at students' individual mathematical identity as it develops as they collaborate in small groups over the course of one school year. The student participants worked in a virtual environment called the Virtual Math Teams (VMT) collaborating with students who were not co-located. They solved a series of combinatorial and social-choice problems in groups of three or four without any contemporaneous teacher involvement. They developed their own normative identities within their groups. Their interactions were completely different from any of the studies I reviewed in that they never had face-to-face interaction with their teammates. The participants became accountable to one another through discourse by answering and asking questions to the best of their ability. From the chat logs, I analyzed their discussions and looked for changes to the quality of their discourse within the group as well as changes in their activity level.

In an online setting, there were no studies observing or tracing a students' mathematical identity. Given the increasing availability of computer-mediated programs in the mathematics classroom, both synchronous and asynchronous, there is a need to study students' mathematical identity in such systems under particular pedagogical frameworks. Classroom networking brings the promise of expanding collaboration opportunities (Stahl, 2006). The benefits of collaboration without geographic limitations are novel and it is important that we understand how this environment for collaboration

might affect a student's mathematical identity. For this reason I will focus my research on the following two questions:

1. What aspect of a student's mathematical identity is transformed from their involvement in an online computer environment?
2. How does the collaborative group create a sense of belongingness to the group that can be realized through a shared social identity between group members?

3 Theoretical Framework

3.1 Introduction

The National Council for Teachers of Mathematics (National Council of Teachers of Mathematics, 2000) in its *Learning Principle* states, “Mathematical tasks that engage students in doing mathematics, making meaning, and generating their own solutions to complex mathematical problems can be beneficial in engaging students and supporting their identity as mathematics learners.” This framework followed the same idea: (1) students need to be engaged to support the transfer of knowledge, (2) this engagement is best accomplished through discourse and a sense of belonging to a community of learners, and finally, (3) this engagement supports students’ identity as mathematics learners. Boaler (2002) suggests that students are able to transfer knowledge because of three interrelated factors: 1) the knowledge that is being transferred, 2) the practices in which the students are engaged, and 3) the active and productive relationship with the subject that these students have developed. It is this relationship that the students cultivate as they practice mathematics, as opposed to an accumulation of skills and information, that will support and strengthen their mathematical identity (Boaler, 2002b; Wenger, 1998). The final section of this framework will support the use of networked Internet applications in the classroom that create an alternative environment for engagement and collaboration, in particular, an emphasis on the VMT which created an optimal collaborative environment for this research.

3.2 Engagement through the Transfer of Knowledge

This framework is rooted in the Vygotskian theoretical framework that emphasizes the social formation of the mind, and in particular, the importance of social interaction in the development of individual mental processes (Michaels, O'Connor, & Resnick, 2008; Vygotsky, 1978). Vygotsky's theory has been most closely related to constructivism, a belief that students learn most effectively when they make sense of different ideas and actively organize them into their own cognitive schema (Lerman, 1996). Constructivists believe learning is naturally tied to authentic activity, context, and culture, as opposed to the traditional didactic approaches of education, many of which are based on the direct transfer of knowledge (A. L. Brown, 1994; Lerman, 1996; Maher, Powell, & Uptegrove, 2010, (in press); Scardamalia & Bereiter, 1991). The socio-cultural constructivist theory is the belief that the learner actively constructs knowledge and coming to know is a process constantly modified by the learner. Delisi (2006) takes this definition further: students are active learners, higher forms of thinking develop from when the co-construction of knowledge with peers takes place, cultural tools play an important role in the learning process, and discourse quality is an important factor. If identities are defined as a collection of stories about a person, then positive classroom experiences rooted in the socio-cultural constructivist theory will define a student's perception of themselves as mathematical learners (Sfard & Prusak, 2005).

3.3 Engagement through Discourse

Powell (2006) states, "Student-to-student conversations...are mathematical discussions when they possess the following four features: are purposeful, focus on a

mathematical topic, involve genuine student contributions, and are interactive” (p. 34). Curriculum needs to be developed that incorporates open-ended mathematical tasks, questions, or projects that have multiple solution paths and can create situations that foster a rich classroom discourse (Kabiri & Smith, 2003). Classroom discussions are intrinsically motivating for students because communication allows them to get involved rather than passively listening to the teacher talk (De Lisi, 2006). It gives students the opportunity to exercise agency over their own knowledge building by questioning themselves and questioning their teacher. Giving students a higher level of agency would not just foster the development of students answering questions but would also support students’ role as the question-asker (Kabiri & Smith, 2003; Scardamalia & Bereiter, 1991). Scardamalia and Bereiter used the term “*reciprocal teaching*” where they state the following:

In reciprocal teaching the target activity is a thoughtful discussion that the students carry on by themselves, having gradually weaned themselves from the dependence on the teacher to direct the discussion and to help them perform their roles in the discussion. It fits the Vygotskian model in that the children grow into an activity that has meaning for them in its own right and at the same time grow out of the need for external support in the activity (p. 49).

Many teachers might agree that this type of discourse takes time and practice. Yet as discourse becomes the norm in the classroom, students can take over some of the teacher’s responsibilities as long they have constructed personal ways of judging what is an appropriate mathematical contribution (Yackel & Cobb, 1996). Mathematical contributions include actions such as listening to, asking, and answering one another’s contributions to create accountable discourse in the classroom. Michaels, O’Connor and Resnick (2008) write about three forms or critical features of accountable discourse in the

classroom: accountability to community, accountability to knowledge, and accountability to accepted standards of reasoning. Their research draws on constructivist and socio-cultural principles that emphasize the importance of social practices. Practices include the “careful orchestration of talk and tasks in academic learning” (p. 284). In accountability to community, group members listen to each another, build on each another’s ideas, and question each other to expand upon their own individual ideas. Accountability to mathematics, which is based explicitly on the use of accurate facts and mathematical language in discussions of mathematical topics, is considered the most difficult to achieve. Some educators argue that the accumulation of facts is trivial while others believe that facts are the foundation to the domain. Accountability to accepted forms of reasoning emphasizes the logical connections and the drawing of reasonable conclusions (Michaels, et al., 2008).

The aspect of accountability to community was the most important to this research project. When talk is accountable to a community, students practice listening to others more carefully, build upon one another’s ideas, and come together to learn collaboratively. A shift away from individual competitive work and towards more group sharing of mathematical ideas is an empowering experience for students and one that will strengthen their mathematical identity (Ernest, 2002).

Classrooms or learning atmospheres that stress collaborative learning and classroom discussions are classrooms where students become a “community of learners” (Gee, 1999; Gee 2001; Wenger, 1998). The classroom is not just about learning mathematics, it is about learning a set of practices that come to define that knowledge. If students are made to feel that their contributions are valued by their classmates and

teacher, then the classroom could become their scholarly home (Wenger, 1998). Mathematics should be about ideas, trial and error, discussion and most importantly participation in the practice of mathematics (Boaler & Humphreys, 2005). As Gee spoke about the four perspectives of identity, my research stresses the affinity identity where in the classroom of learners share and co-participate in the practices. These practices create an identity for students in which they are proactive inquirers and responsible for each other's learning. Learning implies becoming a new person and involves the construction of an identity. The accumulation of educational experiences is a practice of being in the classroom. These experiences create a way of being in the world (Wenger, 1998). As Wenger (1998) states,

Talking about identity in social terms is not denying individuality but viewing the very definition of individuality as something that is part of the practices of specific communities (p. 146).

The specific community for us as educators is the classroom. The classroom community that fostered this research involved a networked Internet community called the Virtual Math Teams (VMT) chat. As students engaged in multiple sessions within the VMT, they became a community of learners engaged in problem solving mathematical tasks. Unusual to this community is that the students never have face-to-face contact, yet the formation of a community and acknowledgement of each other as equal participants led them to work collaboratively to a common goal. The students in the program developed their own unique practice, expectations of one another, and most importantly, how to work together as a unique community of practice.

3.4 Anonymity in the Classroom

Next generation classroom networks are programs that go beyond typical Internet uses in the classroom. They are not just for information seeking or asynchronous messaging, but for students to work collaboratively in real time with students not co-located. Constructing identity in the culture of the Internet can only be understood as part of a larger cultural context (Turkle, 1995). Students have to adjust their boundaries from the classroom, which is real, to the virtual. As they participate they become authors not only of text but of themselves, constructing new identities through social interaction (Turkle, 1995). Common to most next generation networked programs is the feature of personal anonymity. Although there is a lack of research within the field of education concerning anonymity and next-generation environments, some studies do show that under the condition of anonymity participants were more likely to make critical comments and ask more clarifying questions about each others submissions (Postmes & Lea, 2000).

Hsi and Hoadley (1997) researched an asynchronous discussion tool and compared rates of participation in oral discussions and to rates of participation in electronic discussions. Their results showed that 16% of the students participated in the oral discussions, while 78% participated in the electronic discussions. In addition, Hsi and Hoadley's results demonstrated that girls participated more often in the electronic setting than in the oral discussion setting. This feature of anonymity can foster an environment that has potential for increased creativity and expression, leading the way to higher levels of learning (Stroup, Ares, & Hurford, 2004). Anonymity in a networked

setting creates a more equitable or enjoyable participation environment by reducing social anxiety (S. M. Davis, 2002).

Anonymity can also create an unpleasant atmosphere where students might be empowered to say negative comments. In a text-based environment, words are deeds (Turkle, 1995). Students have to create and negotiate relationships centered completely on text.

Every classroom teacher knows that group collaboration is not equally distributed amongst the members of the group. As indicated by Scardamalia and Bereiter (1991),

“Students as early as the first grade understand and appreciate the value of cooperation, however, by the fourth grade many have acquired reservations about working in groups. They are aware of the variety of things that can go wrong: rivalries and domination, the suppression of novel ideas, time wasting, and the plain nastiness that often infects preadolescent social relations” (p. 60).

Unequal personalities and unequal content knowledge create struggles that can inhibit students from participating in the group discussion or assignment.

Classroom networks can allow for a positive experience because it creates an extension of the students’ private space. They may be discussing a mathematical task with other students but they are still alone at the computer and capable of turning away from an unpleasant situation. Within the network space, anonymity opens up new and affirming ways for students to participate in the classroom.

3.5 Virtual Math Teams (VMT)

The VMT project is an NSF-funded research program designed to investigate sustained collaborative problem solving in a computer-supported environment. The VMT is web-based synchronous chat room designed for mathematics students to work

collaboratively. It has a chat log for discussion as well as a dynamic whiteboard for shared problem solving. There have been research studies investigating how the VMT's community of learners constitute their interactions over time to develop as collaborative learners. Collaborative learning in a computer-supported environment is different in many ways from collaborative learning in a traditional classroom (Powell & Lai, 2009; Stahl, 2009a).

Foremost the VMT is designed to engage students in learning through teamwork. As a problem is posted and read individually, it is the teams' responsibility to negotiate and plan how to proceed (Charles & Shumar, 2009). Since the students are working online and cannot verbally discuss the problem, to participate they must type their reactions and questions into the chat. In a traditional classroom, habits of learning tend to lean towards the passive acquisition of knowledge from authority sources like teachers or books, rather than self-motivated collaborative inquiry (Stahl, 2009b). The VMT turns the focus from the teacher and to the mathematical problem, as the students have to rely on one another. This environment seems to yield small groups focused on mathematical conversation as it buffers out traditional classroom distractions (Charles & Shumar, 2009). Several VMT studies have yielded robust discussions as indicated by Stahl (2009),

“We found that participants in virtual math teams spontaneously began to explore their problems together, discussing problem formations, issues, approaches, proposals and solutions as a group. Moreover, students generally found this interaction highly engaging, stimulation and rewarding.” (p. 13)

As the individuals exchange ideas, consider, and challenge one another, they focus on a common purpose which strengthens the collaborative interaction (Powell & Lai, 2009).

As the collaborative interaction unfolds, students model and scaffold information for each other.

Conversations in a text chat are different from face to face conversations, which in turn, makes the collaborative interaction process unique. The participants are unable to rely on vocal emphasis, intonation, facial expressions, accent, gestures, pauses, or laughter (Stahl, 2009a). They are forced to create new affordances to organize and create their social order and shared meaning making (Stahl, 2009a). Students working in the VMT environment have similar experiences to students in the classroom; however, they have to demonstrate their emotions within the chat or on the workspace. Students working in a virtual environment have to get used to substituting representations of reality for the real (Turkle, 1995). They create ways of showing emotions by using capital letters, repeated entries, and one-word entries to express themselves.

To participate in the discussion, a student would have to become accustomed to the routines established by a particular group. Each group as long as they stay together might have different routines that define their unique community. As they participate in collaborative problem solving, math routines form. Routines such as exploration, exposition, and imitation, are created that produce social order and make sense of their shared VMT world (Stahl, 2009b).

Rituals are socially orientated and can be unique to each group (Stahl, 2009c). Team members in a VMT environment have to negotiate their relationships using rituals such as providing leadership, responding to one another, and assigning tasks to each other. Each member, if actively engaged, has to facilitate the group process by working together. However, unequal personalities and unequal content knowledge create

struggles that can inhibit students from participating in the group discussion. As the group members become more adapted to each other, leaders and followers emerge, as well as participants who engage in unconstructive actions. If there is no contemporaneous teacher involvement, then a VMT team has to evolve into its own domain. Rituals help the teammates position themselves within the group.

The distinction between exposition and exploratory parallels cooperation versus collaboration, whereas cooperation is the dividing up of tasks and collaboration is the shared task (Stahl, 2009b). Exposition is the scenario where one person tells the story or directs the team as to how to solve the task. In expository group discussion, the expositor dominates the group discussion while the other group members attentively provide an audience. In exploratory inquiry the turns are more equally shared as the group collectively co-constructs the solution path (Stahl, 2009b). This, of course, is the optimal situation in any collaborative environment where all the participants work together and agree at each stage as they move through solving a problem.

Different from exposition and exploratory interactions, imitating is when a student may not possess the knowledge, but he is learning to participate in the problem solving. By that, he might make proposals, ask questions, or help create solutions as a following. As in Vygotsky, first imitating and then gradually individualizing their own abilities (Stahl, 2009c).

3.6 Discussion

The data for this research was based on the view that knowledge is actively constructed by the learner and coming to know is a process constantly modified by the learner's experiences in the classroom. It is based on the assumption that as students gain

more agency over their learning, they become empowered to take responsibility for their education. From this empowerment, their mathematical identity can be affected.

4 Methodology

4.1 Project eMath

Based at Rutgers University in Newark and directed by Arthur B. Powell, the *eMath* Project is a research study and a pedagogical intervention. As a pedagogical project, *eMath* involves diverse high school students in developing their mathematical reasoning through online collaboration. As a research project, *eMath* aims to understand the following:

1. How can students use online technology to collaborate synchronously and asynchronously to solve open-ended but well-designed mathematical problems that are cognitively demanding and that promote the construction of problem-solving schema?
2. What resulting mathematical ideas and reasoning do students develop collaboratively?
3. Based on a given situation, what mathematical problems do students collaboratively pose?

To accomplish these aims, our research design has the following six objectives: (1) create online conditions in an informal learning environment that elicits mathematical reasoning and the building of convincing arguments; (2) trace the development of that reasoning by studying patterns of discourse that emerge as students work online on mathematical tasks; (3) document and study the nature of student-to-student online communication as they make sense of each other's ideas and reasoning; (4) understand and evaluate the affordances and constraints that the computer and Internet tools we provide; (5) develop rich situations from which students may pose and solve

mathematical problems; and (6) create social, intellectual networks among students in urban and suburban communities, here and abroad.

4.2 Students and Setting

The seventeen students in the *eMath* research project were from two different high schools in New Jersey. Eight students were from Long Branch High School (LBHS), an urban, public school, and nine students were from Rutgers Preparatory School (RPS), a suburban independent private academy. Four of the students at RPS were juniors and all other students in the project were seniors. The students from Long Branch High School were required to take only three years of mathematics and elected to take Contemporary Mathematics as a fourth year mathematics course. The students from Rutgers Prep were required to take three and half years of mathematics and were enrolled in the Advanced Algebra & Trigonometry course. The first semester was required and the second semester was an elective. Although both sets of students had completed algebra 1, geometry, and algebra II as a prerequisite to their current mathematics class, we were unsure of their skill level mathematically or the rigor of their past courses. All seventeen students agreed to be part of the study after the course had begun.

The students, in groups of three, four, or five met approximately twice a month in a virtual environment called Virtual Math Teams (VMT) Chat. The two main interactive components to the VMT are a shared dynamic workspace and chat window. The workspace, which occupies three quarters of the screen, is a shared, dynamic workspace where students can enter text and create drawings. The chat window, located on the right side of the screen, is the main component for the students to communicate. Both the workspace and the chat window can be viewed continuously meaning users can scroll

back to access prior workspace representations that might have been deleted and view prior chat postings. Each member of a team has a screen name and a distinct color for their typed chat entries. All actions in the space are dynamic meaning other users cannot view an individuals work until they press the return key, at that time students' contributions become visible to other members in the room. This slight delay in the interaction could cause work entered on the workspace to overlap between the team members, however, any member could scroll back and use the cut and paste function to move entered solutions on the workspace. All interactions between a students' computer and the server are recorded for later review by the researchers. Each room within the VMT Chat contains three to six tabs that a user may interact with while still viewing the chat space. Figure 4-1 displays a screen shot with four tabs: Workspace, Summary, Topic, and Wiki.

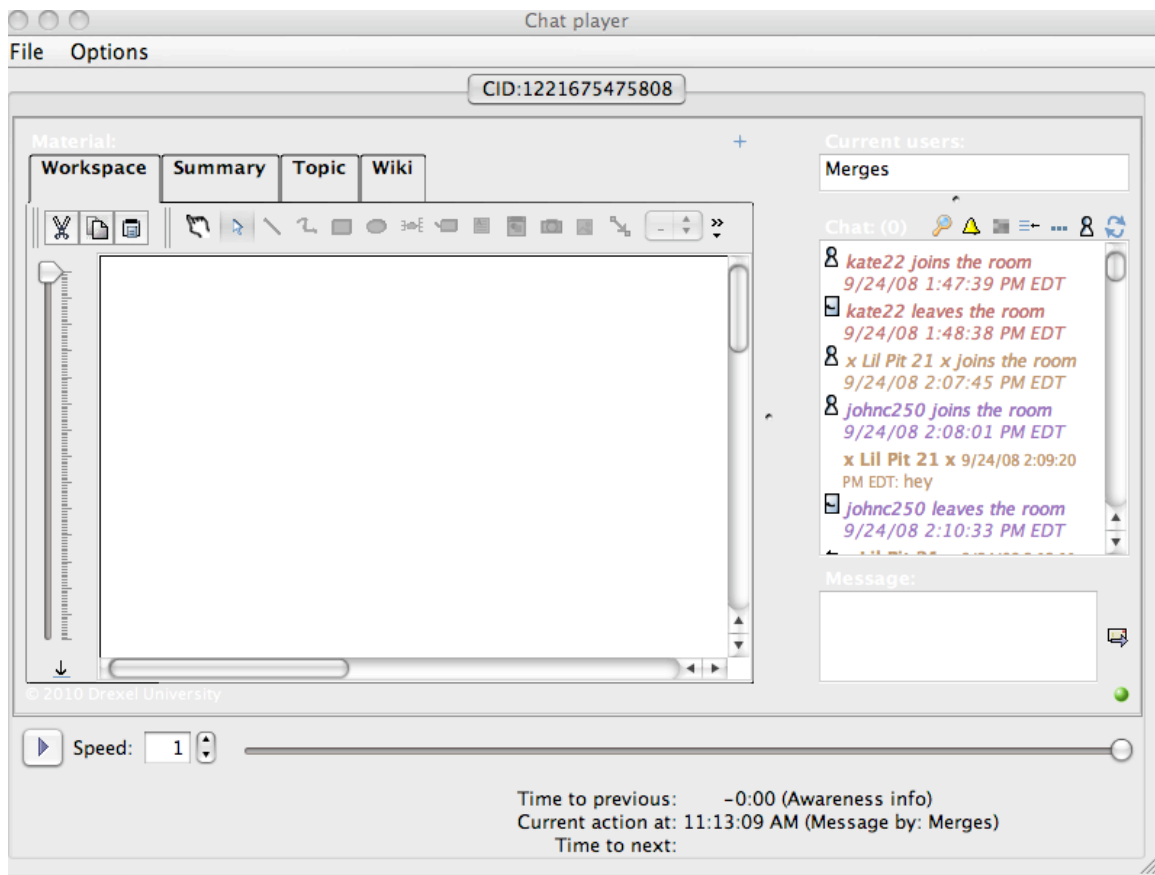


Figure 4-1. Screenshot of the VMT window

The first tab, the Workspace, is a shared whiteboard that is designed for the students to use as virtual scrap paper. There is ample room for the students to create lists or visual representations using the drawing tool. The students can create their own work or collaborate to create one solution. The second tab, the Summary, is a second workspace where students are asked to post their final solutions to the problem as a team. The program offers the affordance of cut and paste so that work did not have to be recreated in the solution tab. Topic is the where students found the problem statement and Wiki may be used to post other teams' solutions, so that a team may compare their solution with all the other teams' solutions. It is possible to have two additional tabs: Browser, and Help depending on your needs for the project. The Browser allows students

to browse the Internet for resources and, lastly, the sixth tab is a Help tab, which helps students if they need instructions on how to use particular functions of the environment. For our research we utilized the four tabs shown in the figure above for each session.

4.3 Data Sources for eMath

The data collected during our study came from three main sources: the recorded workspace and chat sessions provided by the automated transcriber built into the VMT, video recorded and transcribed focus group interviews, and researcher notes recorded during the sessions and afterward at weekly meetings.

The sessions were viewed simultaneously as the students completed the tasks and afterward via two main sources. The java files can be viewed using a Replayer to play back the session at varying speeds or at real time to re-enact the session as it actually occurred. Replayer allowed us as researchers to view the sessions as many times as needed. Also available was the automated transcriber which extracted the files and translated them into spreadsheets with all activity recorded. The activities transcribed included all chat entries, all workspace entries, and erased entries that were never submitted. To clarify on the erased entries, we were not able to view what was erased only that a chat was typed and then erased and not entered.

Four focus group interviews were videotaped and transcribed. The focus group interviews were conducted by the teacher-researchers during their regular class time. The first focus group interview questioned them about their prior experiences regarding group collaboration, mathematics, and technology in the classroom. The following three interviews, although scripted to begin, were designed to inspire the students to share their feelings about mathematics they were doing in VMT chat-room. The questions posed

during the group interviews focused on the students' interpretations of activities and problems solved in the VMT environment.

The researchers met at weekly meetings to discuss the sessions. Each researcher was responsible for updating the others on an assigned group. Replayer was utilized to re-experience the sessions as they occurred that week. Notes were taken during the sessions and shared during the meetings. Scripts were created at these meetings to convey consistent information to the students for upcoming sessions.

As part of our research design, contemporaneous teacher involvement was held to a minimum to enhance the students' collaborative participation within small groups. Intervention was discussed at weekly meetings when the sessions were viewed. Future sessions were adjusted to augment the groups' progress with scripts. Scripts were read before the sessions that were designed carefully to direct and encourage group problem solving and to enhance consistency between the two student groups.

4.4 Tasks

For the *eMath* research, students worked on open-ended combinatorial and social choice problems not seen in their traditional mathematics classes. The combinatorial tasks were derived from the longitudinal research from the Robert B. Davis Institute for Learning at Rutgers on how students build mathematical reasoning and meaning (R. B. Davis, 1992; Maher & Davis, 1995). The social choice problems are drawn from social choice theory (Tannenbaum, 2009). The students met for 16 sessions, each lasting approximately 45 minutes. The following table lists the questions in the order they were assigned. The sixteenth session was a question and answer session encouraging the students to further discuss their activities and involvement in the VMT.

Table 4-1
List of Problem Tasks

Problem Task	Date
Cups, Bowls, and Plates	September 24, 2008
Towers Problem	October 7, 2008
Towers Problem continued	October 13, 2008
Pizza with Halves	October 23, 2008
Pizza with Halves continued	October 29, 2008
Four Topping Pizza	November 24, 2008
Towers 3-tall	December 12, 2008
School Council Problem	January 9, 2009
School Council Problem II	January 15, 2009
School Council Problem III	February 9, 2009
Weighed Voting	February 13, 2009
Towers Problem III	March 6, 2009
Class Party	March 30, 2009
Class Party II	April 3, 2009
World Series Problem	April 24, 2009
Team Questions	April 30, 2009

4.5 Analysis Plan

4.5.1 Introduction

This case study focuses on the students' developing identities individually and as a collaborative group from one of the four teams. The data set includes the first seven sessions as they occurred chronologically in the Fall of 2008. Although it might not be possible to label a student's identity, it is however, possible to describe changes in their behavior that might relate to their identity. Changes in these behaviors may show an increase in their interest or the feeling of empowerment over the mathematical tasks. The focus of this dissertation is to describe what aspect of a students' identity are transformed as observed from their involvement in problem solving sessions in a online computer environment.

4.5.2 Team Two

The team that I will analyze for this dissertation is what we called Team Two. Team Two experienced a gain of one student during the research project, who was a junior. The rest of the teammates were seniors. All of the members were male. Their names and dates of entry are listed below:

Table 4-2

Team Two

Student Name	Screen Name	School	Dates
Pedro Gonzalez	xLilPit21x	Long Branch High School	9/24 – 4/30
Jhonaton Cervalos	Johnc250	Long Branch High School	9/24 – 4/30
John Cammalleri	Cammalleri	Rutgers Preparatory	9/24 – 4/3

Jordan Robinson	16oncebabyjesus	Rutgers Preparatory	9/24 – 4/30
Andrew Cogen	CaliforniaSquirrels	Rutgers Preparatory	12/12 - 4/30

During the research the students would refer to one another using their screen names, their actual names, and occasionally made-up nicknames. For consistency, I will refer to the students using their screen names.

4.5.3 Tasks Analyzed

Our research began in September 2008 and ended in April of 2009. For this dissertation, I analyzed the first seven sessions. During these sessions the students worked on five different combinatorial tasks. I chose to limit my data analysis to combinatorial problem tasks for several reasons. I wanted the focus on their identity as they solved similar tasks, therefore a change in their reaction could not be construed to a change in the type of mathematics. Secondly, these particular combinatorial problems had content that was familiar to students from urban and suburban communities and mathematically allowed for different solution approaches ranging from simple listing to more advanced methods. The list of tasks and dates to be included in this analysis are as follows:

Table 4-3

The task

Problem Task	Date
Cups, Bowls, and Plates	September 24, 2008
Towers Problem	October 7, 2008

Towers Problem continued	October 13, 2008
Pizza with Halves	October 23, 2008
Pizza with Halves continued	October 29, 2008
Four Topping Pizza	November 24, 2008
Towers 3-tall	December 12, 2008

4.5.4 Method of Analysis

Data analysis began with viewing the sessions using the automated tool called Replayer. Replayer replays the sessions from beginning to end allowing sessions to be viewed multiple times. Replayer can be set to run faster, slower, or at the authentic time to re-watch the session as it transpired. Each session was viewed several times before a general description was written. That general description is the introductory paragraph to each session analyzed in this dissertation.

In addition, html logs were produced in two different forms: automated transcribed chat sessions noting line by line interaction of the sessions, and a vertical arrangement that allowed for quick access of particular students' interactions.

The line by line chat logs were coded first by me and then verified by Kevin Merges, a fellow graduate student. The line by line coded logs were referred to numerous times as a reference when re-watching the sessions using Replayer.

To further identify emerging personality traits or changes, a themes worksheet was created. Using the vertical column html printout, I highlighted all comments made by each student in a given chat and looked for similar statements made by a student during each of the seven sessions analyzed. This categorization helped me reveal similar

statements made by each of the four students analyzed. Similar statements helped me to infer characteristics about their individual identity and their identity as a member of the group.

4.5.5 Coding

The chat and whiteboard logs were coded for the following: accountability to the group and mathematics, empowerment, and unconstructive behavior. The coding was designed to identify different behaviors and changes to behavior to aid in interpreting the data in a virtual environment. In a virtual environment, such as the VMT, chat statements and sometimes the absence of chat statements need to be interpreted differently. Table 4.4 lists the codes that were used to identify and trace the students' mathematical identities as they completed the tasks as a collaborative group.

*Table 4-4
Codes Used in Chat Room Transcriptions*

Accountability to the Group and Mathematics		
Encourage	Student encourages teammates to begin the task, or return to the task at hand	E
Agreement	Student agrees with the current group solution and states approval in the chat	A
Asking for Help	Student states that they are confused and requests assistance from his teammates.	C/AQ

Empowerment		
Taking Lead	Students assert themselves by taking the lead in current problem solving strategy	TL
Redirect	Student redirects the current approach by suggesting another problem solving strategy	RD
Posts Answer to Chat	Student states the solution or partial solution in the chat	ASC
Posts Answer to Whiteboard	Student states the solution or partial solution on the whiteboard	ASWB
Non-Collaborative Behavior		
Whiteboard Alone	Student working on the whiteboard without collaborating with teammates.	WBA
Disagreement	Student disagrees with current solution but does not offer reasoning.	D
Disruptive behavior	Students purposefully disrupts the problem solving session.	DP
Erased Chat	Student fully erases chat message	ER

Accountability to the group is communication that attends to and builds on the collaborative efforts of the group. It identified students' responses that: encouraged one another to join or continue efforts in problem solving, agree with the current approach, or ask clarifying questions that would show positive participation. Each of these communication components were important because the students were working in virtual

environment without contemporaneous teacher involvement. In a synchronous virtual environment, students learn quickly that small statements of encouragement and agreement displayed to the other members that they were following along with the current approach. No activity from a teammate might signify that they were no longer present in the chat or following along with the activity. Asking questions is significant during any type of collaborative group work, in particular, this environment. Without face-to-face interaction, or without voice, the students were motivated to ask one another how to proceed, and what they were working on almost continuously throughout the session. If a student was working on the task individually and not hitting the enter key, the other students might consider this student to be dormant and not participating. Since the program is dynamic, an individual's work is not displayed to their teammates until they press the enter key. Answering questions was also an extremely important component to the collaboration. They had to be clear and explain their answers to one another. This made them accountable through their written word in the chat for group collaboration. In the VMT environment, it was possible for a student to enter a partial solution on the whiteboard without any explanation to the other group members. It was evident at times that the students were observing work entered onto the whiteboard and then asking for clarification of the effort. When the students asked and answered questions to the best of their ability, they were showing their accountability to the group. They were encouraged before the sessions to work as a collaborative group, however, intervention during the sessions did not take place.

The codes for empowerment were designed to highlight moments that displayed the individual's growth in confidence within the group. The sub-codes for

empowerment: taking the lead, redirecting, or posting an answer to the chat and/or whiteboard, give instances of the student showing a personal sense of power over the creation or validation of the knowledge. In a virtual environment, ideas, suggestions and answers have to be posted in a written form either in the chat or on the workspace. Once an idea has been posted then your teammates can view your suggestion and comment on it. Coding for moments of empowerment would assist in finding the development of a students' mathematical identity.

The third section for coding, non-collaborative behavior was developed to highlight the efforts made by teammates that were not collaborative in nature. By viewing the logs it was apparent at times that students were working on the mathematics by themselves. Since all actions in the space are dynamic, work entered on the whiteboard is not visible to others until the person performing the action types the return key. This created moments when there was little action from one or more of the students as they appeared dormant to their teammates but might have been working alone in the workspace. It is not to say that working alone is unconstructive, yet it was not helpful to the group. If a student disagreed with a current solution but did not give any reasoning for this disagreement, this was also seen as a non-collaborative effort since it mostly displayed negativity without any redirection or suggestion. Disruptive behavior was created only after all the logs had been coded and viewed because it was apparent on several occasions that students would engage purposefully in behavior aimed at disrupting the problem solving process. The final sub-code for other behavior, erased chat, could only be seen when viewing the chat logs. If a student typed a chat message and then fully erased that message without ever sending it, that action was recorded in the

logs. It is not possible to know if erased comments were constructive or unconstructive, however, they were recorded in order to keep track of how often this action occurred for each student.

5 Results

5.1 Introduction

Our research began in September 2008. The students from Long Branch High School and Rutgers Preparatory School were selected because they were all seniors taking a fourth year math course, and their class schedules which both rotated differently allowed them to meet twice a month. Although both sets of students had completed algebra 1, geometry, and algebra II as a prerequisite to their current mathematics course, we were unsure of their skill level mathematically or the rigor of their past courses.

We began our study with fifteen students separated into four teams; three teams of four students and one team of three students. By midyear, we were joined by two additional students giving four teams of four students and one team of five students. The team that I will analyze for this dissertation we called Team Two. Team Two began with four male students: Pedro, screen name xLilPit21x, Jhonaton, screen name Johnc250, John, screen name Cammalleri, and Jordan, screen name 16oncebabyjesus. A fifth member, Andrew, who chose the screen name of CaliforniaSquirrels, joined them in December, 2008. The boys alternated between calling one another by their actual names, their screen names, and, at times, nicknames they had created for one another. For purposes of clarification, I think it is best to use their screen names since the excerpts from the chat logs will list their utterances using their chosen screen names.

Before our research began we discussed the significant differences between students at Rutgers Preparatory School and Long Branch High School. We were not only concerned about their level of mathematics, but for the possibility that the LBHS students

would be intimidated by notion of working with students from a private academy. We had decided earlier not to discuss in detail either of the schools' background, however, it was possible they could investigate on their own. During our meeting in August, we decided to use Cups, Bowls and Plates as our first task. We felt the problem might serve as an equalizer since the LBHS students were familiar with concept as they prepared for the New Jersey High School Proficiency Assessment (HSPA) and the RPS students had not worked on the problem prior. We were hopeful that a familiar problem for the LBHS students would ease their feelings of intimidation.

5.2 Cups, Bowls, and Plates

The first session was held on September 24, 2008; the task assigned was Cups, Bowls, and Plates (Appendix page 149). Team Two's members were all present: xLilPit21x, Johnc250, 16oncebabyjesus, and Cammalleri. Each logged on within a few minutes of one another and socialized for approximately twelve minutes. As they all stated apprehension in the beginning of the session, xLilPit21x encouraged his teammates to shift from their socializing and begin the task. He continued to motivate them as they worked towards the solution. At one point, 16oncebabyjesus persuades xLilPit21x to enter his work onto the whiteboard, claiming they he and Cammalleri have an idea but would like to see xLilPit21x's solution strategy first. Cammalleri is cautious at the beginning of the task but he takes the lead towards the end of the session and posts his work as the teams' final solution on the summary tab. Johnc250 begins the session with a few encouraging statements about "getting started" but makes no entries once the problem solving process is underway. The task was completed correctly within the 45-minute time span with all four teammates agreeing on the single solution entered by

Cammalleri to the solution tab. Johnc250 was the first to log off several minutes before his teammates.

During the first session several interesting comments were entered into the chat that will be used as a baseline to analyze their mathematical identity as it transformed during their involvement in the VMT. To view change it is important to establish what kind of learner they appeared to be at the beginning our research and to observe if their activity or quality of activity changed as a result.

From the beginning of the first session xLilPit21x took an active role and encouraged the team to begin working. He suggested the team begin working three times during the first twelve minutes. On line 47, he said, “lets get this problem done so we have the rest of the time to talk,” and on line 54 and 69, he repeated this sentiment and said, “lets start this problem,” and “lets get this problem done.” Approximately 17 minutes into the session, the following excerpt from the chat occurs. This excerpt is a short discussion between three of the four boys: Cammalleri, xLilPit21x, and Johnc250. It opens with Cammalleri expressing his confusion about how to do the problem.

Turn	Time	Student	Type	Utterance
94	14:28:45	cammalleri	chat	i dont know how to do this problem.
95	14:29:07	cammalleri	chat	do any of you?
96	14:29:15	johnc250	chat	no
97	14:29:16	johnc250	chat	im lost
98	14:29:16	xLilPit21x	chat	its confusing but we can get through it
	14:29:23	johnc250		[johnc250 has fully erased the chat message]
99	14:29:33	cammalleri	chat	ok where do we start
100	14:29:47	xLilPit21x	chat	im figuring that out

Johnc250 answers Cammalleri with two chat entries that can be viewed as a single entry fragmented. He simply says, “no, im lost.” Johnc250 does not offer assistance at this point or any point during this session. He is quick to agree with this statement about

being lost, but does not offer further comment. Chat discussions are different from real time discussions in that they have longer periods of time between comments. From my analysis, a response that occurred within eight seconds, such as Johnc250's comment on Line 96, and then followed by Line 97 is a faster than normal response. xLilPit21x responds by offering his fourth comment of encouragement, and says, "Its confusing but we can get through it." Not only is he encouraging them, he is encouraging a collaborative effort as he begins his sentence with, "we". Cammalleri's response, "ok where do we start," indicates that he ready to assist and work on the problem collaboratively also. Cammalleri is upfront about his lack of understanding of the task and asks his teammates to help him get started. He may not know how to begin the problem but he is accountable to the task and his group by this communication. Between line 98 and 99, Johnc250 had entered text and then erased what he typed. We cannot be sure as to what Johnc250 might have entered, however, we do know that he entered something into the chat and then erased it. Johnc250 does not enter chat related to this short conversation again, but begins to draw large overlapping squares and circles in a seemingly random fashion on the whiteboard. In the next excerpt, xLilPit21x takes the lead and suggests that he has an idea. The group acknowledges and encourages him to display his work.

Turn	Time	Student	Type	Utterance
109	14:36:28	x Lil Pit 21 x	chat	i think i have an idea
110	14:36:35	cammalleri	chat	o
111	14:36:35	cammalleri	chat	ok
112	14:36:36	cammalleri	chat	ill watch
	14:36:40	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
113	14:36:41	cammalleri	chat	because im lost
114	14:37:04	johnc250	chat	yea ill do the same

115 14:37:08 16oncebabyjesus chat we have an idea to so wel watch urs first

As the boys struggle with how to start the problem, it is xLilPit21x who states first that he might have an idea. The other three provide him an audience and encourage him to display his idea. From this vignette, you might think that xLilPit21x had the only solution plan, however, in line 115, 16oncebabyjesus suggests that he and Cammalleri have an idea but have not shared their idea with the group, instead would rather “watch” xLilPit21x post his answer first. 16oncebabyjesus is admitting that he and Cammalleri are apprehensive about sharing their mathematical idea first. After this dialogue, xLilPit21x begins to list possible combinations in a textbox which is shown below. He then creates a second text box and types the statement “we need sets of three with the different colors and for ten kids.” Approximately two minutes later, Cammalleri posts the following list to the whiteboard and states, “that’s all the combos” with his teammate, 16oncebabyjesus, agreeing with his entered solution.

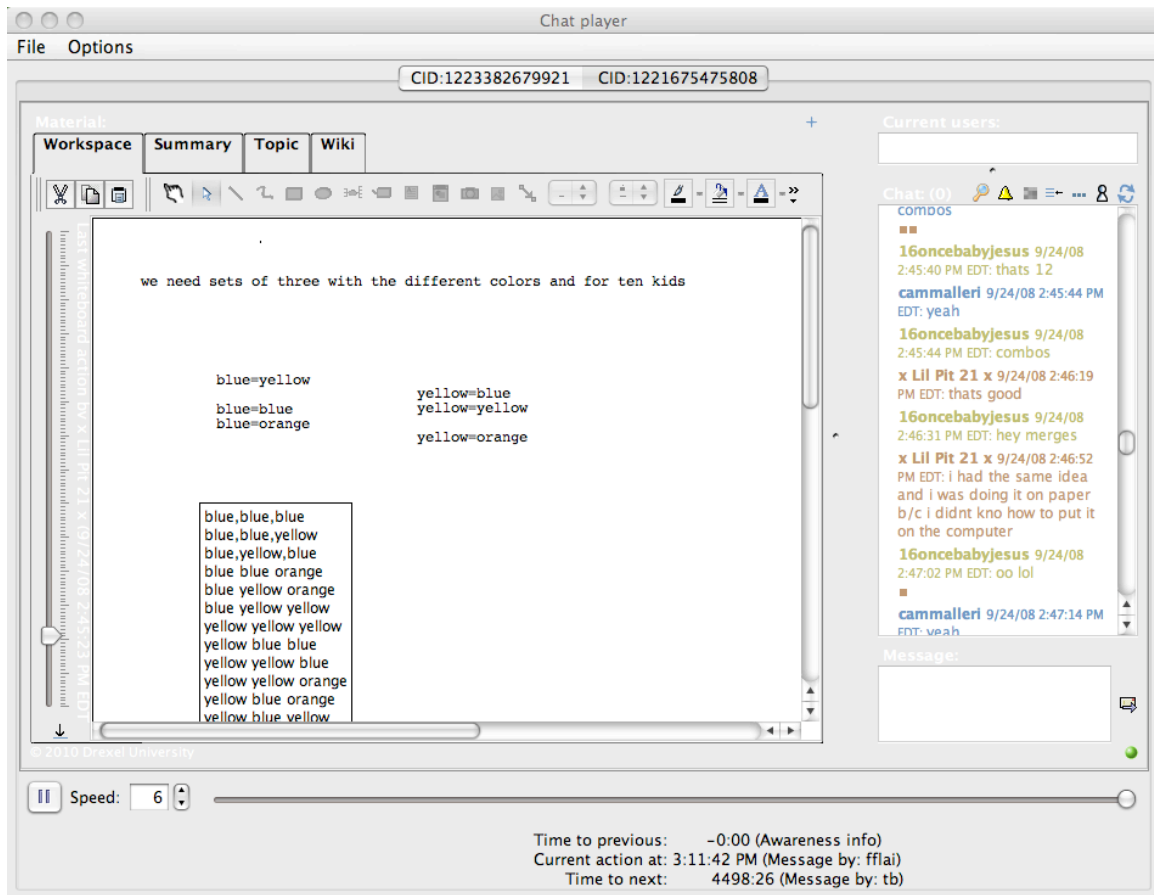


Figure 5-1. Screenshot Cups, Bowls, and Plates.

16oncebabyjesus expressed in the chat that they had an idea but wanted to see xLilPit21x show his work first. xLilPit21x began entering his work and then added a suggested solution strategy to help the team along. Almost concurrently, Cammalleri posted his completed list. Although he was apprehensive about posting incorrect work, once he felt he was on the correct path, he quickly posted his work and stated that he found all the combinations of cups, bowls, and plates. The following chat occurs within seconds of Cammalleri posting his work.

Turn	Date	Time	Student	Type	Utterance
129	09/24/08	14:45:28	cammalleri	chat	i think thats all the combos
130	09/24/08	14:45:40	16oncebabyjesus	chat	thats 12
131	09/24/08	14:45:44	cammalleri	chat	yeah
132	09/24/08	14:45:44	16oncebabyjesus	chat	combos
133	09/24/08	14:46:19	xLilPit21x	chat	thats good
135	09/24/08	14:46:52	xLilPit21x	chat	i had the same idea and i was doing it on paper b/c i didnt kno how to put it on the computer

xLilPit21x who was slow to add items to the workspace at the time, agrees with their solution and then states, “i had the same idea and i was doing it on paper b/c i didnt kno how to put it on the computer.” At this point, evidence shows that he was capable of entering information into the workspace. It might be possible that he was unsure of his work, or did not have a solid solution at this point. Cammalleri, who originally stated apprehension waited to see xLilPit21x’s work and then posted his answer. He does not give credit to xLilPit21x’s beginning work or direction. Instead and states, “I think that’s all the combos.”

During this session, Johnc250 did not contribute to the problem solving in the chat or on the whiteboard. He created different sized squares and circles in a random fashion that were later erased by xLilPit21x. On three occasions, Johnc250 also created large textboxes and colored them black so that the whiteboard was unusable. These entries were also undone by xLilPit21x. There was no discussion in the chat about Johnc250’s behavior. Johnc250 was the first person to leave the chat room several minutes before the session is over. The other three teammates continued to discuss whether they had satisfied all the questions listed in the task.

In the first session several comments from each student helped me to establish a baseline for evaluating their identities. There were instances of accountability to the community and accountability to the mathematics in chat and on the workspace. Chat that was considered accountable to the community occurred when the students asked and answered each other's questions, built upon one another's ideas, and came together collaboratively. A shift away from individual competitive work and towards more group sharing of mathematical ideas is an empowering and thus affecting their mathematical identity.

5.2.1 Cammalleri

Cammalleri, began the session cautious stating he did not know how to do the problem. He posted the final answer quickly once he saw xLilPit21x's work verifying to himself that he was probably correct with his solution strategy. After he posted his answer, he took full credit for the solution and did not use any of xLilPit21x's initially entered work. On Line 129, he stated, "I think that's all the combos," and on Line 155, he followed up with, "I think that is the answer my friends," after he instructs them to view the summary posted by him. He is not accountable to the community, his teammates. He assumes a leadership position only when he felt he knew how to answer the task.

5.2.2 xLilPit21x

xLilPit21x encouraged the group to begin the task and work as a team on several different occasions. Each time he began the statement with, "lets," or "we" promoting collaborative work for the entire group. He initially took the lead by posting the first

solution, however, after Cammalleri posted his list, xLilPit21x adhered to Cammalleri's solution and assisted him in writing up the summary. He also stayed beyond his regular class time to make sure the task was answered completely. He contributed to the accountable discourse by asking and answering questions during the chat. He showed accountability to the community and to the mathematics as he encouraged the group to work together and solve the task.

5.2.3 16oncebabyjesus

16oncebabyjesus contributed to the accountable discourse in this session as he encouraged xLilPit21x to enter a solution and he verified Cammalleri's work once it was posted. He is accountable to the community, in that he sees his community as he and Cammalleri at this time. He used the word "we" on several occasions but it implied he and Cammalleri and not the group as a whole. On Line 155 he opens with, "we have an idea to so wel watch urs first." Again on Line 126 he states, "yeah, we tried that too," which gives the impression that he was discussing a solution strategy with Cammalleri in the classroom before they entered work into the VMT. After Cammalleri posts his list, 16oncebabyjesus states, "that 12 combos," as he is keeping track of Cammalleri's list.

5.2.4 Johnc250

Johnc250 did not join the group discussion past the initial 12 minutes of socializing. He stated that he was lost and agreed quickly when Cammalleri expressed apprehension and confusion. He did not enter any chat or whiteboard activity past agreeing that he was lost or drawing random shapes in the workspace. He was not accountable to the mathematical task or the community since he did not contribute to the

accountable discourse about the task at any time. He was the first to leave the session stating, "I have to go." He left several minutes before the session or actual class time was over.

5.2.5 Team Two

As the boys participate in the discourse, routines and rituals began to emerge (Stahl, 2009b). At first xLilPit21x was the leader and everyone was extending him a turn to show his work. It quickly changed when Cammalleri posted his work and positioned himself as the one who provided the solution. For three of the teammates, the session ended on a positive note, however, this session could be viewed as unconstructive for Johnc250. He was actively engaged until the team began to discuss the mathematical topic. His participation could be viewed as first time jitters or it could be predictive his involvement in the VMT project.

5.3 Towers 4-Tall October 7, 2008

The next task, Towers 4-Tall, was modified during our weekly meeting prior to the session. The original problem task suggests the students build as many towers possible when selecting from two colors using Unifix cubes, a manipulative of colored cubes that connect together. Our students would not be given Unifix cubes but would have to create their own representations in the workspace to solve the task. We reworded the problem and supplemented the question with a simple illustration of two sample towers.

To understand how the students interpreted the Towers problem, it is important to explore the details of the problem statement as it was presented to them. The following screenshot shows the problem task as the students viewed it.

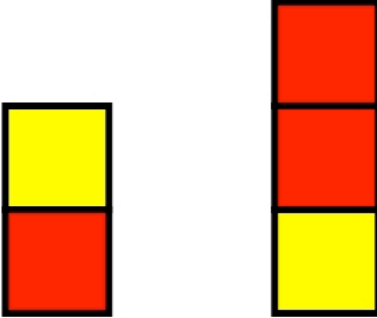
Material: +

Workspace Summary Topic Wiki

URL: <http://vmt.mathforum.org/VMTLobby/topics/PBTowers.html>

Towers Problem

Your team has an inexhaustible set of two colors of cubes. You will use these cubes to build towers. Pictured below are two types of towers: a tower 2-cubes tall and a tower 3-cubes tall.



1. Work together with your teammates to make as many different towers 4-cubes tall as possible when selecting from two colors. Find a way to convince each other that you have accounted for all possible towers 4-cubes tall.
2. How many different towers do you think are possible when selecting from two colors for each of the following situations: 5-cubes tall, 3-cubes tall and n-cubes tall? Work together to determine how many there are for each situation.
3. Work together to write a report of your findings for questions 1 and 2 above. It should include a justification that in each situation you have accounted for all possible towers. You want your report to convince others who are not in your team that your findings are correct. Enter your report into the Summary tab.

Figure 5-2. Screenshot of Towers Task

The problem task states that you have an “inexhaustible set of two colors of cubes.” We did not anticipate that the students would completely rely on the visual representation to guide them. This leaves them with three red cubes and two yellow cubes to build towers 3-tall, 4-tall, 5-tall and n-tall. Also, when relying on the visual image as a guide, the students thought that they needed to have both colors represented in every tower. This

eliminated the possibility of having towers with all one color as they constructed their combinations which is further examined in the next paragraph. Using this interpretation, there can only be six towers 3-tall, ten towers 4-tall, and ten towers 5-tall.

The students worked on Towers for two days, October 7 and October 13. 16oncebabyjesus was absent on October 7 and Cammalleri was absent on October 13, leaving three students to work on the task each time. During the two sessions the students did not solve the task in a conventional manner, however, as they interpreted the problem they solved two out of three sections of the problem correctly. The students did engage in some mathematical discourse, however, they did not answer one another's questions or build upon one another's ideas in a collaborative manner. Cammalleri kept an ongoing discussion with xLilPit21x but did not shift away from his own individual ideas leaving xLilPit21x confused since Cammalleri did not answer his questions. Johnc250 made several attempts to help on this task both in the chat and in the workspace, however the other students did not respond to his inscriptions. In this session Johnc250 struggles, not only with the mathematics, but with a sense of belonging to the group as his questions went unanswered and his participation dwindled until he left the session several minutes early. As defined earlier, identity can be viewed as a set of stories about a person (Boaler & Greeno, 2000). Their stories, or interactions with one another, were beginning to form a pattern in their social activity. These patterns were helping create or defeat a sense of belongingness to the group.

For this task, and some of the following sessions, a script was read before the students logged onto the VMT (Appendix page 152). Each script was unique and most often was designed to give advice for something that might have happened in the prior

session. The script for this session contained the following topics: location, thinking online, audience, the referencing tool, and socializing.

For location we reminded the students not to sit near one another in the classroom so that they would not be inclined to speak verbally but use the VMT for all communication.

The script was also about working online; we wanted to remind the students to put all their ideas in the chat or on the workspace since it was the only way for us to examine how they were learning and developing as mathematicians. (mathematics is about a set of practices and skills that help problem solvin....answering and asking question....)

We also talked to them about having two audiences to think about when they submitted their answers: their teammates were one audience, and their second audience could be the other teams. All information in the chat and in the workspace would be for their teammates and researchers only, while other teams could view their final answer posted in the summary tab. This detail we added because we knew in advance that we were going to have the groups' views each other's summary pages using the wiki tab as the project progressed.

During this script we also instructed them on how to use the referencing tool. The reference tool is an affordance of the program that allows the students to point to what they are referencing. It can be used to point to an utterance in the chat or a representation in the workspace. Most of the affordances the students' discovered and experimented with on their own during the practice and first sessions, however, the referencing tool is not a commonly known affordance and we thought they needed guidance on this unique tool.

Lastly, we wanted to encourage the students to socialize briefly in the beginning of the session. Socializing and becoming acquainted with one another would facilitate the group to becoming a collaborative community of learners. We suggested that they each ask one question about another teammate in the beginning of the session before they started working on the task. These items were read to both classes before they logged on to begin working on Towers.

The session begins with xLilPit21x and Johnc250 logging on approximately six minutes before Cammalleri. Without discussion both students began to draw squares on the workspace. When Cammalleri entered the room xLilpit21x stopped creating squares and exchanged a simple greeting with Cammalleri. None of three boys exchanged questions about one another as they were instructed to so in the script. Instead xLilPit21x began by erasing Johnc250's drawings and entering a partial solution to the workspace a few minutes after the initial greeting. He listed the six possible towers 4-tall when selecting from two reds and two yellows using the letters y and r as representations. At the exact same moment, Cammalleri also entered a partial solution to the workspace by entering a list of towers 3-tall using the words red and yellow. The two entries were entered at the exact same moment because they were entered on top of one another. A screenshot of their initial entries after Cammalleri moves them apart is shown below. On the left is a textbox with xLilPit21x's list of 4-tall towers and on the right is Cammalleri's list of 3-tall towers

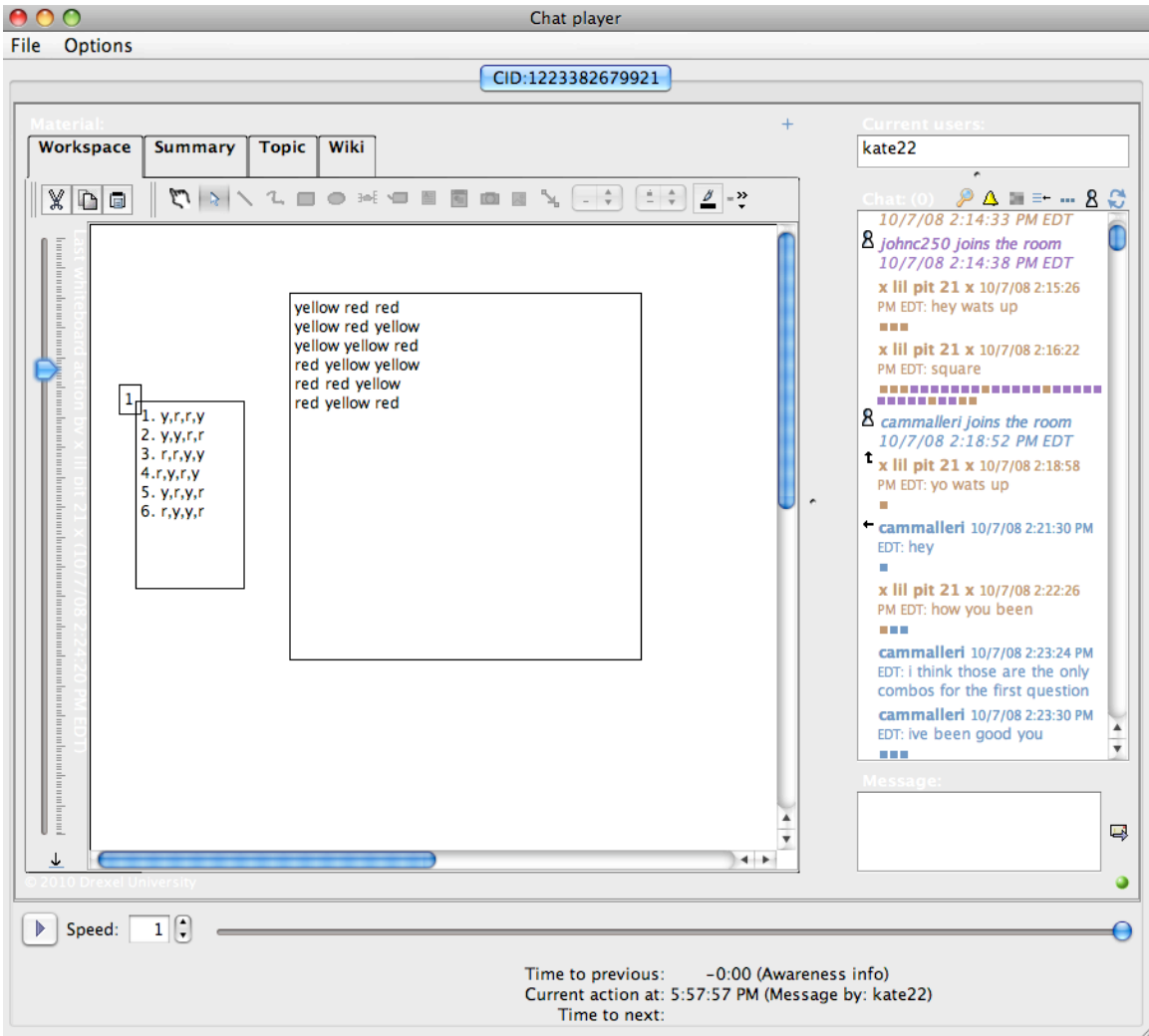


Figure 5-3. Screen shot of Towers

xLilPit21x's list of towers represent the six possible towers using two red and two yellow. His list is organized as he controlled for variable moving the two reds cubes in an organized manner. His first three entries display three possible ways to organize towers 4-tall with two red cubes place side by side, while his last three entries display three possible ways to organize towers with the red cubes placed apart from one another. Cammalleri's list of towers 3-tall represents the six possible towers using two red and a yellow or two yellow and a red.

At the top of the chat window in the Figure 3 above, there is a long line of squares. Each square represents one of the random shapes that were being created by Johnc250. The last square in the sequence is the square that represents xLilPit21x erasing the squares drawn by Johnc250. They are just erased and replaced by xLilPit21x's and Cammalleri's work. Figure 4 is a screenshot of of Johnc250's drawings before they were erased by xLilPit21x.

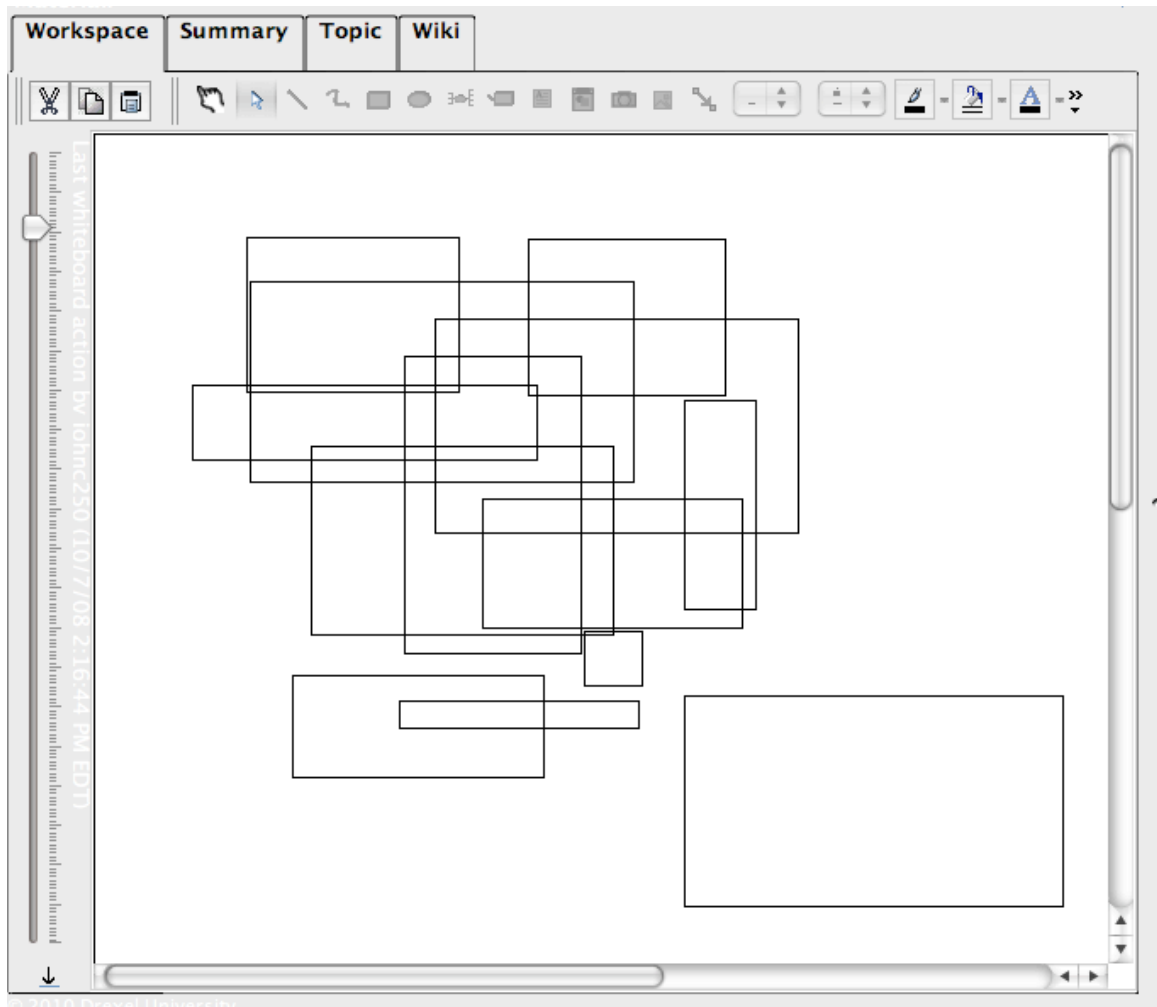


Figure 5-4. Screenshot of Johnc's drawings

After Johnc250's drawings were erased and the initial solutions were posted the following conversation in which Cammalleri questions what kinds of towers are acceptable occurred. xLilPit21x answers him by restating a portion of the problem task.

Turn	Time	Student	Type	Utterance
10	14:23:13	cammalleri	chat	I think those are the only combos for the first question
12	14:23:50	Xlilpit21x	chat	Yea I think too
15	14:24:28	cammalleri	chat	Wait are you only allowed to have two colors in one combo
16	14:24:53	xLilPit21x	chat	no
17	14:25:08	xLilPit21x	chat	They want a tower that's 4 cubes tall with two color

On Line 10 Cammalleri states he thinks that he thinks he has found all the combinations for the towers. He made a similar statement during the first session when solving the Cups, Bowls, and Plates problem. To recap in the first session, Cammalleri posted his list of possible combinations for Cups, Bowls, and Plates. He did not post until he saw xLilPit21x's initial list, but when he did he stated, "those are all the combos." He takes the same stance here by announcing, "I think those are the only combos for the first question." He is sure of himself and does not have the cautious attitude he had in the first session as he did not request that anyone post their work first nor does he ask if the others think his solution is correct. It might be this show of empowerment that keeps xLilPit21x from disagreeing with Cammalleri's solutions. There also seems to be a moment of disconnect between the two students. Cammalleri is questioning the formation of possible towers. xLilPit21x answers him yet neither have commented on one another's list. Cammalleri had built towers 3-tall and xLilPit21x has built towers 4-tall.

In the first vignette quoted above, Cammalleri questioned if they had to have two colors in each tower and to this xLilPit21x replied, “no.” This question and response discussion did not encourage Cammalleri to modify his original list. Given xLilPit21x’s response, he could have added a 3-tall tower made up of three reds. Cammalleri might have questioned his own interpretation, but he did not acknowledge xLilPit21x’s answer and continued forward when he stated in the chat, “yeah I think that’s it.” This statement might have confused xLilPit21x because following Cammalleri’s positive statement, he posted, “I really lost.” An interaction pattern between xLilPit21x and Cammalleri is forming. Cammalleri is not being accountable to the collaborative process but rather is working individually on the mathematics. Cammalleri takes the position as the expositor as he uses xLilPit21x as an audience or as a sounding board rather than working with him to co-construct the solution. xLilPit21x trusts Cammalleri’s mathematical decisions more than he trusts his own as he leaves his list of towers 4-tall in the workspace and uses Cammalleri’s solution when they write up the summary. As the two boys continue to create lists of possible towers, xLilPit21x questions whether Cammalleri’s version of the problem statement will continue to work when they move to solving n -tall towers. It is possible that he sees this interpretation as amiss since it is not possible to create a formula for towers n -tall if you only have five possible towers. In the conversation below, xLilPit21x clearly states that he is confused about the n -tall towers. Cammalleri’s response shows his strength and belief in himself even though he had not considered how to solve the n -tall issue.

Turn	Time	Student	Type	Utterance
24	14:31:58	x lil pit 21 x	chat	2. is asking about 5 and 3 cubes tall but then they throw in n-cubes tall
25	14:32:47	cammalleri	chat	i know how

26	14:32:48	cammalleri	chat	watch
27	14:33:23	x lil pit 21 x	chat	ok
28	14:34:07	cammalleri	chat	so theres 6 for 3 cubs
29	14:35:21	x lil pit 21 x	chat	write it on the workspace
30	14:35:31	cammalleri	chat	wait for 1 theres more
31	14:38:16	x lil pit 21 x	chat	i dont kno how to do the c5cubes tall one
32	14:38:34	cammalleri	chat	i think thats the correct answer for #1
33	14:39:15	johnc250	chat	wich number are we doing?

Cammalleri is sure of his problem solving approach and continues to work individually. Although he might be conversing with xLilPit21x, he is not directly answering him. When he answers, “I know how, watch,” he is clearly taking the role of the expositor and requesting they act as his audience. He is empowered as he guides Team Two’s discussion.

At the end of the previous excerpt, on Line 33, Johnc250 asks which problem are they working on. At this moment the chats were going back and forth at an even pace and both Cammalleri and xLilPit21x were responding to one another immediately. Johnc250’s question was ignored by both teammates. At this point in the session, Johnc250 created his own text box and began to list towers 4-tall. A few minutes later, xLilPit21x moved to the summary page the solutions that Cammalleri and he were currently working on, leaving Johnc250’s work in the workspace. Four minutes later, on Line 46, he posted the following, “im so lost I just woke up.” Cammalleri responded to him on line 47 by saying, “im sry to hear that” and xLilPit21x entered on line 48, “hahahaha.” Following this response, Johnc250 did not enter more to the session and logged off five minutes early without saying goodbye

As Cammalleri and xLilPit21x continued to discuss the notion of n -cubes, Johnc250 logged off and left the session. On this day, he did not have a strong

connection to the problem-solving session. The excerpt below begins with Johnc250 leaving the room without notice while the other two students continue to work.

Turn	Time	Student	Type	Utterance
53	14:49:53	johnc250	leaves	leaves the room
54	14:50:32	x lil pit 21 x	chat	how do you do the n-cubes
55	14:50:52	cammalleri	chat	5 is the highest amount
56	14:50:58	cammalleri	chat	theres only 3 red and 2 yellow
57	14:51:13	x lil pit 21 x	chat	thats foor n cubes
58	14:51:20	cammalleri	chat	i tink
	14:51:23	cammalleri		[cammalleri has fully erased the chat message]
59	14:51:29	cammalleri	chat	#1 #2 are done
60	14:51:46	x lil pit 21 x	chat	yea
61	14:52:05	cammalleri	chat	ok
62	14:52:14	cammalleri	chat	we will do number 3 on monday

xLilPit21x questions this solution again and clearly states his concerns on how they will solve towers n -tall when only dealing with five available cubes. Cammalleri's is empowered as illustrated by his responses. He is not concerned about his team members concerns. During the session, Cammalleri goes on to create his own list of towers 4-tall and xLilPit21x's original work is not used. xLilPit21x does not seem to be convinced but agrees and does not bring up this issue again.

5.3.1 Cammalleri

Cammalleri's solution was used in the summary tab but he did collaborate with his teammates to build the solution.. Rather he is leaning towards the role of expositor keeping xLilPit21x involved as an audience or sounding board. He did not directly answer xLilPit21x's questions nor did he use the work submitted by xLilPit21x. The following table lists several of his comments that are beginning to show a trend to his identity. He begins most of his statements with "I" and his comments and questions are

more directed to himself as he works through the problem alone but uses the chat room as his audience.

*Table 5-1
Cammalleri comments from Towers*

Turn	Date	Student	Utterance
10	10/07/2008	cammalleri	i think those are the only combos for the first question
15	10/07/2008	cammalleri	wait are you only allowed to have two colors in one combo
19	10/07/2008	cammalleri	yeah i think thats it
25	10/07/2008	cammalleri	I know how
26	10/07/2008	cammalleri	watch
32	10/07/2008	cammalleri	I think that's the answers for #1
35	10/07/2008	cammalleri	look in the summary thats #1 and # 2
38	10/07/2008	cammalleri	Idk for 5 cubes
39	10/07/2008	cammalleri	Wait yes I do
40	10/07/2008	cammalleri	Hold on
49	10/07/2008	cammalleri	Make sure there isn't any more 5 cubes
62	10/07/2008	cammalleri	We will do number 3 on monday

He was not cautious at any time as he was in the first session solving Cups, Bowls, and Plates, but rather empowered and confident that he knew what he was doing. Although engaged in the chat continually, he did not contribute to the mathematical discussion. This behavior is interpreted that in this chat, Cammalleri was not accountable to the community.

5.3.2 xLilPit21x

xLilPit21x might have questioned the task throughout the session but did not have the mathematical courage to interrogate Cammalleri's work. He aligned himself with Cammalleri during the problem solving process and did not communicate with his co-located classmate, Johnc250 in the VMT chat log. In fact, he erased Johnc250's work without mention in the chat and moved all of the solutions from the workspace to the summary page after Johnc250 entered work to the workspace. The following table lists the comments made by xLilPit21x that show his accountability to the mathematics as he continues to question their solution strategy.

Table 5-2
xLilPit21x's comments from Towers

Turn	Date	Student	Utterance
20	10/07/2008	x lil pit 21 x	im really lost
24	10/07/2008	x lil pit 21 x	2. is asking about 5 and 3 cubes tall but then they throw in n-cubes tall
31	10/07/2008	x lil pit 21 x	I don't kno how to do the c5cubes tall one
54	10/07/2008	x lil pit 21 x	How do you do the n-cubes

xLilPit21x tried to make sense of this task and build upon Cammalleri's solution, however, without a reciprocated discussion, he was left confused. He was accountable to the mathematics as he abided with Cammalleri's solution. His accountability to the community was only to Cammalleri as he ignored and erased most of Johnc250's contributions.

5.3.3 Johnc250

The extent of Johnc250's involvement in this session was a turning point to his collaborative relationship to the community. He did not respond to Cammalleri's and xLilPit21x's initial greeting in the beginning of the session as he occupied himself with creating different sized boxes. When he asked where they were in the problem-solving process, his question went unanswered and when he made a comment about just waking up, they ridiculed him. In my research notes, I wrote down that Johnc250 put his head down twice during this problem and I urged him to wake up and do his best to work on the problem. Johnc250 only entered three chat statements during this session, however, he did enter a partial list of towers 4-tall onto the workspace attempting to help in the process, however, his efforts were not noticed. It is possible that Cammalleri's strong personality or the unequal content knowledge between the teammates had created a struggle for Johnc250 and thus inhibited his participation in the group discussion.

5.3.4 Team Two

The session of Towers ended with three text boxes created by Cammalleri listing six towers 3-tall, ten towers 4-tall, and nine towers 5-tall. Their interpretation of only using five cubes should have yielded them six towers 3-tall, ten towers 4-tall and ten towers 5-tall. Additionally, they were unable to understand how to answer the question of towers n -tall. Cammalleri and xLilPit21x worked as partners to solve what they could of this task. Johnc250 was not included in their problem solving discussions and at times his work was not responded to when he entered a partial solution or asked a question. In fact, within seconds of him entering his text box, both Cammalleri and xLilPit21x moved their

work to the solution tab and ignored his entry. He logged off without saying good-bye several minutes before the session ended.

5.4 Towers October 13, 2008

The students were given more time to work on the Towers problem on October 13, 2008, six days after their initial effort. During weekly VMT research meeting dated October 10, we discussed their interpretation of the task (Appendix page 149). We decided it was important to our research to observe how the students worked around the problem and solved it the way they interpreted it. We decided not to intervene.

For the third session, Cammalleri was not present whereas 16oncebabyjesus was. The three students in attendance; xLilPit21x, Johnc250, and 16oncebabyjesus did not work further on the mathematics. Instead they socialized with one another and moved text boxes around in the summary tab. At one point xLilPit21x does say in the chat we have to find the formula for n -tall towers, however, the discussion does not develop further. There is a discussion in the beginning of the session about Cammalleri's absence. Cammalleri's absence is noticed and discussed but 16oncebabyjesus' absence in the last session was not commented on. It evidences that Cammalleri's presence is deemed important to the community. There are several instances in the session where Johnc250 is ridiculed by xLilPit21x and 16oncebabyjesus thus further inhibiting his participation.

In the first excerpt, xLilPit21x, Johnc250, and 16oncebabyjesus are logging into the VMT and greeting one another. It should be noted also before reading the next entry that Johnc250 and Cammalleri's first names were both John and their last names both began with a C. Johnc250's actual spelling for his name was Jhon but he preferred to use

the American spelling of John when he created his handle of Johnc250. As they logged on and began to socialize, xLilPit21x is asking 16oncebabyjesus about Cammalleri. xLilPit21x and Cammalleri have worked closely together for the last two sessions, and xLilPit21x is anticipating his arrival. In the chat, Johnc250 is attempting to be a part of this conversation but to some extent is affronted by xLilPit21x and 16oncebabyjesus. The following chat happens in the first three minutes. Since the students are returning to the session for a second time, line 76 marks the beginning entry.

Turn	Time	Student	Type	Utterance
78	13:20:47	x lil pit 21 x	chat	HEY'
79	13:22:23	16oncebabyjesus	chat	hey
80	13:22:34	x lil pit 21 x	chat	ok
	13:22:39	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
81	13:22:50	x lil pit 21 x	chat	is the other kid here today
82	13:22:54	johnc250	chat	no
84	13:23:49	16oncebabyjesus	chat	who john
85	13:23:54	x lil pit 21 x	chat	yea
86	13:23:55	johnc250	chat	im here
87	13:24:46	16oncebabyjesus	chat	nah he mean da kid frm my skool
89	13:24:56	16oncebabyjesus	chat	idk i think he here
90	13:25:12	x lil pit 21 x	chat	oo tell him to get on
91	13:25:23	johnc250	chat	brb ima nap for a lil
92	13:25:38	x lil pit 21 x	chat	iight gte out
93	13:25:43	x lil pit 21 x	chat	*get
94	13:25:54	johnc250	chat	out of where?
95	13:26:02	x lil pit 21 x	chat	HERE
96	13:26:07	johnc250	chat	why?
97	13:26:21	x lil pit 21 x	chat	cuz i said sooo
98	13:26:26	16oncebabyjesus	chat	lol
	13:26:44	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
99	13:26:47	16oncebabyjesus	chat	hahahahaha

xLilPit21x, who is looking for Cammalleri asks, “is the other kid here today.” To which 16oncebabyjesus responds, “who john.” That is when Johnc250 responds that he is here. Johnc250 knows which “John” xLilPit21x is referencing because he is co-located with

xLilPit21x in the classroom. When they both answer him that they are not interested in his presence but in the “other Johns,” presence Johnc250 states that he is going to take a nap. Their reaction was quite abrupt as xLilPit21x said, “iight gte out.” Johnc250 who initiated the notion of leaving for a nap questions this directive and asks, “Why?” To which xLilPit21x says, “I said so” and 16oncebabyjesus enters, “hahaha.” Johnc250 did not enter another message for the next thirteen minutes.

In the next excerpt, Johnc250 attempts to re-enter the conversation. In my research notes, I did note that he logged off his computer and selected a different laptop from the shelf and re-logged back onto the VMT which would explain his absence in the chat. When he does re-enter the conversation he tries to contribute to some of the work on the workspace and it is erased by xLilPit21x. In the following quote, Johnc250 tells his teammates he is back and excuses his absence.

Turn	Time	Student	Type	Utterance
115	13:39:36	johnc250	chat	im back
116	13:39:54	16oncebabyjesus	chat	oo wasnt here
117	13:40:03	16oncebabyjesus	chat	how was ur nap lol
118	13:40:30	johnc250	chat	i didnt take a nap lol my internet wanst working so i had to get a different computer
119	13:40:38	16oncebabyjesus	chat	oo lol
120	13:40:51	johnc250	chat	i agree
	13:40:53	johnc250	wb	[johnc250 moved some object/s]
121	13:41:29	johnc250	chat	why pedro why?
122	13:41:42	x lil pit 21 x	chat	cuz we had the answer already'

At the time mark 13:40:53, Johnc250 rearranges some of the answers in the summary. Those changes were immediately erased by xLilPit21x and moved back to where xLilPit21x had originally had them. On line 121 when Johnc250 states, “why pedro why,” he is referring to the subsequent move made by xLilPit21x that undoes Johnc250’s

move and returns it to its original place. When Johnc250 tried to get involved his actions were deterred by xLilPit21x.

Just as classroom discussions motivate students and give them the opportunity to exercise agency over their own knowledge, the opposite situation can occur if participation is deemed unwelcome. As Johnc250's attempts to co-produce work are ignored and even thwarted, it is possible that he does not feel welcomed into this community.

In the next excerpt, a quick comment made by xLilPit21x might explain the feelings that he had for Johnc250. As their teacher, I can say they got along very well in the classroom, however, this comment in the chat was surprising. It occurred at the end of the session when the boys were just chatting and waiting to log off. 16oncebabyjesus asks xLilPit21x if he likes John. He is referring to his classmate John Cammalleri, however, this starts a conversation is negative towards Johnc250 and ends with a definitive insult made by xLilPit21x towards his classmate Johnc250.

Turn	Time	Student	Type	Utterance
133	13:50:34	16oncebabyjesus	chat	do u lke john
134	13:50:48	johnc250	chat	what?
135	13:50:55	16oncebabyjesus	chat	not u lol
136	13:51:02	johnc250	chat	oh haha
	13:51:31	johnc250		[johnc250 has fully erased the chat message]
137	13:51:39	johnc250	chat	predo what do we now?.
138	13:52:56	16oncebabyjesus	chat	chill lol
139	13:53:26	x lil pit 21 x	chat	hahaha
140	13:53:34	x lil pit 21 x	chat	the other john is cool
	13:53:40	johnc250		[johnc250 has fully erased the chat message]
141	13:53:42	x lil pit 21 x	chat	he works unlike the one at my school
142	13:53:46	johnc250	chat	john c yeah i know

Although the conversation begins with 16oncebabyjesus asking xLilPit21x if he liked Cammalleri, it ends with xLilPit21x making a comment about how Johnc250 does not “work” like the others. In between, Johnc250 tried to ignore this conversation and asks xLilPit21x what they should be doing now. Normally that would be a valid question, however, the session was over and the students were about to shut down their computers. On Line 142 he goes along with the insult and responds as if they are talking about Cammalleri and not himself. A few minutes later he logged off with saying good-bye. He was the first to leave the room again on this session.

5.4.1 xLilPit21x

When they returned to the task for the second time, xLilPit21x immediately looked for Cammalleri. He did not change the answers or return to the task to re-think their solution. He went along with Cammalleri in the first session and did not attempt to make changes without Cammalleri presence in the second session. At one point in the session, when he and 16oncebabyjesus were moving items around in the summary tab, he said, “we just have to make our answer convincing so when other people look at it they can know why that’s the answer not anything else.” This statement is not a response to anyone, he is just making a statement. It might be that he was questioning their answers but he does not change them. He has positioned himself as a follower, taking his lead from Cammalleri, and leaves Cammalleri’s work untouched from the previous session. xLilPit21x, who was strong in the beginning, has been destabilized by Cammalleri’s emboldened stance. He would prefer to assist Cammalleri rather than to create his own ideas.

5.4.2 16oncebabyjesus

16oncebabyjesus' contribution to the second session was to engage in a conversation with xLilPit21x, move items around, and ridicule Johnc250. He, too, seemed to be lost without Cammalleri' presence. 16oncebabyjesus continues to have one motive, and that is to encourage his teammate Cammalleri. Without his presence in the chat, he does not engage beyond a social conversation.

5.4.3 Johnc250

Johnc250 is struggling to become a member of this collaborative community. He asked for guidance and entered work during the first session yet both attempts were ignored. During the second session he was affronted by xLilPit21x when he said that Johnc250 did not work like the "other" John. The members of Team Two seem to be thrusting his position in the community upon him. When he tries to participate they do not welcome his efforts or answer his questions. Cammalleri and xLilPit21x get along well with one another and do not engage with Johnc250. His lack on contribution may be a sign of unequal content knowledge between him and his teammates which is creating a struggle and inhibiting his sense of belongingness to the group.

5.4.4 Team Two

In the second session of towers, the students did not further the mathematical progress made in the first session. Instead, they moved items around, socialized and ended up drawing their names in the workspace by creating lines. xLilPit21x did enter one addition to the summary page. It was a text box describing the number of towers

they found. He stated that they found six towers 3-tall, ten towers 4-tall and nine towers 5-tall without any mathematical justification for how the solution was created. As the students develop their own practice, expectations of one another, and most importantly, how to work together as a community of practice, these practices are contributing to their individual identities and the normative identity of the collaborative group. In the second session of Towers 4-tall: xLilPit21x, 16oncebabyjesus, and Johnc250 did not progress the solution further.

5.5 Pizzas with Halves October 23, 2008

The next task we decided to assign to our students was Pizza with Halves (Appendix page 150). We thought it was a good choice for the next task since it did not require them to list many combinations. The target answer for Pizza with Halves is ten pizza combinations. With a smaller list to work with, we thought it would give them opportunity to practice organized list making and accountable talk. We were hoping that by the time we assigned the task of Pizza with Four Toppings, which is isomorphic to Towers 4-Tall selecting from two colors, the students would have incorporated heuristics and accountable talk that would aid them in making the connection between the two tasks.

The students worked on Pizza with Halves for two sessions, October 23 and October 29, 2008. Most of the mathematical problem solving was accomplished in the first session along with some interesting events that revealed how the students were continuing to develop as a learning community. We did not have a script to present to the students before the session began for either the first or second session of Pizza with

Halves. We only incorporated scripts during the research when we felt the students needed guidance. For the first session all four boys were present and actively engaged in the problem solving process. In the second session, Cammalleri was not present and the three remaining students did not move forward mathematically from the place they left off in the first session, in fact, very little was accomplished.

During the first session, there was an active mathematical discourse between the teammates as to whose solution was correct. Cammalleri dominated the group discussion but did not guide the group to the correct solution as he changed his interpretation of the problem task several times during the session. xLilPit21x offered several suggestions but continued to allow his work to be a second option to Cammalleri's multiple and changing solutions. 16oncebabyjesus who always plays the uncritical enthusiast to Cammalleri, accepted a solution from xLilPit21x and Johnc250 but does not take a firm stand. Johnc250, who has had some difficulty with his position in the group during the first two tasks, mathematically and socially thrusts himself into the argument and contributes a solution. Johnc250 works very hard to justify his solution correct, however, instead of using a convincing argument in the chat he enters his argument into the workspace using iconic representations. Towards the end of the first session, 16oncebabyjesus and xLilPit21x do concur with Johnc250's argument, however Cammalleri could not be persuaded to change his answer.

The session begins with the xLilPit21x and Johnc250 logging on a few minutes before Cammalleri and 16oncebabyjesus. xLilPit21x immediately begins to draw a pizza with four lines drawn through it creating eight slices. Johnc250 enters eight single entry messages of "hi," which can be considered as unconstructive behavior since it

gives no value to the discussion. When Cammalleri and 16oncebabyjesus enter the room there is the standard greeting and some joking between each of them and xLilPit21x but Johnc250's salutations are not returned by any of his teammates. As the boys are exchanging their initial greetings, xLilPit21x erased his drawn pizza and listed four possible pizza combinations in a text box which he colors bright red. This is first time anyone has colored their text box using the paint brush affordance.. As xLilPit21x continued to chat about a college visit, he moved his red text box to the summary tab using the cut and paste affordance. Cammalleri also continued to discuss the college visit, however, he followed xLilPit21x to the summary tab and expanded xLilPit21x's text box. He enlarged the red text box and viewed its contents but did not enter chat related to this move. xLilPit21x undoes Cammalleri's expansion and says, "lets do the work." Less than fifteen seconds later, Cammalleri responds, "I did the work." After he had viewed xLilPit21x's text box, he returned to the workspace and entered a list of six pizza combinations. He then puts a second copy on the summary page next to xLilPit21x's work. What is interesting about this segment is that xLilPit21x and Cammalleri continued to have a social conversation with one another as they solved the problem individually. The following screen shot shows the lists in the summary tab created by xLilPit21x, which is red, and Cammalleri's which is white.

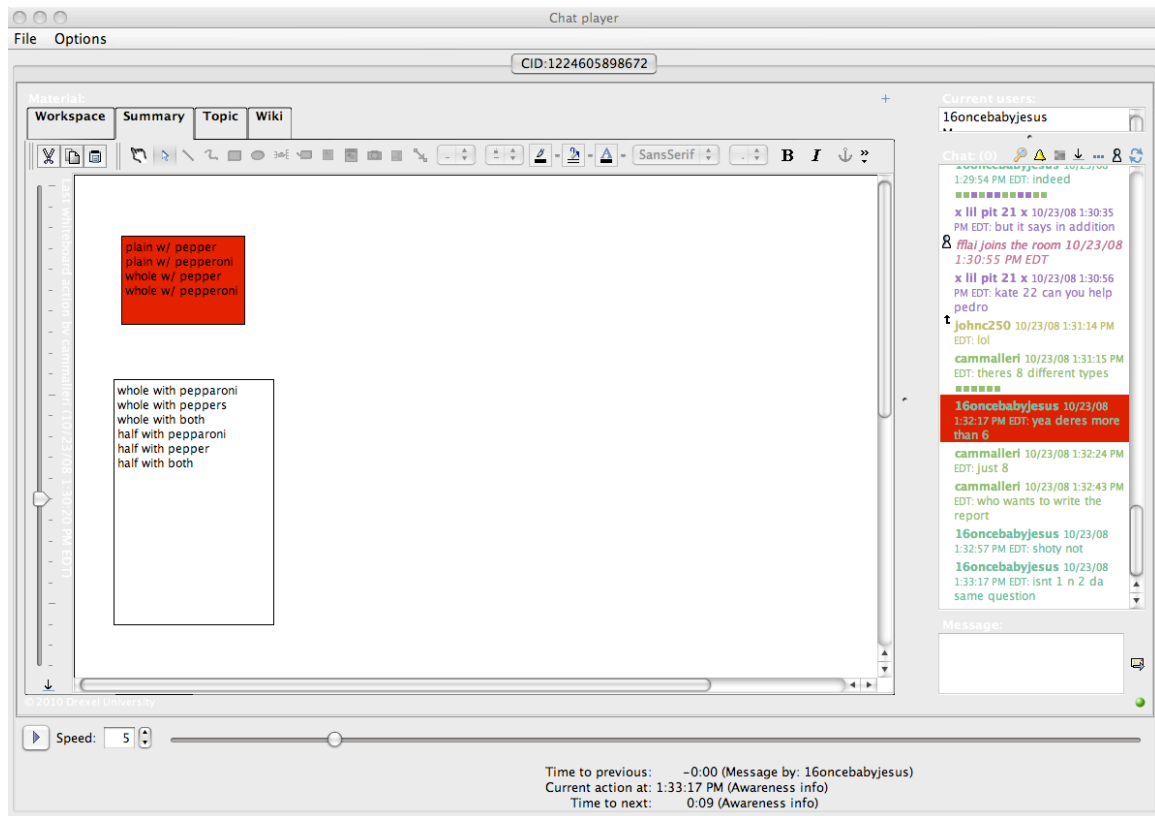


Figure 5-5. Screen of Pizza with Halves initial solution

The figure above shows to the two initial entries made by xLilPit21x and Cammalleri. xLilPit21x’s red text box contains four possible pizzas, however, he has misinterpreted the problem task at this point since, “plain w/ pepper,” and a, “whole w/ pepper,” would be considered to be the same pizza. Cammalleri’s list is more promising since he has a, “whole with pepperoni,” and a, “half with pepperoni,” however, soon it will be realized that Cammalleri believes it is possible to order a half of a pizza and does not think all the pizzas are sold as whole.

The following excerpt taken from the chat begins with xLilPit21x’s encouraging statement of, “lets do the work.” As he has done in previous sessions, he encourages the team to work collaboratively. When Cammalleri responds with, “I did the work,” it was

very similar to the last two sessions when he stated that he had found “all the combos.” As this conversation occurred Cammalleri entered his text box shown above with six possible pizzas. He does not reference the fact that he viewed xLilPit21x’s work. He begins his statement with “I” and makes a declarative statement that the task has been completed by him. In the following vignette, all four of the boys become involved in the discussion as to whether there are six or eight possible pizza combinations.

Turn	Time	Student	Type	Utterance
46	13:28:45	x lil pit 21 x	chat	lets do the work
48	13:28:59	cammalleri	chat	i did the work
49	13:29:47	x lil pit 21 x	chat	theres only 6 different types
50	13:29:54	16oncebabyjesus	chat	indeed
51	13:30:35	x lil pit 21 x	chat	but it says in addition
54	13:31:14	johnc250	chat	lol
55	13:31:15	cammalleri	chat	theres 8 different types
56	13:32:17	16oncebabyjesus	chat	yea deres more than 6
57	13:32:24	cammalleri	chat	just 8
58	13:32:43	cammalleri	chat	who wants to write the report

The chat above begins with xLilPit21x encouraging the group to work collaboratively. The response from Cammalleri is he has solved the task already. xLilPit21x responds with, “theres only 6 different types.” At this point in the session there are two lists on the workspace; xLilPit21x’s list has four pizza combinations and Cammalleri’s list has six pizza combination. 16oncebabyjesus, in a typical fashion, agrees with the list created by Cammalleri that has six possible pizzas and he says, “indeed.” xLilPit21x furthers his inquisition by saying, “but it says in addition.” xLilPit21x is referring to the problem statement and is referring to the words, “in addition to” which is leading xLilPit21x to suggest that a plain pizza is not counted. Johnc250 responds with a “lol” which may not seem important except that it does show that he is following along with the chat and he is

pleased that xLilPit21x is finding error in Cammalleri's answer. Cammalleri does not respond to xLilPit21x's question and enters, "theres 8 different types." He is not acting accountable to the group by ignoring xLilPit21x's question. He then states that there are eight pizzas. He adds a half plain pizza and a whole plain pizza to his list, still ignoring the question of "in addition to" which was posted by xLilPit21x. 16oncebabyjesus quickly agrees by stating, "yea, deres more than 6." 16oncebabyjesus is completely accountable to Cammalleri. If Cammalleri says there are six pizzas, 16oncebabyjesus agrees. In the next line Cammalleri changes his answer to eight pizzas and 16oncebabyjesus quickly agrees. He stays involved in the discussion but keeps his allegiance is to Cammalleri. At this point he adds a whole plain and a half plain to his text box. Cammalleri then states the directive, "who wants to write the report." The statement is bold and empowered since his teammates are still asking questions and the team has not agreed on the solution.

Cammalleri is not showing accountability to the community because he is not concerned with their questions nor is he interested in expanding on their ideas. He now wants to delegate the task of writing his answer in the solution tab before the group has agreed on his solution.

In the next excerpt 16oncebabyjesus questions whether number one and number two of the task are the same. In the problem statement, number one is asking how many pizzas, while number two is asking them to create a list. Johnc250 quickly types a response, then erases it and types another. At this point, Johnc250's input is minimal but it can be noted that he is following along with the chat. Cammalleri does not respond to their questions and directs xLilPit21x and Johnc250 to write the report because he and

16oncebabyjesus did all the work. In the following excerpt he refers to the xLilPit21 and Johnc250 as “boys” not once but twice. This may not be an insult but it certainly makes his directive sound authoritative.

Turn	Time	Student	Type	Utterance
60	13:33:17	16oncebabyjesus	chat	isnt 1 n 2 da same question
	13:33:27	johnc250		[johnc250 has fully erased the chat message]
61	13:33:36	johnc250	chat	that's what i thought
62	13:33:59	cammalleri	chat	dont touch my work boys
63	13:34:09	x lil pit 21 x	chat	i wont
64	13:35:39	cammalleri	chat	lbhs boys..ill let you write the report since me and 16oncebabyjesus did the 8 choices

First he says, “don’t touch my work boys,” showing his bravado that his work should not be moved or changed. He follows this comment with the directive that xLilPit21x or Johnc250 should write the summary since he and 16oncebabyjesus developed the eight choices.

At this point in the session there is a turning point. The conversation could be described as lively for several reasons. The chat turns were extremely fast and on several occasions, tactics were used that could be described as chat yelling. On several occasions they entered statements into the chat one word at a time. For example, on one occasion Cammalleri said, “ok, listen up,” but instead of entering that with one entry, he typed, “ok,” then hit the enter key and typed, “listen,” and then, “up,” with each word a single entry. This type of action signified their excitement and at times their frustration. The final phase of the disagreement leads Johnc250 to draw all of his pizza combinations on the workspace rather than engage in a discussion in the chat. The dispute begins with Johnc250 taking a stand against Cammalleri’s list of eight pizzas.

Johnc250 makes the opposing statement that there is only six possible pizzas. In the next excerpt, a dispute begins between Johnc250 and Cammalleri with xLilPit21x supporting Johnc250 and 16oncebabyjesus supporting Cammalleri. On Line 69, 16oncebabyjesus even insults Johnc250 by calling him the “fake John.”

Turn	Time	Student	Type	Utterance
65	13:36:07	johnc250	chat	there's only 6
66	13:36:16	cammalleri	chat	no theres 8
67	13:36:20	cammalleri	chat	look at mine
68	13:36:21	16oncebabyjesus	chat	8 son
69	13:36:34	16oncebabyjesus	chat	take dat fake john
70	13:36:36	johnc250	chat	how can you get a half plain?
71	13:36:47	cammalleri	chat	read the topic
72	13:36:51	cammalleri	chat	it says you can get half
73	13:37:18	johnc250	chat	yeah so you'll be getting only one half made not the other then
74	13:37:26	16oncebabyjesus	chat	true
75	13:37:50	cammalleri	chat	nooo you dont understad

16oncebabyjesus has always supported Cammalleri until Line 74 when he agrees with Johnc250's comment on Line 73. Johnc250's behavior changes as he takes responsibility for the mathematics and argues for what he believes. By noticing the time stamps, it is clear that this conversation is happening very fast. It is Cammalleri's claim that they can order a “half plain” to which Johnc250 cannot except because he does not agree with a half of a pizza as an option.

In next excerpt the final misunderstanding is cleared when Cammalleri describes a “half plain” as four slices not eight. Cammalleri dominates the conversation and makes directives such as, “read the topic,” or “you don't understand.” The dispute goes on a long time before they convince Cammalleri that he cannot have a half of a pizza.

Turn	Time	Student	Type	Utterance
101	13:43:36	cammalleri	chat	read the topic
102	13:43:39	cammalleri	chat	it says you can
103	13:44:27	x lil pit 21 x	chat	cuz u already have half with peppers or pepperoni or both but you cant have a half with cheese when the whole pie has cheese
104	13:44:45	johnc250	chat	exactly
105	13:45:09	16oncebabyjesus	chat	oo aite i see
106	13:45:38	x lil pit 21 x	chat	yea
107	13:45:45	cammalleri	chat	theres 6 then..i read the problem wrong
108	13:45:55	johnc250	chat	told you
109	13:46:11	x lil pit 21 x	chat	theres only 6

On Line 105 when Cammalleri finally sees the argument for six pizzas, he concedes and give the excuse that he read the problem wrong. He concedes that he interpreted the problem differently. Johnc250 quickly responds with, “told you.” It is possible that he felt empowered because he understood the problem task and was able to convince the others that he was correct.

The quandary of number of pizzas does not end there, in fact, it was only the beginning. The following excerpt begins with Cammalleri excusing his mistake, then correcting xLilPit21x summary answer. Notice how Cammalleri uses several chats to make his point in the following excerpt.

Turn	Time	Student	Type	Utterance
110	13:47:19	cammalleri	chat	easy there..i read the problem wrong
111	13:47:51	x lil pit 21 x	chat	its done. we just have to do the summary
112	13:48:13	16oncebabyjesus	chat	it comes with cheese and sauce its a pizza
113	13:48:15	cammalleri	chat	you still wrote it wrong
114	13:48:20	cammalleri	chat	its whole pain
115	13:48:26	cammalleri	chat	whole peppers
116	13:48:35	cammalleri	chat	whole pepparoni
117	13:48:49	cammalleri	chat	half pepper half pepperoni
118	13:51:28	cammalleri	chat	now look

119 13:51:32 cammalleri chat thats right

Although he is just entering his list of pizzas, what is unique in this vignette is that he is stopping to enter each item separately. The time stamps illustrate a very quick set of entries. He begins with, “you still wrote it wrong,” at 13:48:15 and follows that with several entries that are only seconds apart. He finishes with, “now look,” at 13:51:28 and four seconds later, about the time it would take to type this response, he enters, “that’s right,” at 13:51:32.

At this point in my research notes, the classroom was quite excited. Johnc250 and xLilPit21x were yelling at their computer screens. Two other students from different teams entered Team Two’s room to see what all the excitement was about.

In the VMT room, Johnc250 had begun to draw the pizzas using the affordances of the workspace. He started by creating ellipses’ and then adding little lines in their interiors to signify pizza toppings. He entered 130 whiteboard entries over the course of ten minutes to complete his iconic representations. The following excerpt occurred in the chat as the other three students watched Johnc250 draw the pizzas. It should be noted that Johnc250 did not discuss his motives to the group. He just began drawing pizzas.

Turn	Time	Student	Type	Utterance
121	13:52:29	cammalleri	chat	you dont need to do that
122	13:52:52	cammalleri	chat	i have it all done in the summary
123	13:52:59	16oncebabyjesus	chat	are u drwing the pepronis lol
124	13:53:24	16oncebabyjesus	chat	u dnt have to do all dat
125	13:55:23	cammalleri	chat	bro i have all this done haha
126	13:55:31	x lil pit 21 x	chat	yea he doesnt but he's going to show how you get 7 combination
127	13:55:55	cammalleri	chat	pedro theres only 6
129	13:56:09	16oncebabyjesus	chat	6
130	13:58:04	16oncebabyjesus	chat	pedro dta only six brother

On Line 126, xLilPit21x defends Johnc250's motives and states that Johnc250 is going to show the team that there are seven possible pizzas. In past sessions Johnc250 has contributed to the chat sparingly. On occasion there have been negative comments made towards him. At this junction, he obviously feels he has a valid argument to make, however, he does not choose the chat log but must feel more comfortable drawing his argument on the workspace. As they watch what Johnc250 is creating, Cammalleri says on Line 122, "I have it all done in the summary," declaring that the correct answer has been selected and placed in the summary thereby calling Johnc250's actions ineffective. The fact that Johnc250 will add another pizza to the list sets off further discussion as xLilPit21x and Cammalleri begin to dispute this addition.

One more detail I would like to point out from the above chat is on Line 125 and Line 130 both Cammalleri and 16oncebabyjesus refer to xLilPit21x as "bro" and "brother," respectively. The manner in which they speak to xLilPit21x is friendlier and more like that of a teammate. It is different from Line 68 and Line 69 when 16oncebabyjesus referred to Johnc250 as "son," and "fake John."

After Johnc250 created his pizzas on the workspace, xLilPit21x suggests that there are even more possibilities. This statement infuriated or excited Cammalleri because his response shows signs of chat yelling. First of all he uses xLilPit21x's actual name which was Pedro. Secondly he hits the enter key for each word. In the middle of assertion, Johnc250 enters his declaration for the first time since he began to draw, that there are actually eight possible pizzas.

Turn Time	Student	Type	Utterance
135 14:00:44	x lil pit 21 x	chat	i think theres more then 8

136	14:01:00	cammalleri	chat	pedro
137	14:01:03	cammalleri	chat	you
138	14:01:04	cammalleri	chat	can
139	14:01:05	cammalleri	chat	not
140	14:01:06	cammalleri	chat	order
141	14:01:08	cammalleri	chat	a
142	14:01:10	cammalleri	chat	sauce
143	14:01:12	cammalleri	chat	or
144	14:01:12	johnc250	chat	theres 8 right there
145	14:01:13	cammalleri	chat	cheese
146	14:01:17	cammalleri	chat	pizza
147	14:01:19	cammalleri	chat	it
148	14:01:21	cammalleri	chat	comes
149	14:01:22	cammalleri	chat	with
150	14:01:23	cammalleri	chat	both

Cammalleri is obviously frustrated. He has announced that his list was correct on two separate occasions and now he is being questioned again. He enters his thoughts one entry at a time and continues to ignore Johnc250's workspace creation and statement on Line 144. Meanwhile, in the workspace Johnc250 has created his eight pizzas. Below is a screenshot of Johnc250's solution in the workspace.

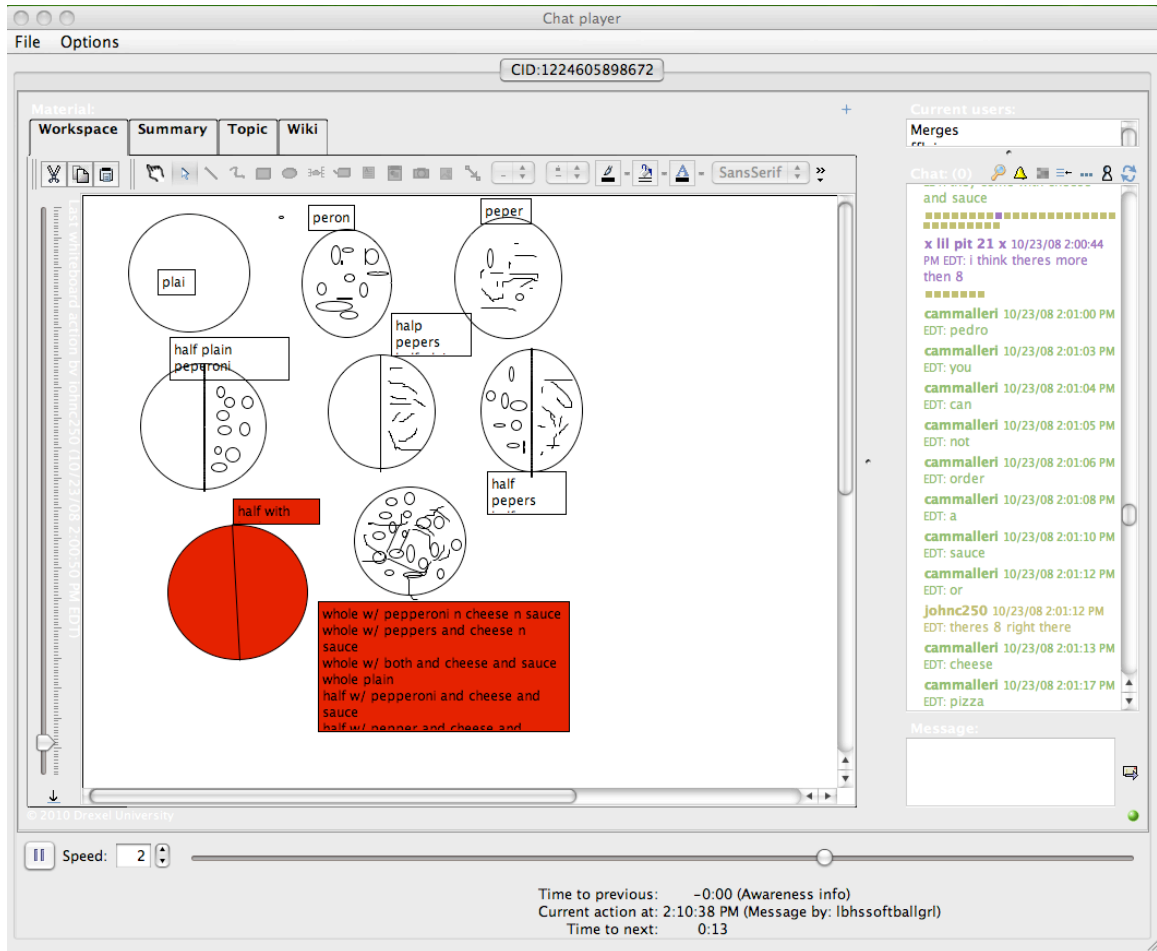


Figure 5-6. Screenshot of Johnc250's eight pizzas

The screenshot above shows Johnc250's iconic solution. Johnc250 was confident in his answer but it is possible he was not sure of his ability to win the argument in the chat. So he drew each pizza in order to prove his point visually.

In the next excerpt, Cammalleri attempts to redirect the conversation as he has considered other solutions long enough. He begins the defense with his authoritative style of entering one word at a time.

Turn Time	Student	Type	Utterance
162 14:03:47	cammalleri	chat	ok
163 14:03:48	cammalleri	chat	guys
164 14:03:50	cammalleri	chat	listen up

165 14:03:55 cammalleri chat in the topic

Cammalleri dominates the team but is not accountable to the community effort of the team. He wants them to accept his solution as the only solution. The shift that occurred during this session is that Johnc250 had become accountable to the community and the mathematics. He was empowered enough to first draw his solutions and later into the session, he began to utilize the chat to defend his solution of eight pizzas.

Turn	Time	Student	Type	Utterance
167	14:04:06	cammalleri	chat	it clearly states that every pizza is made with cheese and sauce
168	14:04:18	johnc250	chat	we know
169	14:04:18	cammalleri	chat	therefor no pizz can be made without both cheese and sauce
170	14:04:27	cammalleri	chat	there are 6 choices to order from
171	14:04:28	johnc250	chat	we know that
172	14:04:37	cammalleri	chat	ok good
173	14:04:38	johnc250	chat	no theres 8

Notice on Line 168 and Line 171 he answers him immediately but he begins each line with, “we.” Although xLilPit21x has written in the summary that there are seven possible pizzas, Johnc250 is keeping him close as his ally during this argument. From Line 173 to Line 200 the boys go back and forth about the issue of a plain pizza. Johnc250 is empowered and does not back down. The sessions comes to close due to time constraints and the final excerpt displays Cammalleri’s strong mathematical identity as he is unmovable in his decision. The last excerpt for this session begins and ends with Cammalleri assuring himself and the others that he is correct. On Line 207 he states his answer and on Line 208 he logs off.

Turn	Time	Student	Type	Utterance
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200	14:08:18	cammalleri	chat	no theres 6
201	14:08:19	cammalleri	chat	i was right
202	14:08:26	16oncebabyjesus	chat	son
204	14:09:53	cammalleri	chat	i gotta go
207	14:09:59	cammalleri	chat	theres six
208	14:10:02	cammalleri	leaves	leaves the room

It appears from the time stamp that as he made his last stand, he quickly exited as to not hear any more of this discussion.

In my research notes, I have noted that as that class finished, Johnc250 jumped to the board and decided to share his ideas with all the members of the class. He drew his eight pizzas again on the chalkboard as he tried to explain to them that Cammalleri wanted a half a plain pizza. He was excited and empowered at the end of this session. In past sessions, the number of chat entries ranged from sixty to one hundred turns. On day one of Pizza with Halves, the students entered 256 chat entries and 178 workspace entries as each of the four teammates contributed to the discussion.

5.5.1 Cammalleri

In the first two sessions of the VMT, Cammalleri appeared to accredit himself for correctly solving; Cups, Bowls, and Plate, and then Towers. He has gradually began to take on the role as expositor and comfortably directes xLilPit21x and 16oncebabyjesus to follow along with his thinking as he solves the problems. Most often, if he does ask a question, it appears to be directed at himself as he uses his teammates as a sounding board or as an audience. He began this session with the same intention. He listed six different pizzas and then made the following directive statements within the first few minutes of the session:

Line 48 “I did the work”

Line 58 “Who wants to write the report”

Line 64 “Ibhs boys...I’ll let you write the report since me and
16oncebabyjesus did all the work.”

He takes the role as the expositor as he tells the story, in this case the solution, and then directs the team as to what step to do next, in this case to write the summary. He is not being accountable to the community as he does not concern himself with their questions or their contradicting solutions. He does not value anyone else’s contributions as he ignores their work completely. In this session, his role as the expositor or leader, was challenged which evoked a struggle that created an electrified atmosphere. Several times during the session, Cammalleri showed his frustration as he entered his statements one by one into the chat. He was determined to win the argument and control his teams’ decision making process. He ended the session maintaining his stance on six pizzas and signing off immediately making his word the last as he exited the room. He might be empowered by his mathematics but he is not accountable to the mathematical discussion or his community.

5.5.2 xLilPit21x

xLilPit21x’s accountability to the community persisted into this session. He was determined to keep the group together as a set of collaborative learners as he maintained a relationship with each team member throughout the session. As Cammalleri and Johnc250 argued their positions, they were using xLilPit21x as their mediator. Cammalleri began several of his declarative statements with xLilPit21x’s first name, Pedro which made it seem as if he wanted only to direct his discussion to xLilPit21x. In

the first two sessions, Cammalleri and xLilPit21x worked closely together. It is possible that Cammalleri wanted that relationship to stay in tact without the interference of the other teams suggestions.

5.5.3 16oncebabyjesus

16oncebabyjesus' accountability is divided. He is first and foremost accountable to Cammalleri's solution strategies as he follows closely along in the discussion and consistently supports his teammate. He is accountable to the community in several different ways; he does on occasion view other solutions and comment on them, and he continuously provides simple comments and jokes that mend the disagreements between opposing sides. His membership is very important as he provides the comradeship that keeps this group together. He is always involved in the groups' discussion, although he does not contribute to the mathematical ideas.

5.5.4 Johnc250

Johnc250, who had previously struggled to find his place in the community made a transformation in the first session of Pizza with Halves. He was confident enough to share his solution on the workspace but did not argue his point in the chat. At this point he is more comfortable with iconic representations than with a mathematical discussion.

5.5.5 Team Two

The first session of Pizza with Halves created a lively mathematical discussion between the four members of the team. For the first time, each teammate contributed to the co-construction of the solution, making this session closer to an example of

exploratory inquiry. There was evidence that the students were listening to one another and building upon each others' ideas as they changed their own solutions several times during the first session. However, by keeping their own individual lists, it still shows that their mathematical routines have not shifted away from individual work and towards group sharing at this point. As a community, they are willing to share their ideas but they were still working to solve the problems individually. Although they did not collectively agree on a solution path, they did engage in meaning making and idea sharing as they argued their strategies. Cammalleri fought hard to maintain his dominant role as the expositor, but in this session he was met with confrontation. The confrontation might be what the team needed to bring about change and create a collaborative environment.

5.6 Pizza with Halves October 29, 2008

The next session of Pizza with Halves was held one week later on October 29. Cammalleri was not present to continue their discussion. In the Topic tab, we added sausage as a third possible topping. As the boys entered the room, the energy that they experienced did not seem to return. xLilPit21x changed the solution statement in the summary tab to eight possible pizzas. The three teammates did not discuss xLilPit21x's reworking of the summary statement. Once that was done, it was now their task to figure out how many pizzas could be ordered if they had three toppings to choose from: peppers, pepperoni, and sausage.

There is very little action in the first several minutes as xLilPit21x moves text boxes around and then makes a comment about Cammalleri's absence. This was the

second time in five sessions that Cammalleri was not present. In the next excerpt, xLilPit21x expresses his need for Cammalleri's leadership as they face the next task.

Turn	Time	Student	Type	Utterance
264	14:27:32	16oncebabyjesus	chat	we gota add the sausage topics to the possiblities now
265	14:29:19	x lil pit 21 x	chat	wheres john c

For several minues following the above chat the team does not chat. Instead xLilPit21x continued to revise the summary tab. Almost 27 minutes into the session, Johnc250 asks what they should do. In the next excerpt, xLilPit21x states that they have to find the number of possible pizzas when they add the next topping. Johnc250 does not participate or add to this session which is in clear contrast to his actions in the last session. The problem task has not changed. The only difference in this session is that Cammalleri is not present. He answers xLilPit21x's request by stating that they might just add three pizzas to their last count.

Turn	Time	Student	Type	Utterance
273	14:37:52	johnc250	chat	yo pedro so what do we do now?
274	14:38:10	x lil pit 21 x	chat	we have to find out how many we can make now with the sausages
275	14:39:01	johnc250	chat	3
276	14:39:15	x lil pit 21 x	chat	no
277	14:39:16	16oncebabyjesus	chat	3 wat?
	14:39:22	johnc250		[johnc250 has fully erased the chat message]
278	14:39:25	x lil pit 21 x	chat	nothing
279	14:39:29	johnc250	chat	with sausage
280	14:39:54	x lil pit 21 x	chat	im trying to do the part with the sausage'
281	14:40:34	johnc250	chat	yeah i think theres only 3

On Line 277 when 16oncebabyjesus exclaims, "3 wat?" it seems that he is surprised by this simplistic answer. xLilPit21x covers for him by responding on Line 278 with,

“nothing.” The time stamps to this conversation are paced far apart displaying long periods of dormancy. The discourse that was present in the last session is not present in this session. It is possible that the absence of Cammalleri robs this group of their competitive energy. In each previous session, Cammalleri enters the room and begins to work on the task. His work ethic might be what spurs this team into action because without him they did not move forward. Johnc250 was very active in the last session and yet had very little to offer on the idea of a new topping. They discuss the notion of adding a third topping to the task, however, none of them offer suggestions of a solution path. The excerpt begins with xLilPit21x explaining exactly what they need to do but it just continues with everyone agreeing that they are lost. On Line 285, 286, 288, and 293 Johnc250 enters in unconstructive comments about being lost. He then leaves the room without saying goodbye. 16oncebabejesus tells them on Line 290 that he is trying to do it on paper but he is also lost. xLilPit21x, as per his usual stance, encourages them by agreeing with their confusion but accepting the responsibility on Line 292 and telling them that he is “doing it.”

Turn	Time	Student	Type	Utterance
284	14:43:04	x lil pit 21 x	chat	we have to do all the pies with sausage pepperoni and peppers
285	14:44:06	johnc250	chat	i know
286	14:44:14	johnc250	chat	this is so confusing
287	14:44:21	x lil pit 21 x	chat	yea it is
	14:44:21	johnc250		[johnc250 has fully erased the chat message]
288	14:44:37	johnc250	chat	idk what else to do like im thinking but i dont get it
289	14:45:01	x lil pit 21 x	chat	me 2
290	14:45:43	16oncebabyjesus	chat	yea i jus tried doin it on paper but i got lost
291	14:45:54	16oncebabyjesus	chat	its pretty confusing
292	14:46:06	x lil pit 21 x	chat	yea it is
293	14:49:10	johnc250	chat	yo im real lost

294	14:49:26	x lil pit 21 x	chat	im doing it
295	14:49:29	x lil pit 21 x	chat	just try it
296	14:50:37	johnc250	leaves	leaves the room

When Johnc250 leaves the room, xLilPit21x and 16oncebabyjesus have one final discussion that is worth noting as it is revealing to their mathematical identities in the VMT. It should be noted that the day has ended at Long Branch High School and xLilPit21x is staying beyond his class time to finish this problem. In the final excerpt xLilPit21x tells him to keep trying and 16oncebabyjesus, who had admitted that he was trying it on paper in the last vignette, tells him that he is afraid to put his idea in the workspace because it might not be correct. xLilPit21x gives his support by explaining, “that’s why we’re working in groups.”

Turn Time	Student	Type	Utterance
303	14:51:39	x lil pit 21 x	chat keep trying
304	14:51:46	16oncebabyjesus	chat i know i ddnt want to put it in da workshop n it b wrong
305	14:52:16	x lil pit 21 x	chat lol. thats why we're working in groups so that we can coorrect eachother

16oncebabyjesus admits that he is afraid to appear wrong. His behavior up until this point was to cheer on Cammalleri.

The session comes to close without the team moving forward from where they left off on the first day of Pizza with Halves. In the second session when Cammalleri was absent, the group appeared suspended. They did not have the same energy to solve the augmented task or revisit the original task. It is apparent that he provided the energy for this group.

5.6.1 xLilPit21x

In the second session, when Cammalleri was absent and the three remaining students had to carry on, he stepped into the roll of leader. Both 16oncebabyjesus and Johnc250 asked xLilPit21x what they were supposed to be doing for the second session. They were lost and asked him to be the guide. At the end of the second session, 16oncebabyjesus confides in xLilPit21x, “Yea, I jus tried doing it on paper but I got lost. Its pretty confusing. I know I ddnt want to put it in da workshop n it b wrong.” xLilPit21x’s manner led the group to trust him and feel comfortable working with him. xLilPit21x’s accountability to the community is leading this team to a collaborative set of workers, while his accountability to the mathematics is steady.

5.6.2 16oncebabyjesus

He gave reason in the second session as to why he was not contributing to the mathematical ideas when he stated to xLilPit21x that he wanted to post an idea but he is afraid it might be wrong. 16oncebabyjesus’ contributions thus far have been to support Cammalleri. He has not contributed to the mathematical solutions in any way. He may not have the content knowledge necessary and this is creating a struggle for him. At this point, he is keeping his participation, thus mathematical identity, as active in the discussion but not proactive in the solution process.

5.6.3 Johnc250

However, when Cammalleri was not present in the second session of Pizza with Halves, Johnc250 did not contribute in any way, either in the chat or the workspace, or work towards a solution. It is possible that he was engaged in the mathematics not only because he felt confident in his solution but because he was able to assert himself in a challenge against Cammalleri. His contribution to the second session was the exact converse of his contribution in the first session.

5.6.4 Team Two

It is possible that Cammalleri's is the motivator for this group. He was absent for the second day of Pizza with Halves and the group did not further the mathematical inquiry past the first session. In fact they stalled and left their answer unchanged. The same scenario occurred during the second day working on Towers 4-Tall. They did not work to complete the task in Cammalleri's absence.

5.7 Pizza with Four Toppings

As we moved towards our sixth session, the students in Team Two were beginning to practice accountable talk. Accountable talk to a community is when students practice listening to each other, build upon one another's ideas, and come together collaboratively.

On November 24, 2008 the students entered the VMT chat room for their sixth session to work on Pizza with Four Toppings (Appendix page 150). All four team

members were present and logged on within a few minutes of one another. A script had been prepared for this session (Appendix page 153).

In this script we talked about the students working collaboratively to devise a plan and make decisions. We noticed in past sessions that the students worked separately and then compared their work attempting to agree on an end result. Our preferred goal was for the students to discuss a plan and then subsequently build a solution collaboratively. Listed below are the first two points of the script read to them aloud before the start of the session:

1. We want to encourage you to work collaboratively and by this we mean we want you to devise a plan and make decisions about the task.
2. The researchers have reviewed conversations where students seem frustrated and the source of this frustration seems to be a misunderstanding of the work being offered by other students in the group. Please explain your ideas to your teammates. Everyone will benefit from you helping your teammates understand how you interpret the task and how you think about a possible solution.

These two items were scripted to encourage the students to practice accountable talk and come together as a community. We wanted them shift away from expository group discussion and more towards exploratory group discussion with each team member contributing ideas.

This script also reiterated the idea from the first script read on October 7, that they should consider two audiences when they were adding work to the workspace or summary tab. The workspace was a private space that they could enter their work and only they and the researchers could view this work. The summary tab was more of a public forum where other groups could gain access to their work through the use of the wiki tab.

In this session, xLilPit21x used iconic representations to list seventeen pizzas in the workspace while Cammalleri preferred to enter his list of fifteen pizzas directly into the chat log. Cammalleri made a valid attempt to interpret xLilPit21x's iconic representations, but his communicative efforts were not met. Throughout the session Johnc250 engaged in unconstructive behavior that appeared to be intended towards Cammalleri. 16oncebabyjesus kept the group together by placating both sides, however, he did display some negative reactions in response to Johnc250's unconstructive entries. The session ended with a negative tone as the students logged off the VMT leaving behind two inconsistent solutions.

All four members of Team Two logged on within seconds of one another. In the following excerpt, 16oncebabyjesus greets both Johnc250 and xLilPit21x individually and uses their real first names.

Turn	Time	Student	Type	Utterance
1	1:26:11	16oncebabyjesus	chat	Hey john
2	1:26:20	Johnc250	chat	Sup
3	1:26:40	16oncebabyjesus	chat	Wat up pedro
4	1:27:07	xLilPit21x	chat	Wats up

It seems that as the teammates become more familiar with one another, they are using one another's actual names, as opposed to their chat handles. Cammalleri who is present and logged on does not engage in the salutations. After this exchange, Johnc250 begins to engage xLilPit21x in a conversation about going to the weight room after school. Although this seems harmless, it should be noted that they are co-located in the same classroom and could discuss this issue before or after class. Instead he chose the VMT chat room to have a personal conversation that excluded Cammalleri and 16oncebabjesus. Because this personal conversation could have occurred at a different

time and is clearly between he and xLilPit21x, I would consider it to be unconstructive behavior. It went on for several lines until Cammalleri made a comment about getting to work. In the next excerpt, he is being sarcastic as he employs the boys to stop their personal interchange and begin to work on the task. However, three minutes after he suggests they begin working on the task, he enters the statement that there are twelve possible pizzas.

Turn	Time	Student	Type	Utterance
14	1:31:11	Cammalleri	chat	Excuse me I believe this is a learning environment...not a place to talk about the weight room...lets finish this problem por favor
15	1:32:20	xLilPit21x	chat	We are doing the problem. We have to read it first
16	1:32:40	16oncebabyjesus	chat	We did how bout we discuss it
17	1:34:07	Cammalleri	chat	Theres 12 different ways

After he reminds them that they have a task to work on, xLilPit21x agrees and says that they have to read it first. From the Replayer, I can view that xLilPit21x had been drawing and labeling pizzas in the workspace as he chatted with Johnc250. He responded that he needed time to read, however, he was already working on the problem in the workspace. It is possible that when 16oncebabyjesus suggested they discuss the problem task, he is adhering to the script read before the session began. The last comment made in the above vignette is atypical of Cammalleri. Although he has not given any indication that he had been working on the problem, he is prepared to enter a solution. He does not enter the work into the workspace or into the chat but he makes the definitive statement that there are twelve combinations of pizzas. This is very similar to previous tasks when he announced, "I found all the combos," and implies that the task has been solved.

Following this declaration, xLilPit21x entered into the chat, “explain,” and then followed that statement with, “convince me.” Cammalleri immediately began listing his pizzas in the chat log, one at a time. He did not enter his ideas into the workspace. This method of entering work in the chat instead of the workspace was a new practice since in all the session prior they listed entered their solutions in the workspace. Their usual practice was to create a text box and list their solutions, or draw their solutions with iconic representations into the workspace whiteboard so that their solutions were clearly viewable to each teammate. xLilPit21x asked Cammalleri to enter his work into the workspace on two separate occasions but he ignores this request and proceeds to list twelve possible pizza combinations abbreviating only pepperoni with the letters, “pepp,” directly into the chat log. His list includes one plain, one with everything, one pie with each topping, and all possible pizzas with a combination of two toppings. He is missing the four possible pizzas with three toppings. His list, although organized, might have been hard for them to understand as it was coming quickly in the chat and not listed in a textbox in the workspace. When he finished, xLilPit21x says asks him again to, “write in the workspace,” to which 16oncebabyjesus responds, “hes just telling ya, dats 12 by da way.” This is not working for xLilPit21x because he says, “I kno but we have to put it on the workspace so we all can see how hes getting.” This request goes unanswered and the next entry from Cammalleri is, “15.” It should also be noted, simultaneously, as this discussion is taking place, xLilPit21x is creating iconic representations of pizzas in the workspace. He currently had eleven pizzas drawn and labeled. Some discussion occurs in the chat that is unrelated to the task and the boys are temporarily distracted. When this settles, xLilPit21x says, “theres not 15, I only have 11.” In previous sessions all work has

been done in the workspace, however, Cammalleri does not use a textbox during this session nor does he respond to their request to do so, instead he responds with, “okay, ready. Im gunna count them al.” He enters in, “plain” and 16oncebabyjesus follows that entry with a, “1.” This method goes on as he enters his pizzas combinations and 16oncebabyjesus conducts a running count.. When they get to the eighth pizza and 16oncebabyjesus enters, “8,” Johnc250 who had not entered chat for most of the session enters in, “9.” The list was correctly tallied at eight, and I do not believe Johnc250 was at error but engaging in unconstructive behavior trying muddle the number count. At the thirteenth pizza, Johnc250 entered, “76686767960976076908760” which was ignored, and after the fifteenth pizza, he entered, “98988776.” In the next excerpt, Cammalleri defends 16oncebabyjesus’ number tallying but Johnc250 confuses the conversation with responses that do not further the mathematical discussion.

Turn	Time	Student	Type	Utterance
14	1:50:11	Cammalleri	chat	Yo hes counting what I say, don’t mimic him
15	1:50:20	xLilPit21x	chat	We kno hes just being silly
16	1:51:00	16oncebabyjesus	chat	Lol
17	1:51:17	Johnc250	chat	That wasn’t funny
18	1:51:51	16oncebabyjesus	chat	We dnt play dat son
19	1:51:18	Johnc250	chat	We do son
20	1:51:38	xLilPit21x	chat	U don’t have kids
21	1:52:07	Cammalleri	chat	Theres 14
22	1:52:16	Johnc250	chat	Kids?
23	1:52:18	Cammalleri	chat	No, pizzas
24	1:52:31	16oncebabyjesus	chat	PIZZAS
25	1:52:37	Johnc250	chat	No, there’s more

On Line 17 when he responds, “that wasn’t funny,” it does not make sense since it was he who was putting in the long lines of useless numbers. When 16oncebabyjesus says, “we

dnt play dat son,” he is making a negative comment directed at Johnc250. He also referred to him as “son” which implies someone who is juvenile to your position. In past sessions, 16oncebabyjesus refers to Cammalleri and xLilPit21x as, “bros,” or “brother,” but never has he called them, “son.” Johnc250 immediately responds and also ends his statement with, “son.” I can only think that xLilPit21x is trying to defuse the conversation when he made the comment about not having any children. Cammalleri appeared to ignore this interchange and entered in, “14.” Johnc250’s response of, “Kids?” must have been seen as antagonistic because 16oncebabyjesus aggressively responded in all capital letters, “PIZZAS.” When Johnc250 responds, “no, there more,” it appears that he is just being antagonistic because he does not back that response up with an argument for more pizzas. He did not enter any argument to support this claim, nor was he entering any work into the workspace. Johnc250 did engage further in the mathematical discussion after this comment. At that time in the session, his co-located classmate xLilPit21x is still drawing pizzas but only had thirteen pizzas. Johnc250’s claim of fifteen pizzas is not backed up with any evidence. He did not create a textbox and list them and he did not enter them into the chat.

In the next excerpt xLilPit21x makes a claim that there are seventeen pizzas. Cammalleri is willing to negotiate the number of pizzas with xLilPit21x but he is adamant that they be entered into the chat. Cammalleri does not want to use the workspace. xLilPit21x does not comply and instructs Cammalleri to look at the whiteboard in the summary page because he has drawn all of his seventeen pizzas. Johnc250 defends the location of the list as he uses all capital letters showing his

frustration with the situation. His responses were unconstructive to the task and unconstructive to the collaborative nature of the group.

Turn	Time	Student	Type	Utterance
22	1:58:11	xLilPit21x	chat	Theres 17 pizzas
23	1:58:20	Cammalleri	chat	What 17 are there
24	1:58:42	Cammalleri	chat	Tell me here, don't draw on the whiteboard
25	2:00:15	Cammalleri	chat	Pedro
26	2:00:20	Cammalleri	chat	Tell me the 17 please
27	2:00:34	xLilPit21x	chat	Look in the summary
28	2:00:51	xLilPit21x	chat	Count. I kno im not blind I have my contacts on
29	2:00:57	Johnc250	chat	THERE ON THE WHITE BOARD!
30	2:01:31	Cammalleri	chat	That doesn't make sense, type it on here
31	2:01:43	Johnc250	chat	NO
32	2:01:54	16oncebabyjesus	chat	Finish ur drawings boss
33	2:01:55	xLilPit21x	chat	Just look at it
34	2:02:01	Johnc250	chat	WERE NOT SUPPOSED TO TYPE IT ON HERE

In the above vignette, Cammalleri is polite to xLilPit21x as he refers to him by his actual name on Line 25. Cammalleri is respectful and interested in xLilPit21x's number of pizzas. In the past, Cammalleri did not consider his teammates' solutions rather it was their job to view his work. Johnc250 responded aggressively using capital letters as he defends the location of the solution. His reactions are ignored. On Line 32 16oncebabyjesus makes a statement to xLilPit21x that he can finish is drawings, but finished the entry with, "boss." This statement is accommodating to xLilPit21x's work and suggests that he is trying to mend the negative discussion about where to enter the work between Cammalleri and xLilPit21x.

The session continued and Cammalleri did view xLilPit21x's illustrations in the workspace. Cammalleri asked xLilPit21x to clarify how he labeled his pizzas. On the workspace xLilPit21x drew seventeen pizzas but had labeled them in a way that it was

not clear how he organized or accounted for his combinations. Pictured below in Table xx is xLilPit21x’s seventeen pizzas.

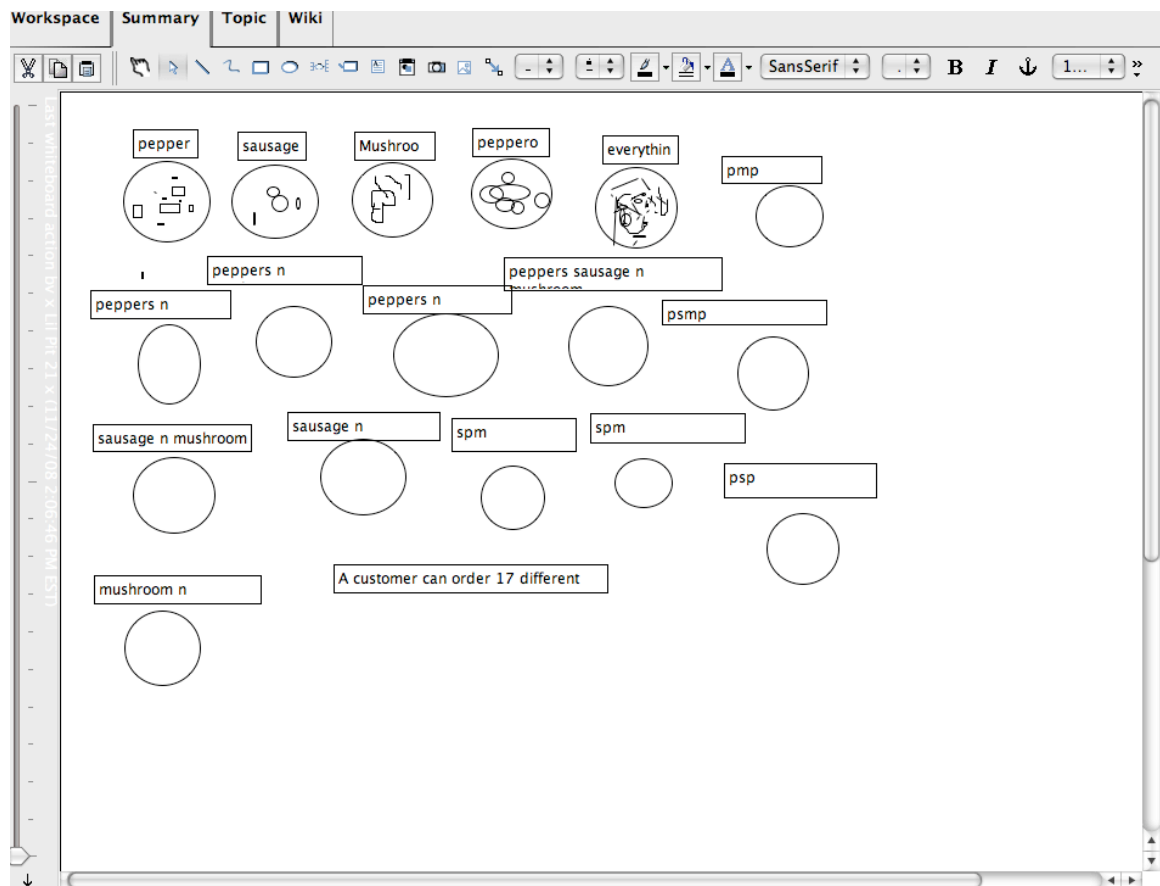


Figure 5-7. Screenshot of xLilPit21x solution

xLilPit21x used the letter “p” for both pepperoni and peppers. He also abbreviated the labels by simply writing, “peppers n,” three separate times possibly meaning; peppers and pepperoni, peppers and mushroom, and peppers and sausage. However, without explanation, this illustration is confusing to Cammalleri. He asked him several questions in the chat ; “whats 3 peppers n,” and a few chats later, “whats pepper n,” and then, “whats mushroom n.” All of his questions go unanswered by xLilPit21x. In the next

excerpt, Cammalleri is frustrated and he leaves the room several minutes before the session was over.

Turn	Time	Student	Type	Utterance
47	2:08:14	Cammalleri	chat	Im leaving
48	2:08:14	Cammalleri	chat	bye
49	2:08:47	16oncebabyjesus	chat	peace
59	2:08:55	xLilPit21x	chat	16oncebabyjesus u out too. Gonna join your friend

xLilPit21x might have considered that Cammalleri left the room angry as he asked 16oncebabyjesus on Line 59, "...u out too. Gonna join your friend." He did not receive a response to this question since on Line 49 16oncebabyjesus followed Cammalleri's exit and logged off. The session ended with xLilPit21x's iconic solution left in the summary tab.

5.7.1 Cammalleri

In this session Cammalleri finally shifted his accountability to the community and the mathematics but his efforts were not reciprocated. When his list was challenged by xLilPit21x to be a different number of pizzas, he was inquisitive and requested xLilPit21x to follow his lead and enter work into the chat. When this request was not met, he did view xLilPit21x's work in the workspace because he asked several questions about xLilPit21x's labeling. He tried to make sense of xLilPit21x's iconic representations in the workspace, but his questions went unanswered. In all of the prior sessions, Cammalleri suggested that his teammates view and accept his mathematical solutions as the teams' solution. In this session, Cammalleri's behavior was different as

he displayed accountability to the community when he was open to his teammates' ideas and suggestions.

5.7.2 xLilPit21x

xLilPit21x's behavior also changed during this session. In the past, he had always encouraged the group to work together. He was accountable to the community and the mathematics. He began his statements with the word, "we," and would try to align his list of combinations to Cammalleri's list. During this session, he did not follow Cammalleri's suggestion to list the solutions in the chat, but directed Cammalleri to view his list. When Cammalleri asked him several times to clarify his labeling in the workspace, he ignored the request each time. It was the first time that xLilPit21x showed confidence in his solution, however, his empowerment thwarted the mathematical discussion. He was confident with his mathematical solution, however, the way he chose to show empowerment was to not be accountable to the community. He did not collaborate with Cammalleri but hindered the process by not answering any of his questions.

5.7.3 16oncebabyjesus

16oncebabyjesus' position in prior sessions was to be the unwavering enthusiast to his co-located teammate Cammalleri, however, in this session he attempted to placate both sides. When Cammalleri and xLilPit21x were in a dispute as to where to list their solutions he interjected and said to xLilPit21x, "Finish ur drawings boss." This comment was unique in that he was defending xLilPit21x's drawings in the workspace when

Cammalleri was requesting xLilPit21 list them in the chat. 16oncebabyjesus changed in this session in that he was not just accountable to Cammalleri, but he was accountable to community as he tried to ease the tension and facilitate a positive atmosphere.

5.7.4 Johnc250

Johnc250's behavior in this session was confrontational yet it is not clear why he is frustrated. When he responded in the chat using all capital letters, when he attempted to confuse the tallied number of pizzas, and when he answered his teammates in an antagonizing fashion, he was unconstructive to the chat, therefore not accountable to the community or the mathematics. In a text-based atmosphere, words are considered deeds making Johnc250's capital letters aggressive behavior aimed at Cammalleri and 16oncebabyjesus (Turkle, 1995). In a virtual environment, the student is alone at the computer and capable of turning away from an unpleasant situation. He did not have to engage in the discussion at all. He deliberately engaged in unconstructive behavior during this session.

5.7.5 Team Two

As our research group looked over the events and discourse within Team Two, we decided it was best to keep the groups together and let them work out their differences. There was definitely a struggle taking place, however, we hoped it would work itself out and the team would become united. If we were to move them into different groups at this point, they would have to negotiate their identities in relation to a new group. The usual routine of Cammalleri leading the group was being challenged as xLilPit21x was

struggling to create his own solutions and have them accepted by the group. Through this, 16oncebabyjesus was keeping the room together with his ritual activity of joking and agreeing with given solution while Johnc250's unconstructive behavior was unwarranted.

5.8 Towers Three Tall 12/12/08

We decided to return to the task of Towers for the seventh VMT session. Their initial attempt at Towers was during the second and third session. During those sessions, Team Two had interpreted the task of building different towers 4-tall using only the five cubes visually shown in the problem statement as opposed to “having an inexhaustible” number of cubes. This interpretation allocated only six possible towers 3-tall, ten towers 4-tall, and ten towers 5-tall. They provided no evidence that they approached the task of creating a formula for towers n -tall. Although we understood their interpretation, we wanted to push them to find all possible towers tall when selecting from two colors, which would be eight towers 3-tall, sixteen for towers 4-tall, and thirty-two towers 5-tall. This alternative interpretation might lead them to building an isomorphic understanding between towers 4-tall and Pizzas with Four Toppings in a future session. To challenge their interpretation, we changed the wording from the original problem task and eliminated the visual representation.

In the original task assignment of towers, the wording said you had an inexhaustible number of cubes. On a different day, and without reference to their VMT session, I asked my students what, “inexhaustible” meant. They did not know, but a few of them said they remembered seeing it during the VMT session for towers. I did not discuss the problem task with them but explained that inexhaustible meant the same as

unlimited. There was discussion amongst the class of how unlimited changed their idea of the task.

Towers 3-Tall, was reworded to have an “unlimited” number of cubes to build towers 3-tall and then build towers 4-tall. We also eliminated the visual representation of sample towers as seen in the original problem task of Towers (Appendix page 151). The wording for the rest of the problem task remained the same.

We had prepared a small script for this session (Appendix page 154). It contained only two points of interest. The first was to encourage collaborative thinking by discussing their ideas before they created their solutions. The second point was to remind them that we observed all of their chat entries. It was our intention to remind them that we were privy to their conversations. The purpose of this point was to quell the negative tone experienced in the last session.

As Team Two enters the room for their seventh session, they welcomed a fifth member to the Team, CaliforniaSquirrels. CaliforniaSquirrels, a male student, is a junior who due to a scheduling change at Rutgers Preparatory School joined the class midyear. They have been told ahead of time that they would receive a new team member so they were expecting his arrival. As they entered the room, Cammalleri began to solve the task by listing possible towers 3-tall in the chat log. xLilPit21x questions Cammalleri’s towers that contain one color. There is a short discussion but Cammalleri moves forward with his new interpretation of the towers solution, and eventually the team follows along. However, a very interesting transfer in information occurs in this session as Cammalleri lists his combinations chat. xLilPit21x transfers the list to the workspace but changes it . His corrections to Cammalleri’s list are never mentioned by any of the teammates.

Johnc250 tries to get involved and this time he is not ignored but assigned small tasks to complete. He completes one of the tasks assigned to him by xLilPit21x but ignores the task assigned to him by Cammalleri. In this session there was an appreciable change in their collaboration. Although Cammalleri still maintains the leadership position, he was more accountable to the community. Team Two solved the problem correctly in the 45-minute session.

xLilpit21x began by creating boxes in the workspace that appeared to be the beginning of iconic representations for towers 3-tall. Cammalleri enters and within three minutes states that he will work on part one of the task that was create all possible towers 3-tall. Then immediately begins listing towers 3-tall into the chat. In the last session, Cammalleri introduced this method of entering solution into the chat log. It did not work well for that session but it appeared that he was continuing with this format. xLilPit21x does ask him on Line 19 to, “write them down,” which likely means in the workspace; however, Cammalleri ignores the request, while 16oncebabyjesus responded on Line 23, “he is.” For the rest of this session, Cammalleri continued to list his tower combinations in the chat while 16oncebabyjesus followed each entry with a tally.

Cammalleri lists correctly the eight possible towers 3-tall when selecting from two colors by using the heuristic of controlling for variable. His list began with words red, red, red, which represented a 3-tall tower with three red cubes. He then replaces one of the cubes with a yellow cube three times; yellow, red, red, and then red, yellow, red, and finally red, red, yellow. He then repeated this process beginning with an all yellow tower. When he finishes, he asks on Line 33, “can anyone else give me more options.” In the following excerpt, xLilPit21x questions Cammalleri’s list. xLilPit21x is

maintaining initial interpretation of Towers from session named Towers 4-tall. To recap when Team Two worked on Towers 4-tall during the second and third session, they had inferred from the problem statement that each color, yellow and red, had to be represented in each tower and that they only had five possible cubes to build with. In this session we changed the wording from “inexhaustible” to “unlimited,” and eliminated the visual representation of sample towers. These changes corrected Cammalleri’s interpretation of the problem even though the wording “when selecting from two colors” did not change in either problem statement.

Turn	Time	Student	Type	Utterance
46	14:24:03	x Lil Pit 21 x	chat	i dont think we can do red red red
47	14:24:47	cammalleri	chat	ok
48	14:24:52	cammalleri	chat	listen pedro
49	14:24:55	cammalleri	chat	in the problem
50	14:24:59	cammalleri	chat	it states that
51	14:25:05	cammalleri	chat	we have unlmited colors
52	14:25:08	cammalleri	chat	therefor
53	14:25:22	cammalleri	chat	we can use red red red as a possiblilty for a 3cube tower
54	14:25:55	x Lil Pit 21 x	chat	but it says from selecting from two colors
55	14:26:18	CaliforniaSquirrels	chat	it doesnt say u have to use both of them though
56	14:26:18	x Lil Pit 21 x	chat	read 1 again
57	14:26:44	cammalleri	chat	yes
58	14:26:49	x Lil Pit 21 x	chat	ok
59	14:26:59	cammalleri	chat	but those are the two colors we can choose from
60	14:27:06	cammalleri	chat	those two dont have to bee in the cube

In the above excerpt when xLilPit21x requests Cammalleri to read number one again, he responds with, “yes.” If Cammalleri did re-read it, he would have seen that the wording in number one is exactly as it was when they were first assigned towers. He is not re-

reading number one but relying on the word unlimited to interpret the problem. He is also very intent on making his point. Notice how Cammalleri does not complete his thought in one or two longer chat utterances but continuously hits the enter key to make his point. He begins on line 48 when he says, “listen Pedro,” which is xLilPit21x’s actual name, and continues through line 53. Hitting the enter key was an approach used by Cammalleri before in the Pizza with Halves session. He uses the enter key for each word to make his point stronger. Their discussion is about whether they can have a tower with all of the same color cubes. In the middle of the excerpt Cammalleri is joined by CaliforniaSquirrels defending his argument. However, this time, Cammalleri is referencing the “unlimited” number of cubes and stating that, “it doesn’t say u have to use both of them though.” xLilPit21x, in his argument, quotes the problem task and states it to Cammalleri, “but it say from selecting from two colors.” We can only assume that the word, “unlimited” is what changed Cammalleri’s interpretation of the problem. From this point, although the excerpt ends with the plan of re-reading the problem statement, they agree to list the towers again. xLilPit21x does not further his argument and the discussion of whether they can have a tower with the same three colors ends here. Cammalleri states that he will re-list his towers 3-tall. In the following excerpt, xLilPit21x encourages the team to work together and Cammalleri agrees and leads the process.

Turn	Time	Student	Type	Utterance
64	14:27:15	x Lil Pit 21 x	chat	lets make a box and write some solutions
65	14:27:24	16oncebabyjesus	chat	alrite
66	14:27:31	cammalleri	chat	i will write the solutions again
67	14:27:32	cammalleri	chat	pedro
68	14:27:37	cammalleri	chat	you can make the boxes

69	14:27:46	x Lil Pit 21 x	chat	ok
70	14:27:55	cammalleri	chat	ok

Notice on line 67 and 68 as Cammalleri directs xLilPit21x (Pedro), he hits the enter key and then tells him exactly what to do. When xLilPit21x answers yes, then Cammalleri returns the “yes” statement as if he is satisfied with this situation. Cammalleri begins to list towers 3-tall for a second time, with 16oncebabyjesus entering a tally, and xLilPit21x re-migrating the list onto the workspace for the entire team to view.

As this process plays out, xLilPit21x’s list in the workspace does reverse the second and third tower from Cammalleri’s chat list. However, the rest are exactly as Cammalleri states them. Johnc250 did not engage in the conversation, however, right before they began the list for the second time, 16oncebabyjesus writes in the chat, “yo john where u at.” This utterance is certainly directed at Johnc250 because John Cammalleri has been active and engaged. After the list of eight possible towers had been listed Johnc250 responds, “im here,” and then follows it up with, “which one are we doing the 3 tower or 4 tower?” It is possible that Johnc250 is not following along with the chat or he just does not know how to enter the conversation since it was clear they were currently listing towers3-tall in the chat as well as the workspace. In the past, Cammalleri has ignored Johnc250 but this time responds immediately to him with a directive and continues to work with 16oncebabyjesus and xLilPit21x on the next portion of the problem. In the excerpt shown below Cammalleri directs Johnc250 to write up the summary while he, 16oncebabyjesus, and xLilPit21x solve the next portion of the task which was to create towers 4-tall.

Turn	Time	Student	Type	Utterance
-------------	-------------	----------------	-------------	------------------

95	14:31:18	cammalleri	chat	john
96	14:31:27	cammalleri	chat	you can write the summary for #1
	14:31:32	johnc250		[johnc250 has fully erased the chat message]
97	14:31:33	cammalleri	chat	ill work on #3
98	14:31:50	cammalleri	chat	red red red red
	14:31:50	x Lil Pit 21 x	wb	[x Lil Pit 21 x resized some objects]
99	14:31:52	16oncebabyjesus	chat	1
100	14:31:58	cammalleri	chat	red red red yellow
101	14:31:59	16oncebabyjesus	chat	2

Again, Cammalleri uses his enter key to make a stronger point. On Line 95, he enters, “John,” hits enter and then directs Johnc250 in the next line by entering, “you can write the summary for #1.” The assignment of writing the summary has always been an issue. In past sessions, there have been several conversations as to who will write the summary. The general consensus amongst the team members would be that no one wanted to write up the summary. The task was usually administered by xLilPitx21 since the others just refused or said they did not know how to do it. Johnc250 enters something but then erases his message. He did not work on the summary but instead began to create squares using the drawing tool at the bottom of the workspace. The other three boys moved onto towers 4-tall with their cooperative approach: Cammalleri listing towers in the chat, 16oncebabyjesus following each entered tower with a running count, and xLilPit21x transferring them to a textbox in the workspace.

As the three teammates created their list of towers 4-tall, CaliforniaSquirrels tried to interject tower combinations on two occasions. His contributions were ignored by Cammalleri and 16oncebabyjesus but incorporated into the solution by xLilPit21 during the transfer. As xLilPit21x transferred the information, he accepted suggestions from

both students, eliminated repeats and entered a correct list of sixteen towers into the workspace. The following table lists the towers in order as they were entered into the chat by Cammalleri and onto the workspace by xLilPit21x. On the left is Cammalleri's list of towers as they were entered into the chat. The next column is the number assigned to it by 16oncebabyjesus. To the right of that illustrates the two times that CaliforniaSquirrels interjected two possible towers, also numbered by 16oncebabyjesus. The fourth column represents the list created by xLilPit21x along with a C if it matches Cammalleri's list, or a SC if it matches a suggestion by CaliforniaSquirrels.

*Table 5-3
Cooperative Activity*

Cammalleri	16oncebabyjesus	CaliforniaSquirrels	xLilPit21x (as listed in workspace)
r r r r	#1		r r r r C #1
r r r y	#2		r r r y C #2
	#3	r r y y	r r y y CS #3
r r y r	#3		r r y r C #3
r y r r	#4		r y r r C #4
y r r r	#5		y r r r C #5
r r y y	#6		r y r y C #7
r y r y	#7		y r r y C #8
y r r y	#8		y r y r C #9
y r y r	#9		y y y y C#10
y y y y	#10		r y y y C#11
r y y y	#11		y y y r C#12
y y y r	#12		y y r y C #13
y y r y	#13		y r y y C#14
y r y y	#14		y y r r C#15
y y r r	#15		r y y r CS#16
	#16	r y y r	
y r r y	#17		

Cammalleri's list contains a duplicate entry, #8 and #17, which is why he counted seventeen possible towers. 16oncebabyjesus, who was the official counter, counted

CaliforniaSquirrel's #3 tower but then re-used the #3 on Cammalleri's next entry. 16oncebabyjesus has always supported Cammalleri's efforts in problem solving. He considered using CaliforniaSquirrel's tower combination but then decided to only count Cammalleri's thus entering the number three two times. Meanwhile, xLilPit21x's list, which was concurrently being entered onto the workspace, did accept CaliforniaSquirrel's #3 entry and as he continued he omitted Cammalleri's #6 entry which would have been the duplicate to #3. This illustrates how he was observing the work entered by Cammalleri yet modifying it as he entered it into the workspace. To further illustrate this point, when Cammalleri entered into the chat #17, xLilPit21x did not use that combination since it was already entered and counted as #8. xLilPit21x was creating the final list, but correcting Cammalleri's work as he went along. He did not point out any errors that he corrected. As the four boys worked collaboratively, Johnc250, who was directed to "write the summary for number 1" interjected into the chat between Cammalleri's ninth and tenth tower entry and said, "yo Pedro." He then hit the enter key and said, "what are we doing." Not only is he calling out to xLilPit21x to help him, he is using the split entry method to get xLilPit21x's attention. xLilPit21x who continues working collaboratively with Cammalleri, 16oncebabyjesus, and CaliforniaSquirrels answers Johnc250 by saying, "John, look over what I wrote and see if there are more." Johnc250 then answers, "I think that's it Pedro," followed by, "you got all the one I can think of for 3 pedro." Johnc250 is directing his questions and answers directly to xLilPit21x by using his first name. This last statement made by Johnc250, although seemingly innocent, creates a minor dispute.

In this next excerpt, 16oncebabyjesus defends his teammate Cammalleri's work from being claimed by anyone else. It begins with Johnc250's approval of the list of towers 3-tall. He is affirming to xLilPit21x that all the towers are accounted for and directs the comment to him by using his first name. After that 16oncebabyjesus seems to jump to the defense of Cammalleri to be sure that everyone knows that it was Cammalleri who created the list and not xLilPit21x.

Turn	Time	Student	Type	Utterance
144	14:36:25	johnc250	chat	you got all the ones i can think of for 3 pedro
145	14:37:13	16oncebabyjesus	chat	wat did he write
146	14:37:18	cammalleri	chat	woah
147	14:37:18	16oncebabyjesus	chat	y u take his crrdit
148	14:37:19	cammalleri	chat	woah
149	14:37:20	cammalleri	chat	woah
150	14:37:21	CaliforniaSquirrels	chat	whoa
151	14:37:24	cammalleri	chat	i did number 3
152	14:37:28	16oncebabyjesus	chat	son we dnt play dat
153	14:37:30	cammalleri	chat	pedro put it in the workspace
154	14:37:49	cammalleri	chat	were the 3 amigos
155	14:38:06	16oncebabyjesus	chat	slash three muskitechers
156	14:38:13	16oncebabyjesus	chat	SON
157	14:39:20	x Lil Pit 21 x	chat	im not taking no oneswork i just wrotewhatthey wroteon the message box
158	14:39:41	16oncebabyjesus	chat	o aite

On Line 145 when 16oncebabyjesus exclaims, "wat did he write." He is not only excluding Johnc250 from the conversation but he is encouraging a discussion against Johnc250's comment. Cammalleri enters, "woah," three times to possibly slow up the dispute and re-examine what was just said. He then takes a stand and says, "I did number 3," while 16oncebabyjesus refers to someone in the chat as, "son," twice. Once precedes a statement that makes the reference that they do not accept cheating, and the

second time it is in all capital letters. The second time, I am not sure who it is directed to but it could have been meant to exclude Johnc250 from the “three of them.” None of this is responded to by Johnc250. After that they call themselves the “three muskateer’s” for working so well together. They are defining their community as three members, and excluding the other two team members. The last entry by xLilPit21x is him claiming on Line 157, “im not taking no ones work I just wrote what they wrote on the message box.” He is giving Cammalleri all the credit and does not point Cammalleri’s duplicates in the towers 4-tall.

There are only ten minutes left in the session and the boys have not established whether they have 16 or 17 towers. Immediately following the above conversation xLilPit21x stands by his list. Everyone does look over his list and eventually agrees; however, it is noticeable that Cammalleri is the last to agree and he does not mention his duplicate tower.

Turn	Time	Student	Type	Utterance
159	14:39:48	x Lil Pit 21 x	chat	i got 16 combos
160	14:39:54	16oncebabyjesus	chat	we got 18
161	14:40:07	16oncebabyjesus	chat	or 17
162	14:40:21	cammalleri	chat	theres 17
163	14:40:40	x Lil Pit 21 x	chat	look at the box and tell me what i missed
164	14:41:12	16oncebabyjesus	chat	ur rite
165	14:41:26	x Lil Pit 21 x	chat	16 right
166	14:41:41	johnc250	chat	yeah there's no more
167	14:41:46	johnc250	chat	you got them all
168	14:42:56	x Lil Pit 21 x	chat	ok
169	14:43:12	x Lil Pit 21 x	chat	lets right the summary
170	14:43:15	cammalleri	chat	ok good

Following their unified agreement, they discuss who will put the work in the summary. At this point, the summary page is empty even though Johnc250 had been directed to post the summary in the earlier part of the session. The discussion goes back and forth for just a few seconds when Johnc250 exits the program. He does not explain his early departure, he just types, “I g2g,” and logs off. Cammalleri says, Line 178, that either 16oncebabyjesus or CaliforniaSquirrels should write the summary because, “id say Pedro and I are out because we did most of the work,” to which 16oncebabyjesus added, “well I helped count lol.” In the end, xLilPit21x wrote the summary for number one and had to leave for soccer practice. CalifornaiSquirrels wrote the summary for number two.

5.8.1 Cammalleri

Cammalleri assumed the role of expositor in this session. Exposition is the scenario where one person tells the story or directs the team as to how to solve the task (Stahl, 2009c). He organized his teammates’ participation by assigning specific tasks. Cammalleri entered a list of combinations into the chat while one teammate kept a running count and another teammate transferred his list to a text box on the workspace. At the end, he commended his teammates for their good work. He was accountable to the community in that he assembled his teammates to work cooperatively. This was a different approach from his prior sessions when he worked individually and then announced that he had the correct solution. He did not engage in an accountable discussion or build the solution collaboratively; however, he did make a distinguishable change in that he included the community as he solved the problem. This is a positive change in his approach to teamwork as he incorporates his teammates into his problem solving experience.

5.8.2 xLilPit21x

In this session xLilPit21x was accountable to community. He was accountable to the community when he accepted his position in the cooperative group assignment. He accommodated Cammalleri's decision to list the solution in the chat log by taking his list and transferring it to a text box in the workspace. He changed Cammalleri's list to be correct as it was transferred but did not mention his corrections. In addition, he was also accountable to the mathematics. When students are accountable to the mathematics, they are accountable to the knowledge and solution. He showed this accountability by altering the solution and correcting it without discussion that might have led to a negative outcome. He was more concerned with a correct solution than calling out the error of his teammate. This alteration shows the confidence that xLilPit21x was gaining while working within the VMT.

5.8.3 16oncebabyjesus

16oncebabyjesus displayed accountability to the community. He participated in the cooperative group process and commented at the end of the session that he viewed the solution and agreed with the answer of sixteen towers. He tried to engage and elicit Johnc250's participation in the beginning of the session, however, he became contentious at the end when he thought Johnc250 was giving credit to xLilPit21x for Cammalleri's work. His accountability has shifted from just Cammalleri to both Cammalleri and xLilPit21x.

5.8.4 Johnc250

In this session, Johnc250 evidenced accountability to the mathematics and attempted to be accountable to the community. His attempts at being accountable to the community were unsuccessful. When his involvement was not accepted or appreciated by the other members, he created a text box and began making his own list of towers. This can be seen as being accountable to the mathematics as he tried to create his own solution. Towards the end of the session when he confirmed to xLilPit21x that the textbox created by xLilPit21x was complete, he was accosted by 16oncebabyjesus. He not respond to the negative comments and he logged off ten minutes before the session was over.

5.8.5 Team Two

As the seventh session ended, Cammalleri, 16oncebabyjesus, and xLilPit21x had figured out how to work cohesively on a cooperative level. They worked together to create one team solution that each member either contributed to or agreed to at the end. Johnc250 does not have a sense of belongingness to this group as he directs his questions and answers to xLilPit21x and ignores comments or directives from Cammalleri or 16oncebabyjesus. The routine of the team is to follow Cammalleri's solution strategy..

6 Conclusion

6.1 Introduction

There is a need to research teaching practices that encourage accountability and empowerment within the subject of mathematics emphasizing the importance of a student's mathematical identity. As defined earlier, identity can be viewed as a set of stories about a person. Their stories, found in the preceding results chapter, constructed new identities through social interaction in their personal VMT community. With the increased demand for online courses, it is important we understand how students' mathematical identity can be affected in a synchronous computer networked classroom.

6.2 Limitations

The study provided evidence for how collaborative group interaction could encourage accountability to community, accountability to mathematics and empowerment that would ultimately affect mathematical identity. The first limitation to this study is the unique synchronous environment. Students that prefer to work alone or do not engage in the collaborative effort might look as if they are not involved in the mathematics.

Our study was the first VMT project to link two separate schools for a scheduled number of sessions throughout a school year. We proceeded through the study using a grounded approach to collecting evidence (Charmaz, 2006). I did not plan during the research to study students' mathematical identity. Therefore, the second limitation to

my study was that our Focus Group interviews, although well planned, did not include specific questions that related to identity. Additionally, the subjects of this study did not engage extensively or were absent on the scheduled day of the Focus Group interviews. Therefore the Focus Group interview data did not enhance my insight for this study and was useable for analysis. Interviews tailored to their feelings on the VMT experience might have offered more in depth data on how the sessions were affecting the mathematical identity of Team Two. I could only infer meaning from the chat logs and workspace with no other means to gage how they felt about their personal experience.

6.3 Findings

This section will present the findings that follow from the data analysis discussed in Chapter Five. Two research questions guided analyses of data in this study. The first question concerns individual mathematical identity: What aspect of a students' mathematical identity is transformed from their involvement in an online computer environment? This study focuses specifically on their first seven sessions in the Fall of 2008. The evidence describes their accountability to the community and accountability to the mathematics (Michaels, O'Connor, & Resnick, 2008), as well as their sense of empowerment (Ernest, 202) as they collaborated in the virtual chat room. Over the course of seven sessions, the students shifted from individual competitive work to more group cooperation and collaboration. The coding (see page 42 in Methodology section) used for this analysis assisted in finding instances in encouragement, leadership and empowerment which ultimately helped me to understand who was accountable to community, accountable to the mathematics, and who was empowered by the experience of working in small groups to solve open-ended mathematics problems in an online

communication environment. Achieving accountability in mathematics can be an empowering experience and may affect students' mathematical identity in the sense that they develop a stronger relationship with the subject of mathematics.

The second research question concerns a small, collaborative group of students as a community of learners: How does a collaborative group create a sense of belongingness that can be realized through a shared social identity between group members? Based on the results presented in the previous chapter, I will discuss how the group negotiated their roles and created rituals that facilitated the normative identity in the community of learners (Cobb, et al., 2008; Stahl, 2009c). By the normative identity I mean the unique environment that Team Two established for themselves. If the normative identity a student establishes in the mathematics classroom will have an effect on their personal identity with the subject, then the normative identity that was present in the VMT chat room had a personal affect on the participation of the members of Team Two.

6.3.1 Accountability to Community

Accountability to community means that group members listen to each other, build on each another's ideas, and question each other to expand on their own individual ideas (Michaels, et al., 2008). In the data, participants engaged in two different forms of communication to be accountable to one another. In one form, they were able to type their expressions into the chat and, in the other, create representations using the workspace. Accountable talk emerged in the chat as encouraging comments, agreement, and asking questions. When the students were engaged in accountable talk they were

being accountable to community. Contemporaneous teacher involvement was held to a minimum so as not to interfere with the students to develop their accountability to community.

As the students began working in the VMT, accountability to community was not expected in the first session as we anticipated some apprehension to the new experience. xLilPit21x displayed a strong sense of accountability to the community from the first session till the last. He most often began his chat statements with the words, “we,” and “let’s,” as he encouraged the team to work together. He asked questions and attempted to answer questions posed to him contributing to the accountable talk of his group. Whether the solution was his or his teammates, he most often authored the summary page sometimes staying after class time had ended. He was obligated to his teams’ success. In the beginning he would work on his own solution while at the same time interact with his teammates about their solution strategies. If needed, he would compare his solution to others. Towards the end, he began to work at more of collaborative level as he advocated for a single solution from the group. When another teammate took control of the problem solving process, xLilPit21x attended to the process and acted more as a recorder of the his teammate’s strategy. He showed accountability to the community when he fixed his teammates solution in the recording process but did not mention the mistake. It was important to xLilPit21x that the team worked together to solve the task; therefore he was accountable to the community.

Cammalleri’s mathematical identity transformed with a modest shift in his accountability to the community. In the first two sessions, he did not consider his teammates’ solutions or strategies. He did not answer questions or seem to listen to

suggestions about the mathematics. He did not show evidence of accountability to the community. As the sessions progressed, he began to display evidence of accountability by asking whether his teammates agreed with his solutions and, in the sixth session, he considered a solution other than his own. As he developed a sense of himself in relation to the group, he began to value other members of the team. Cammalleri shifted from individual work to a cooperative method of solving the tasks as he led the team as an expositor in the last two sessions. Exposition is the scenario where one person tells the story or directs the team as to how to solve the task (Stahl, 2009c). He organized his teammates' participation by assigning specific tasks. Cammalleri entered a list of combinations into the chat while one teammate kept a running count and another teammate transferred his list to a text box on the workspace. At the end, he commended his teammates for their good work. Although he considered the mathematics his own individual accomplishment, he included them in the process. Cammalleri had become accountable for his teammates' actions during the session and this was a shift towards group collaboration and being accountable to the community.

16oncebabyjesus' chat entries were not frequent, yet the content of his contributions were pivotal to the community coming together. His accountability to community evolved during the study, in that, he expanded his definition of community. At first his accountability was exclusively slanted towards his co-located teammate Cammallari. He assisted him during every session by enumerating and defending his solutions. When Cammalleri was not present, 16oncebabyjesus' involvement was adrift. His mathematical identity was transformed as he expanded his notion of community as the sessions progressed. Evidence shows that he began to value solutions other than

Cammalleri's and considered each member of the team by his actions. He brought the community together by making the others feel their contributions were valued. He was always affable and courteous to everyone in the VMT room, and used humor when commenting other teammates' solutions. When negative comments threatened the harmony of the team, 16oncebabyjesus would mitigate.

Johnc250 struggled with his accountability to community. There is evidence in the beginning of his involvement being oppressed by the other members as they ignored his questions and mocked his work ethic. His lack of contribution was construed as inattentive and negative by his other teammates. In the fourth session, Johnc250 was very active and argued his point contrary to Cammalleri's solution. However, during the session and into the next session, his solution was never accepted or revisited and he appeared to harbored anger towards Cammalleri in the sixth and seventh session. Evidence of this anger was presented as examples of unconstructive behavior in the last two sessions. In the sixth session he entered strings of useless numbers into the chat when the other three teammates were attempting to count the number of Pizzas with 4-tall toppings. When there was a question about where to enter the work, Johnc250 interjected into the discussion that the work should be in the workspace using all capital letters. The use of capital letters was not the normal setting for his entries and were interpreted as angry. In the last session, he did not engage with Cammalleri or 16oncebabyjesus as in continuously directed his entries to xLilPit21. He did not become accountable to community during this study.

The VMT created an environment that gave the students the opportunity to exercise agency over their own knowledge building . In order for them to build together

they had rely on one another, and in that, they became accountable to their community. As they practiced this accountability, they shifted away from their own individual competitive work and more towards the sharing of mathematical ideas (Ernest, 1998)

6.3.2 Accountability to the Mathematics

When students are accountable to the mathematics, they are accountable to the knowledge and solution. Their discourse might emphasize logical connections, explanations, and self-correction (Michaels, et al., 2008). Since the students were collaborating without contemporaneous teacher involvement on mathematical tasks not previously encountered, they had to build arguments or question the premise of others' claims with ideas that were undeveloped, incomplete, and even incorrect. Two of the students struggled and interpreted the tasks to the best of their ability and showed accountability to the mathematics.

xLilPit21x and Cammalleri displayed accountability to the mathematics as they tended to each problem task. At first, they worked separately on individual solutions and would question themselves or each other about their own work. In time, there was evidence of each one observing the other's work and making comments. During the last session, they worked cooperatively and collaboratively to solve the task. It was cooperative in a sense that Cammalleri assigned tasks for xLilPit21x and 16oncebabyjesus to do while he supplied the solution. However, I would consider it collaborative how the students worked together to build the solution. They were all checking the accuracy of information as it was entered by Cammalleri into the chat and then re-entered by xLilPit21x onto the workspace. A duplicate entry made by

Cammalleri was quietly fixed by xLilPit21x in the transfer and all members agreed the final solution was correct.

Mathematics should be about ideas, discussion and most importantly, participation in the practice of mathematics (Boaler & Humphreys, 2005). The classroom is not just about learning mathematics, it is about learning a set of practices that come to define that knowledge. As the students in Team Two began to value each others contributions, they were learning to share and co-participate in the practice of mathematics.

6.3.3 Mathematical and Epistemological Empowerment

Mathematical empowerment is gaining power over the language, skills, and practice of using and applying mathematics (Ernest, 2002). Empowerment is a learning process that students' must achieve on their own. It is not something done to or for someone; however, the process can be facilitated through classroom practices that guide students toward assuming responsibility and thus gaining empowerment (Stinson, 2004). Students cannot be autonomous learners or think critically without first becoming empowered (Ernest, 2002). The empowered learner will engage in accountable talk but also seek to develop an understanding on how mathematics fits into their world. Ernest (2002) divided empowerment into three different domains: social, mathematical, and epistemological. The students in this study showed signs of empowerment in the mathematical and epistemological domains. As the evidence is presented, I will further define the differences between the domains.

xLilPit21x and Cammalleri displayed mathematical empowerment over their semiotic representations in the VMT workspace as they became proficient at using

symbols and text in this social setting. They were able to read the texts and make sense of them, analyze and judge one another's work and the correctness of their mathematical solutions. They evidence this in their list making. As they solved the first three combinatorial tasks, their lists were random and without order. Each student created his own solution in the workspace and neither discussed nor referenced a pattern to justify their solution. In fact, they duplicated items on their own lists and gave little evidence that they analyzed each other's work. However, in the second to last session, both used the heuristic of controlling for variable to create two similar lists that were better organized and each was able to follow the others' work because of the organization. In the last session, when they work collaboratively and cooperatively to solve the task of Towers 3-tall, Cammalleri used the controlling for variable approach once more and his thinking was closely followed by xLilPit21x. Indeed, xLilPit21x was able to catch a duplicate in Cammalleri's work before posting the final answer in the workspace. With each new experience in the VMT room, they improved their skill of collaboration and mathematical practice.

Epistemological empowerment is the individual's growth in confidence in using, creating and validating mathematical knowledge (Ernest, 2002). Cammalleri evidenced growth in his epistemological empowerment as he became a better leader to his team. Without knowing his mathematical identity before the research began, I am unable to know if he has always been strong in his opinions mathematically, however, how he led the team and took into account his teammates' experience shifted in this study. He evidenced this by being less defiant and more confident in his leadership style. In the beginning sessions he did not want to engage in discussion about how he found his

answer, he preferred that they just accept his answer as the team solution. His engagement in the beginning was to use his teammates as an audience as he worked alone. When he was questioned or solutions that were contrary to his own were entered into the workspace he domineered the discussion about his solution being the correct solution. He did this by using one worded entries. By one worded entries I mean he would enter a sentence one word at a time which can be interpreted as aggressive behavior. In the last session Cammalleri completely acted as the expositor of the of the group. He assigned each teammember a task and the team cooperatively solved the task. His epistemological growth is evidenced in how he managed his leadership skills. Team Two went from a group of four boys individually solving combinatorial tasks to a cohesive team led by Cammalleri as the expositor.

xLilPit21x's epistemological growth was evidenced in his mathematical contributions. He was tenacious in his desire to always contribute a solution, however, he rarely stated that he was sure of his strategy. Most often, he began his statements with, "I think this is it," or, "I am not sure." However, in the second to last session, he created his own list in the workspace while Cammalleri listed his in the chat. When xLilPit21x was finished, he stated, "There are 17 pizzas." When questioned about his solution, he stated that he was sure of himself and that they could view them in the workspace. His epistemological empowerment was enhanced. The most poignant event that occurred to prove his epistemological growth was during the last session. Cammalleri assigned tasks to 16oncebabyjesus and xLilPit21x. 16oncebabyjesus was to tally Cammalleri's pizzas as he entered them into the chat and xLilPit21x's task was to read them and re-write them into a textbox in the workspace. The process was seamless

as the three boys worked to create a list of towers 3-tall and 4-tall, however, two times Cammalleri entered a duplicate, which was counted by 16oncebabyjesus, but not transferred to the workspace by xLilPit21x. He intentionally left out the duplicates thus correcting Cammalleri's mistakes. He did not at any time mention his corrections or his teammates error. This showed a strong sense of mathematical empowerment in xLilPit21x as he was confident enough to fix the problem and not feel the need to correct Cammalleri's error publically.

Sharing mathematical ideas is an empowering experience. From this empowerment, their mathematical identity is strengthened (Ernest, 1998).

6.3.4 Second Research Question

The second research question that guided my analysis builds on the theory that identities develop through social practice: How does the collaborative group create a sense of belongingness to the group that can be realized through a shared social identity between group members? Team Two developed their own unique practice, expectations of one another, and most importantly, how to work together as a unique community of practice. The evidence displays changing ways of participation as the students became more familiar with each other, their expectations of one another, and their personal affinity to the group.

As in the case of classroom practice, the role of a student is created through his or her interaction with the teacher and fellow classmates. In this study, the students had to create and negotiate shared interactions without contemporaneous teacher involvement. The normative identity, as defined by Boaler and Greeno (2000), is the sense of affiliation with the mathematical activity and how the student determines that obligation

to himself/herself. It is not how students view themselves; rather, it is how they negotiate their participation to become effective members of a group and create a sense of belongingness to the group. Normative identity is a communal notion rather than an individualistic notion (Cobb, et al., 2008). To establish a sense of belonging and shared social identity, through their interactions, students create rituals, and routines (Sfard & Prusak, 2005; Stahl, 2009b). Routines describe the recurrent pattern in the way the group solved and submitted the solutions. Rituals, by contrast, describe how the group interacted socially and became a community of practice. Both routines and rituals are necessary for a group to function.

Of the group of four students we called Team Two, three of the members—Cammalleri, xLilPit21x, and 16oncebabyjesus—had a sense of belongingness to the group and sense of achievement within the group. One member, Johnc250, did not identify with the group, and thus developed an oppositional identity within the group. As the events unfolded, moments that created team membership and commandship between the three members were, quite possibly, the same events that created alienation for Johnc250.

Greeting one another was a social ritual that was most often led by 16oncebabyjesus. He would not just enter the virtual room and say “hello,” he would make a point of individualizing his salutations. As the sessions progressed, he began to refer to each person by their actual name, as opposed to their chat handle. Most often, Johnc250 would not respond to the initial greeting. Upon leaving the room, each would say good-bye and leave within a few minutes of one another, except for Johnc250 who

was the first student to leave each session without making mention of his exit and most of the time it was several minutes before the session was over.

Each session started out with a few entries that were social in nature but Cammalleri, 16oncebabyjesus, or xLilPit21x would call their attention to the task at hand and encourage the group to get started.

xLilPit21x and Cammalleri were the most active in solving the tasks. The routine in this room was that each would each solve the problem individually and continuously talk to one another throughout, until they finally began to build one solution. 16oncebabyjesus' ritual was to stay close to their chat, counting, defending, and keeping the room jovial. Although he did not contribute to the mathematics, his presence was just as important as xLilPit21x and Cammalleri's as he would mediate disputes and negative behavior. The data show several occasions when he would refer to xLilPit21x as "bro." Cammalleri would refer to xLilPit21x, as Pedro, which was his actual name. None of the three boys extended this kind of friendship to Johnc250.

From the first session to the last, Johnc250 developed an oppositional identity to the group. His participation would be dormant for quite a bit of the session, or he would engage in unconstructive behavior such as doodling in the workspace or erasing their work. There were times when they referred to him as the "other John," since Cammalleri's first name was also John. And they made reference to the "John that did work, unlike fake John." The group was not forgiving when on other occasions he requested guidance from the group, asking "what problem are we working on" or "I just woke up, where are we?" His requests were ignored or he was directed to do something that he was unable to complete, such as the summary page. He attempted to created text

boxes and solve some of the problems on his own, but his efforts were ignored. In the sixth session, he directed his anger at Cammalleri by defending xLilPit21x's work; however, his entries were more angry than necessary for the content of the discussion. He showed his anger with entries that were all capital letters or one worded entries. By one-worded entries, I mean he would enter a sentence one word at a time very rapidly. This type of action evidenced frustration several times in this study. Even 16oncebabyjesus would show frustration at Johnc250 and referred to him as "son" on several occasions. Being called "son," was not accepted by Johnc250 who would most often respond with an angry chat entry followed by a returned statement followed by, "SON."

The final session was a clear example of how three of the boys became a team but did not include Johnc250. As stated in the results, Cammalleri, 16oncebabyjesus, and xLilPit21x worked cooperatively to build the solution for Towers 3-tall. Cammalleri entered the solution into the chat, 16oncebabyjesus tallied the entries, and xLilPit21x transferred the information onto the workspace. During this process, Johnc250 asked what he could do to help. He was directed by xLilPit21x to check the workspace and see if all the towers were there. When he responded directly to xLilPit21x that the towers were all there, he was verbally attacked by 16oncebabyjesus for giving xLilPit21x credit for work that was originally entered by Cammalleri. The dispute was mediated by xLilPit21x as he explained that Johnc250 was just trying to help. Cammalleri responded, "were the 3 amigos," and 16oncebabyjesus followed with, "slash three musketeers."

As the students engaged in multiple sessions within the VMT, they became a community of learners with rituals, routines and a social order in which they created their

own normative identity for the room. The normative identity was positive for three of the students as they learned to work and depend on one another to solve mathematical tasks.

6.4 Implications and Further Research

Several implications emerge from this study of the development of mathematical identity in an online, collaborative environment. One implication is that the mathematics education community needs to know more about how the composition of small groups in online, collaborative environments affect students' mathematical identity.

For instance, how do cultural and linguistic differences among participants affect the development of their mathematical identity, routines, and rituals in small, collaborative groups? Two of the four students from Team Two, xLilPit21x and Johnc250, spoke Spanish as their primary language. There has been recent research that Hispanic students are on average falling one grade below English speaking students in asynchronous online courses (Lohr, 2010). Our study which utilized a synchronous environment could potentially even make it more difficult if there was a weakness in the language due to the speed of the chats. It is possible that some of our students were not comfortable with the reading and writing of the language. The extent to which this condition might have affected their involvement or communication is unknown. Did this linguistic and cultural difference affect their performance or epistemological empowerment?

Another implication that stems from this study concerns the type and amount of teacher intervention. Researchers at Carnegie Mellon University are currently investigating how to facilitate students' interactions and questions as they work collaboratively in the VMT, using automated tutors that react to particular words or time

gaps to motivate and give the students direction (Graesser, VanLehn, Rose, Jordan, & Harter, 2001). This seems highly necessary since it is not possible for a teacher to monitor in real time and intervene in each room for every VMT session. It might not be necessary for every session to be monitored but it would assist groups when they were unsure how to proceed mathematically on a task. Either mathematics educators allow students to work without contemporaneous teacher involvement, as this study illustrated, or mathematics education researchers strive to create some automated situations to assist in students in their collaboration and mathematical development.

The combinatorial tasks selected for this dissertation come from a longitudinal study conducted at Rutgers University, under the supervision of Dr. Carolyn Maher and the late Dr. Robert B. Davis (Maher & Davis, 1995; Maher, et al., 2010). Because of the open-ended nature of the tasks, students will engage in heuristics and lines of reasoning that they would otherwise not develop by solving problems found in traditional textbooks. There have many case studies and extending studies using this combinatorial sequence, however, none have looked at how these problems have been solved in an online environment.

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8 Appendix

8.1 Combinatoric Problems

The following is a list of the combinatorics problems encountered by the students.

Most of them were completed in the fall except for Towers III and World Series which was assigned in the spring.

8.1.1 Cups, Bowls and Plates

Pretend that you work at Chuck E. Cheese and you are preparing for a birthday party. It's your job to set the places with cups, bowls and plates. The cups and bowls are blue or yellow. The plates are blue, yellow or orange.

Is it possible for 10 children at the party each to have a different combination of cup, bowl and plate?

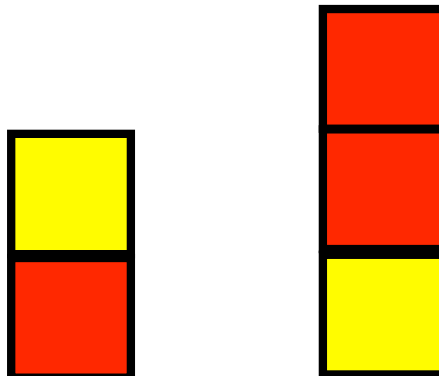
Show how you figured out the answer to the question.

Is it possible for 15 children at the party each to have a different combination of cup, bowl and plate?

Show how you figured out the answer to the question.

8.1.2 Towers Problem

Your team has an inexhaustible set of two colors of cubes. You will use these cubes to build towers. Pictured below are two types of towers: a tower 2-cubes tall and a tower 3-cubes tall.



Work together with your teammates to make as many different towers 4-cubes tall as possible when selecting from two colors. Find a way to convince each other that you have accounted for all possible towers 4-cubes tall.

How many different towers do you think are possible when selecting from two colors for each of the following situations: 5-cubes tall, 3-cubes tall and n -cubes tall? Work together to determine how many there are for each situation.

Work together to write a report of your findings for questions 1 and 2 above. It should include a justification that in each situation you have accounted for all possible towers. You want your report to convince others who are not in your team that your findings are correct. Enter your report into the Summary tab.

8.1.3 Pizza with Halves

A local pizza shop has asked us to help them keep track of pizza orders. Their standard “plain” pizza contains cheese with tomato sauce. In addition, a customer may order toppings on the whole or half of a pizza. A customer can then select from two different toppings: peppers and pepperoni.

How many different choices for pizza does a customer have?

Work together with your teammates to list all the possible different selections.

With your teammates, write a report of your findings for questions 1 and 2 above. It should include a justification that you have accounted for all possible pizzas. You want your report to convince others who are not in your team that your findings are correct. Post your report to the Summary tab.

After the last session, the owner of the pizza shop was confused by the different solutions she received from the different teams. The owner desires that your team urgently respond to these two requests:

From the Wiki tab, read the solution of each of the other teams. If your team agrees with another team’s solution, explain why in the Summary. If you do not agree with any other team’s solution, present a numbered list of all possible pizzas when choosing from the two toppings.

The owner is considering making available another topping—sausage—and wants your team to develop a numbered list of all possible pizzas when choosing from the three toppings. The owner needs to be certain that your list is complete and, therefore, wants you to convince her that your group’s solution is indeed correct.

8.1.4 The Four-Topping Pizza Problem

A new pizza shop has asked for help to design a form to keep track of certain pizza choices. They offer a cheese pizza with tomato sauce. A customer can then select from the following toppings: peppers, sausage, mushroom and pepperoni. (No halves!)

How many different choices for pizza does a customer have?

List all the possible different choices.

With your teammates, write a report of your findings for questions 1 and 2 above. It should include a justification that you have accounted for all possible pizzas. You want your report to convince others who are not in your team that your findings are correct. Post your report to the Summary tab.

8.1.5 Three-tall Towers Problem

Your team has an unlimited number of cubes in two different colors, red and yellow.

Work together with your teammates to plan a good way to find and list all possible, different towers 3-cubes tall when selecting from two colors. Find a way to convince each other that you have accounted for all possible, different 3-tall towers.

When you and your teammates are convinced that you have listed all possible, different 3-tall towers, write in the summary tab a report about how you developed your solution and why you are convinced that it is correct.

Use your solution for the Three-Tall Towers Problem to list as many different towers 4-cubes tall as is possible when selecting from two colors, red and yellow.

When you and your teammates are convinced that you have listed all possible, different 4-tall towers, write in the summary tab a report about how you developed your solution and why you are convinced that it is correct.

8.2 VMT Scripts

8.2.1 October 7, 2008

Script for eMath Research Session of Tuesday, 7 October 2008
Rutgers Preparatory School and Long Branch High School

1. **Location:** Please spread out so that you are not sitting near a student in your or another team. It's important that you not communicate outside of the VMT Chat system with others in your classroom. In our sessions, imagine that you are only able to interact with others through the VMT Chat.
2. **Think online:** For the purposes of our eMath project, we need you to think online, in the VMT Chat system. Please put all your ideas on the whiteboard or in the chat. This way, we can see how you are thinking about and solving the mathematics problems.
3. **Audience:** The work you do in the VMT Chat system at different stages has different audiences. In the first stage, when you work together with your teammates—in the chat and whiteboard—to think about and solve a given problem, your audience is your teammates, those with whom you discuss in your chat room. Only your team and the researchers see this work.

In the second stage, sometimes you will be asked to contribute some work to the Summary tab, which is a more public space. The audience for the work you place in the Summary tab will be the other teams. Other teams and yours as well as researchers will see this work. Present your summaries so that others will fully understand your ideas and be convinced by your explanations.

Please be reminded that the team at Rutgers and me will read your chat.

4. **Referencing tool:** I want to show you a useful feature of VMT Chat. You can create a referencing link from your chat to another chat message or from your chat to an object on the whiteboard, using the referencing tool. As you are creating a chat message and before you press the Return key, you double-click on a message or object to direct the referencing tool to link your message to the text or object. [Show this using the Game of Pig room.]

5. **Socialization:** As you begin today's session, so that your teammates get to know you better, tell them one thing that you want them to know about you. After each of you have done this, start reading today's problem in the Topic tab.
6. **Last five minutes:** I do not know where you are in working on the problem, but do not worry. You and your teammates will be able to complete the work on this problem during the next VMT session.

8.2.2 October 13, 2008

Script for *eMath* Research Session of Monday, 13 October 2008
Rutgers Preparatory School and Long Branch High School

1. **Think online:** For the purposes of our *eMath* project, we need you to think online, in the VMT Chat system. Please put all your ideas on the whiteboard or in the chat. This way, we can see how you are thinking about and solving the mathematics problems.
2. **Audience:** The work you do in the VMT Chat system at different stages has different audiences. In the first stage, when you work together with your teammates—in the chat and whiteboard—to think about and solve a given problem, your audience is your teammates, those with whom you discuss in your chat room. Only your team and the researchers see this work.

In the second stage, sometimes you will be asked to contribute some work to the Summary tab, which is a more public space. The audience for the work you place in the Summary tab will be the other teams. Other teams and yours as well as researchers will see this work. Present your summaries so that others will fully understand your ideas and be convinced by your explanations.

Please be reminded that the team at Rutgers and me will read your chat.

8.2.3 October 29, 2008

Script for *eMath* Research Session of Wednesday, 29 October 2008
Rutgers Preparatory School and Long Branch High School

1. Before opening your room, click on the wiki link (green symbol with red circle on top) and read the summaries of last sessions for each of the four rooms. The entries in each box of the table will connect you to a screenshot of the solution to the The Pizza with Halves Problem offered by another team. Please review each of the other team's solution before entering your room. When in the room there is a wiki tab if

- you need to remind yourself of a group summary.
3. Please re-read The Pizza with Halves Problem since it has been altered to include an additional question. This question—number 4— should be the focus of your work today.

8.2.4 November 24, 2008

Script for eMath Research Session of Wednesday, 24 November 2008
Rutgers Preparatory School and Long Branch High School

3. We want to encourage you to work collaboratively and by this we mean we want you to devise a plan and make decisions about the task.
4. The researchers have reviewed conversations where students seem frustrated and the source of this frustration seems to be a misunderstanding of the work being offered by other students in the group. Please explain your ideas to your teammates. Everyone will benefit from you helping your teammates understand how you interpret the task and how you think about a possible solution.
5. In the last session, you saw different ways of presenting ideas in the wiki. You may use any type of notation your group decides.
6. The work you do in the VMT Chat system at different stages has different audiences. In the first stage, when you work together with your teammates—in the chat and whiteboard—to think about and solve a given problem, your audience is your teammates, those with whom you discuss in your chat room. Only your team and the researchers see this work.
7. In the second stage, sometimes you will be asked to contribute some work to the Summary tab, which is a more public space. The audience for the work you place in the Summary tab will be the other teams. Other teams and yours as well as researchers will see this work. Present your summaries so that others will fully understand your ideas and be convinced by your explanations.
8. Please be reminded that the team at Rutgers and me will read your chat.

8.2.5 December 12, 2008

Script for eMath Research Session of Friday, 12 December 2008
Rutgers Preparatory School and Long Branch High School

1. We suggest that before you and your teammates begin to solve the problem that you explain to each other how you understand the problem. An explanation of how you understand the problem will help your partners when you begin to work on the solution.

2. Please be reminded that the Rutgers staff and I will read your chat.

8.3 VMT Html Files

8.3.1 Cups, Bowls, and Plates September 24, 2008

Chat Index	Date	Time of Posting	Author	Type	Content
1	09/24/2008		kate22	joins	joins the room
2	09/24/2008		kate22	leaves	leaves the room
3	09/24/2008		x Lil Pit 21 x	joins	joins the room
4	09/24/2008		johnc250	joins	joins the room
5	09/24/2008	14:09:20	x Lil Pit 21 x	chat	hey
6	09/24/2008		johnc250	leaves	leaves the room
7	09/24/2008	14:12:02	x Lil Pit 21 x	chat	i do not understnd anything in this chat
8	09/24/2008		johnc250	joins	joins the room
9	09/24/2008		x Lil Pit 21 x	chat	
10	09/24/2008	14:16:17	johnc250	chat	
11	09/24/2008	14:16:18	johnc250	chat	
12	09/24/2008	14:16:19	johnc250	chat	
13	09/24/2008	14:16:	johnc250	chat	

	08	20			
14	09/24/20 08	14:16: 22	x Lil Pit 21 x	chat	
15	09/24/20 08	14:16: 24	x Lil Pit 21 x	chat	
16	09/24/20 08	14:16: 25	x Lil Pit 21 x	chat	
17	09/24/20 08		cammalleri	joins	joins the room
18	09/24/20 08	14:17: 05	johnc250	chat	
19	09/24/20 08	14:17: 08	x Lil Pit 21 x	chat	hey'
20	09/24/20 08	14:17: 12	cammalleri	chat	hey
21	09/24/20 08	14:17: 15	x Lil Pit 21 x	chat	how are you doing
22	09/24/20 08	14:17: 20	cammalleri	chat	im good how are you
23	09/24/20 08	14:17: 28	johnc250	chat	not goof
24	09/24/20 08	14:17: 26	x Lil Pit 21 x	chat	im good too.
25	09/24/20 08	14:17: 30	johnc250	chat	good*
26	09/24/20 08	14:17: 32	cammalleri	chat	why
27	09/24/20 08	14:17: 38	johnc250	chat	because im next to lil pit
28	09/24/20 08	14:17: 52	cammalleri	chat	haha
29	09/24/20 08	14:18: 00	cammalleri	chat	whos lil pit
	09/24/20 08	14:18: 07	johnc250		[johnc250 has fully erased the chat message]
30	09/24/20 08	14:18: 09	johnc250	chat	the kid in the room from my school
31	09/24/20 08	14:18: 23	cammalleri	chat	boy or girl
32	09/24/20 08	14:18: 27	johnc250	chat	boy
33	09/24/20 08	14:18: 30	x Lil Pit 21 x	chat	im a boy
	09/24/20 08	14:18: 31	johnc250		[johnc250 has fully erased the chat message]

34	09/24/20 08	14:18: 36	cammalleri	chat	whats your name
	09/24/20 08	14:18: 36	x Lil Pit 21 x		[x Lil Pit 21 x has fully erased the chat message]
35	09/24/20 08	14:18: 43	x Lil Pit 21 x	chat	pedro
36	09/24/20 08	14:18: 45	johnc250	chat	who/>
37	09/24/20 08	14:18: 48	x Lil Pit 21 x	chat	what about yours
38	09/24/20 08	14:18: 54	cammalleri	chat	john
39	09/24/20 08	14:19: 00	johnc250	chat	my named is john ?
40	09/24/20 08	14:19: 12	x Lil Pit 21 x	chat	your a guy
41	09/24/20 08	14:19: 14	cammalleri	chat	so is mine
42	09/24/20 08	14:19: 39	johnc250	chat	i tought it was a girl
43	09/24/20 08	14:19: 50	cammalleri	chat	no
	09/24/20 08	14:19: 56	johnc250		[johnc250 has fully erased the chat message]
	09/24/20 08	14:20: 01	johnc250		[johnc250 has fully erased the chat message]
44	09/24/20 08	14:20: 04	johnc250	chat	isnt there a girl supposed to be here?
45	09/24/20 08	14:20: 21	cammalleri	chat	i dont knwo
46	09/24/20 08	14:20: 24	cammalleri	chat	know
47	09/24/20 08	14:20: 14	x Lil Pit 21 x	chat	oo ok. lets get this problem done so we have the rest of the time to talk
48	09/24/20 08	14:20: 28	johnc250	chat	oh true true
49	09/24/20 08	14:20: 57	cammalleri	chat	yeah
50	09/24/20 08	14:20: 58	cammalleri	chat	im a john c as well
	09/24/20 08	14:21: 25	johnc250		[johnc250 has fully erased the chat message]
51	09/24/20 08	14:21: 26	johnc250	chat	whats your last named/

52	09/24/2008	14:21:48	cammalleri	chat	cammalleri
53	09/24/2008	14:21:58	x Lil Pit 21 x	chat	oo ok
54	09/24/2008	14:22:00	x Lil Pit 21 x	chat	lets start this problem
55	09/24/2008	14:22:09	cammalleri	chat	i agree
	09/24/2008	14:22:20	johnc250		[johnc250 has fully erased the chat message]
56	09/24/2008		16oncebabyjesus	joins	joins the room
57	09/24/2008	14:23:01	16oncebabyjesus	chat	hey dudes
58	09/24/2008	14:23:04	x Lil Pit 21 x	chat	hey'
59	09/24/2008	14:23:09	johnc250	chat	hey
60	09/24/2008	14:23:11	johnc250	chat	is this a girl or guy?
61	09/24/2008	14:23:12	x Lil Pit 21 x	chat	arew you a girl
62	09/24/2008	14:23:19	cammalleri	chat	no its a guy
63	09/24/2008	14:23:26	x Lil Pit 21 x	chat	ahh man ok
64	09/24/2008	14:23:22	cammalleri	chat	his name is jordan
65	09/24/2008	14:23:40	16oncebabyjesus	chat	srry im not a chick
66	09/24/2008	14:23:43	x Lil Pit 21 x	chat	like michael jordan
	09/24/2008	14:23:53	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
67	09/24/2008	14:23:54	16oncebabyjesus	chat	exactly
68	09/24/2008	14:24:00	x Lil Pit 21 x	chat	oo cool.
69	09/24/2008	14:24:03	x Lil Pit 21 x	chat	lets get this problem done
70	09/24/2008	14:24:09	johnc250	chat	is there any hot girls over there?
	09/24/2008	14:24:16	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
71	09/24/2008	14:24:	16oncebabyjesus	chat	wats ur name

	08	18	sus		
72	09/24/2008	14:24:24	x Lil Pit 21 x	chat	Pedro
73	09/24/2008	14:24:28	cammalleri	chat	o yeah
74	09/24/2008	14:24:30	16oncebabyjesus	chat	like napolean dynamite pedro
75	09/24/2008	14:24:43	x Lil Pit 21 x	chat	exactly
76	09/24/2008	14:24:44	johnc250	chat	damn there aint no hot girls here
77	09/24/2008	14:24:58	cammalleri	chat	im sry
78	09/24/2008	14:25:08	johnc250	chat	its all good
	09/24/2008	14:25:12	johnc250		[johnc250 has fully erased the chat message]
	09/24/2008	14:25:11	x Lil Pit 21 x		[x Lil Pit 21 x has fully erased the chat message]
79	09/24/2008	14:25:12	johnc250	chat	lets start the problem
80	09/24/2008	14:25:23	16oncebabyjesus	chat	aite
	09/24/2008		cammalleri	wb	[cammalleri created a line]
	09/24/2008		cammalleri	wb	[cammalleri created a line]
	09/24/2008		cammalleri	wb	[cammalleri created a line]
	09/24/2008		cammalleri	wb	[cammalleri created a line]
	09/24/2008		cammalleri	wb	[cammalleri created a line]
81	09/24/2008	14:25:42	johnc250	chat	what are you doing?
	09/24/2008		cammalleri	wb	[cammalleri created a line]
	09/24/2008		cammalleri	wb	[cammalleri created a line]
	09/24/2008		cammalleri	wb	[cammalleri created a line]
	09/24/2008		cammalleri	wb	[cammalleri created a line]
82	09/24/2008		fflai	joins	joins the room

83	09/24/2008	14:26:23	johnc250	chat	whos fflai
84	09/24/2008	14:26:16	16oncebabyjesus	chat	yo who is fflai?
85	09/24/2008	14:26:27	cammalleri	chat	im just drawing
86	09/24/2008		Merges	joins	joins the room
87	09/24/2008	14:26:45	cammalleri	chat	merggggggg
88	09/24/2008	14:26:50	16oncebabyjesus	chat	at up merge
89	09/24/2008	14:26:54	x Lil Pit 21 x	chat	hey everybody
90	09/24/2008	14:26:58	cammalleri	chat	hey
	09/24/2008		cammalleri	START: TextEditing	
	09/24/2008		cammalleri	END:TextEditing	
	09/24/2008		cammalleri	wb	[cammalleri created a mindmap]
91	09/24/2008	14:27:14	johnc250	chat	come on lets start
92	09/24/2008	14:27:11	x Lil Pit 21 x	chat	fflai is a teacher. he's cool
	09/24/2008		cammalleri	wb	[cammalleri moved some object/s]
	09/24/2008	14:27:34	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
	09/24/2008		cammalleri	wb	[cammalleri deleted some object/s]
	09/24/2008		cammalleri	wb	[cammalleri deleted some object/s]
	09/24/2008		cammalleri	wb	[cammalleri resized some objects]
93	09/24/2008	14:27:44	16oncebabyjesus	chat	o aite im readin the problem now
	09/24/2008		cammalleri	wb	[cammalleri deleted some object/s]
	09/24/2008		cammalleri	wb	[cammalleri resized some objects]
	09/24/2008		cammalleri	wb	[cammalleri deleted some

	08				object/s]
	09/24/2008		cammalleri	wb	[cammalleri deleted some object/s]
	09/24/2008		cammalleri	wb	[cammalleri deleted some object/s]
	09/24/2008		cammalleri	wb	[cammalleri deleted some object/s]
94	09/24/2008	14:28:45	cammalleri	chat	i dont know how to do this problem.
95	09/24/2008	14:29:07	cammalleri	chat	do any of you?
96	09/24/2008	14:29:15	johnc250	chat	no
97	09/24/2008	14:29:16	johnc250	chat	im lost
98	09/24/2008	14:29:16	x Lil Pit 21 x	chat	its confusing but we can get through it
	09/24/2008	14:29:23	johnc250		[johnc250 has fully erased the chat message]
99	09/24/2008	14:29:33	cammalleri	chat	ok where do we start
100	09/24/2008	14:29:47	x Lil Pit 21 x	chat	im figuring that out
101	09/24/2008		powellab	joins	joins the room
102	09/24/2008	14:30:21	16oncebabyjesus	chat	powellab wat up
103	09/24/2008	14:30:45	johnc250	chat	whos that?
104	09/24/2008	14:30:49	powellab	chat	hi there, i'm just checking that the system is working well.
105	09/24/2008	14:31:12	johnc250	chat	yes its working good
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]

	08		sus		ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008	14:31:26	x Lil Pit 21 x		[x Lil Pit 21 x has fully erased the chat message]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x resized some objects]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		johnc250	wb	[johnc250 created a ellipse]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		johnc250	wb	[johnc250 moved some object/s]
	09/24/2008		johnc250	wb	[johnc250 moved some object/s]
	09/24/2008		16oncebabyjesus	wb	[16oncebabyjesus created a ellipse]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]

	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
106	09/24/2008	14:32:10	powellab	chat	thanks!
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		johnc250	wb	[johnc250 created a ellipse]
	09/24/2008		johnc250	wb	[johnc250 moved some object/s]
	09/24/2008		johnc250	wb	[johnc250 moved some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	09/24/2008		johnc250	wb	[johnc250 resized some objects]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
107	09/24/2008	14:33:05	16oncebabyjesus	chat	any body find a startin point
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a ellipse]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some

	08				object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008	14:33:41	x Lil Pit 21 x		[x Lil Pit 21 x has fully erased the chat message]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 changed layout]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 copied some object/s]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
108	09/24/2008	14:36:02	cammalleri	chat	what are you doing
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]

	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
109	09/24/2008	14:36:24	x Lil Pit 21 x	chat	i think i have an idea
110	09/24/2008	14:36:34	cammalleri	chat	o
111	09/24/2008	14:36:35	cammalleri	chat	ok
112	09/24/2008	14:36:35	cammalleri	chat	ill watch
	09/24/2008	14:36:35	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
113	09/24/2008	14:36:37	cammalleri	chat	because im lost
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		x Lil Pit 21 x	START:TextEditing	
114	09/24/2008	14:36:58	johnc250	chat	yea ill do the same
	09/24/2008		cammalleri	wb	[cammalleri deleted some object/s]
115	09/24/2008	14:36:48	16oncebabyjesus	chat	we have an idea to so wel watch urs first
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : blue=blue blue=yellow blue=orange]
116	09/24/2008	14:37:52	x Lil Pit 21 x	chat	ok
	09/24/2008		x Lil Pit 21 x	START:TextEdit	

				ing	
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	START:TextEditing	
117	09/24/2008	14:38:00	16oncebabyjesus	chat	can u multiply 10 times 30?
118	09/24/2008	14:38:15	16oncebabyjesus	chat	i mean 3
119	09/24/2008	14:38:25	16oncebabyjesus	chat	3*10
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : yellow-blue yellow=yellow yellow=orange]
	09/24/2008	14:38:40	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
	09/24/2008	14:38:43	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
120	09/24/2008		kate22	joins	joins the room
	09/24/2008	14:38:45	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
	09/24/2008	14:38:47	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
121	09/24/2008	14:38:49	johnc250	chat	30?
	09/24/2008	14:38:50	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
122	09/24/2008	14:38:57	16oncebabyjesus	chat	si
123	09/24/2008	14:39:27	16oncebabyjesus	chat	hey kate
	09/24/2008	14:39:24	johnc250		[johnc250 has fully erased the chat message]
124	09/24/2008	14:39:35	x Lil Pit 21 x	chat	thats my teacher.she wont talk
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some

	08				object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
125	09/24/2008	14:40:15	16oncebabyjesus	chat	oo
	09/24/2008		x Lil Pit 21 x	START: TextEditing	
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	START: TextEditing	
126	09/24/2008	14:40:30	16oncebabyjesus	chat	yea we d
127	09/24/2008	14:40:36	16oncebabyjesus	chat	tried dat too
128	09/24/2008	14:40:41	x Lil Pit 21 x	chat	lets see your idea
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		cammalleri	START: TextEditing	
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 created a rectangle]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]

	08				object/s]
	09/24/2008		johnc250	wb	[johnc250 copied some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	09/24/2008		johnc250	wb	[johnc250 deleted some object/s]
	09/24/2008		x Lil Pit 21 x	START: TextEditing	
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : blue=yellow blue=blue blue=orange]
	09/24/2008		x Lil Pit 21 x	START: TextEditing	
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : yellow=blue yellow=yellow yellow=orange]
	09/24/2008		x Lil Pit 21 x	START: TextEditing	
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : we need sets of three with the different colors and for ten kids]
	09/24/2008		johnc250	START: TextEditing	
	09/24/2008		johnc250	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	START: TextEditing	
	09/24/2008		cammalleri	END:Te	

	08			xtEditing	
	09/24/2008		cammalleri	wb	[cammalleri created a textbox : blue,blue,blue blue,blue,yellow blue,yellow,blue blue blue orange blue yellow orange blue yellow yellow yellow yellow yellow yellow blue blue yellow yellow blue yellow yellow orange yellow blue orange yellow blue yellow]
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008	14:45:21	cammalleri		[cammalleri has fully erased the chat message]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
129	09/24/2008	14:45:23	cammalleri	chat	i think thats all the combos
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x resized some objects]
130	09/24/2008	14:45:38	16oncebabyje sus	chat	thats 12
131	09/24/2008	14:45:43	cammalleri	chat	yeah
132	09/24/2008	14:45:43	16oncebabyje sus	chat	combos
133	09/24/2008	14:46:18	x Lil Pit 21 x	chat	thats good
134	09/24/2008	14:46:18	16oncebabyje sus	chat	hey merges
135	09/24/2008	14:46:32	x Lil Pit 21 x	chat	i had the same idea and i was doing it on paper b/c i didnt kno how to put it on the computer
136	09/24/2008	14:47:01	16oncebabyje sus	chat	oo lol
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
137	09/24/2008	14:47:13	cammalleri	chat	yeah

	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
138	09/24/2008	14:47:14	cammalleri	chat	and other kids in my class got 12 as well
139	09/24/2008	14:47:21	cammalleri	chat	so then there could be ten dif combos but not 15
140	09/24/2008	14:47:34	16oncebabyjesus	chat	word
141	09/24/2008	14:47:38	16oncebabyjesus	chat	holla
142	09/24/2008	14:48:09	x Lil Pit 21 x	chat	yea
143	09/24/2008	14:48:27	johnc250	chat	i have to go
144	09/24/2008	14:48:31	johnc250	chat	ill see you guys later
145	09/24/2008	14:48:36	x Lil Pit 21 x	chat	im staying
146	09/24/2008	14:48:40	cammalleri	chat	ok bye
147	09/24/2008		johnc250	leaves	leaves the room
148	09/24/2008	14:48:43	16oncebabyjesus	chat	peace
	09/24/2008		x Lil Pit 21 x	START:TextEditing	
149	09/24/2008	14:49:06	16oncebabyjesus	chat	hey john
150	09/24/2008	14:49:14	cammalleri	chat	howdey
151	09/24/2008	14:49:17	16oncebabyjesus	chat	wat u doin
152	09/24/2008	14:49:21	cammalleri	chat	lookin at you
153	09/24/2008	14:49:26	16oncebabyjesus	chat	whooooaaaa
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : * yes it's possible for 10 children]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]

154	09/24/2008	14:49:43	16oncebabyjesus	chat	i wish pedro was here lookin at u no homo
	09/24/2008		x Lil Pit 21 x	START:TextEditing	
155	09/24/2008	14:51:06	cammalleri	chat	i think that is the answer my friends
156	09/24/2008	14:51:19	16oncebabyjesus	chat	word we kant make 15
157	09/24/2008	14:51:16	cammalleri	chat	its possible for ten kids to have different combos but not 15 since there are a total of 12 combos
158	09/24/2008	14:51:36	x Lil Pit 21 x	chat	why you say that. is there someone i can see
159	09/24/2008	14:52:07	cammalleri	chat	no
160	09/24/2008	14:52:09	cammalleri	chat	sry
161	09/24/2008	14:52:11	cammalleri	chat	my friend is a little crazy
162	09/24/2008	14:52:35	16oncebabyjesus	chat	word a lil
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : * yes its possible for 10 children to have different combination of cups, bowls, and plates, but 15 kids cant b/c there is a total of 12 combinations.]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
163	09/24/2008	14:52:58	16oncebabyjesus	chat	correct
164	09/24/2008		16oncebabyjesus	chat	
165	09/24/2008		16oncebabyjesus	chat	
166	09/24/2008		16oncebabyjesus	chat	
167	09/24/2008		16oncebabyjesus	chat	
168	09/24/2008		16oncebabyjesus	chat	

	08		sus		
169	09/24/2008		16oncebabyje sus	chat	
170	09/24/2008		16oncebabyje sus	chat	
171	09/24/2008	14:52:59	cammalleri	chat	yes pedro
172	09/24/2008	14:53:15	x Lil Pit 21 x	chat	oo ok
173	09/24/2008	14:53:12	cammalleri	chat	i think thats the answer
	09/24/2008	14:53:21	cammalleri		[cammalleri has fully erased the chat message]
	09/24/2008	14:53:25	cammalleri		[cammalleri has fully erased the chat message]
174	09/24/2008	14:53:28	x Lil Pit 21 x	chat	thats the answer for the first one
	09/24/2008		x Lil Pit 21 x	START: TextEditing	
175	09/24/2008	14:54:08	cammalleri	chat	yeah
176	09/24/2008	14:54:19	cammalleri	chat	wait no thats the answer for both
177	09/24/2008	14:54:24	cammalleri	chat	yes you can for 10
178	09/24/2008	14:54:28	cammalleri	chat	no you cant for 15
179	09/24/2008	14:53:45	16oncebabyje sus	chat	mr.merges donalds on myspace
	09/24/2008		x Lil Pit 21 x	END:TextEditing	
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : no it's not possible for 15 children to have different combination of cups, bowls, and plates b/c there is only 12 combinations total.]
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
180	09/24/2008	14:54:53	cammalleri	chat	should i write it on the summary
181	09/24/2008	14:55:14	x Lil Pit 21 x	chat	yea i got it down

	09/24/2008	14:55:19	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
	09/24/2008	14:55:22	x Lil Pit 21 x		[x Lil Pit 21 x has fully erased the chat message]
182	09/24/2008	14:55:25	cammalleri	chat	ok well then im gunna copy it and paste it in summary
	09/24/2008		cammalleri	wb	[cammalleri resized some objects]
	09/24/2008		cammalleri	wb	[cammalleri moved some object/s]
183	09/24/2008	14:55:39	16oncebabyjesus	chat	aite
	09/24/2008		cammalleri	wb	[cammalleri resized some objects]
184	09/24/2008	14:55:33	x Lil Pit 21 x	chat	you can chat with me at BAJAPANTI236@AOL.COM
	09/24/2008		cammalleri	wb	[cammalleri resized some objects]
	09/24/2008		cammalleri	wb	[cammalleri moved some object/s]
	09/24/2008		cammalleri	wb	[cammalleri resized some objects]
	09/24/2008		cammalleri	wb	[cammalleri moved some object/s]
	09/24/2008		cammalleri	wb	[cammalleri resized some objects]
	09/24/2008		cammalleri	wb	[cammalleri moved some object/s]
	09/24/2008		cammalleri	wb	[cammalleri moved some object/s]
185	09/24/2008	14:56:41	cammalleri	chat	were not allowed to
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
186	09/24/2008	14:56:48	16oncebabyjesus	chat	srry
	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x copied some object/s]
	09/24/2008	14:57:13	cammalleri		[cammalleri has fully erased the chat message]
187	09/24/2008	14:57:19	cammalleri	chat	ok cool
188	09/24/2008	14:57:20	cammalleri	chat	good job

	09/24/2008		x Lil Pit 21 x	wb	[x Lil Pit 21 x copied some object/s]
189	09/24/2008	14:57:29	16oncebabyjesus	chat	word good job guys
190	09/24/2008	14:57:37	x Lil Pit 21 x	chat	all done
191	09/24/2008	14:57:41	x Lil Pit 21 x	chat	when you get home you can
192	09/24/2008	14:57:54	cammalleri	chat	why
193	09/24/2008	14:57:55	x Lil Pit 21 x	chat	alright everyone school is over here and i have to go to practice
194	09/24/2008	14:58:33	cammalleri	chat	o
195	09/24/2008	14:58:33	cammalleri	chat	ok
196	09/24/2008	14:58:34	cammalleri	chat	bye
197	09/24/2008	14:58:22	x Lil Pit 21 x	chat	so we can learn more about things
198	09/24/2008	14:58:34	16oncebabyjesus	chat	wat sport u play bro
199	09/24/2008	14:58:41	x Lil Pit 21 x	chat	bye
200	09/24/2008	14:58:45	x Lil Pit 21 x	chat	cross country and track
201	09/24/2008	14:58:54	x Lil Pit 21 x	chat	i run distance
202	09/24/2008	14:58:59	x Lil Pit 21 x	chat	bye
203	09/24/2008	14:58:50	16oncebabyjesus	chat	mr.merges donald is on myspace
204	09/24/2008		x Lil Pit 21 x	leaves	leaves the room
205	09/24/2008	14:59:47	cammalleri	chat	hey jordan were alone in a room
	09/24/2008	15:00:04	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
	09/24/2008	15:00:06	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
206	09/24/2008	15:00:07	16oncebabyjesus	chat	ooo watu think we shud do mr.
207	09/24/2008	15:00:27	16oncebabyjesus	chat	i think we shud figure some math problems

208	09/24/2008		kate22	leaves	leaves the room
209	09/24/2008		cammalleri	leaves	leaves the room
210	09/24/2008		16oncebabyje sus	leaves	leaves the room
211	09/24/2008		powellab	leaves	leaves the room
212	09/24/2008		Merges	leaves	leaves the room
213	09/24/2008		fflai	leaves	leaves the room
214	09/27/2008		tb	joins	joins the room
215	09/27/2008		tb	leaves	leaves the room
216	10/13/2008		Merges	joins	joins the room
217	10/13/2008		Merges	leaves	leaves the room

8.3.2 Towers October 7 and 13, 2008

Chat Index	Date	Time of Posting	Author	Type	Content
1	10/07/2008	14:12:23	powellab	joins	joins the room
2	10/07/2008	14:14:33	x lil pit 21 x	joins	joins the room
3	10/07/2008	14:14:38	johnc250	joins	joins the room
4	10/07/2008	14:15:26	x lil pit 21 x	chat	hey wats up
	10/07/2008	14:16:03	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:16:10	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:16:11	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:16:15	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
5	10/07/2008	14:16:	x lil pit 21 x	chat	square

	08	22			
	10/07/2008	14:16:24	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:16:28	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:16:29	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:16:31	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:32	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:34	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:36	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:37	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:38	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:39	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:39	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:16:41	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:41	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:42	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:43	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:44	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:44	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:16:45	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:46	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:46	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:47	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:48	johnc250	wb	[johnc250 created a rectangle]

	10/07/2008	14:16:49	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:49	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:50	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:51	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:52	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:52	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:16:53	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:16:53	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:17:03	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:17:08	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
6	10/07/2008	14:18:52	cammalleri	joins	joins the room
7	10/07/2008	14:18:58	x lil pit 21 x	chat	yo wats up
	10/07/2008	14:20:47	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:20:50	x lil pit 21 x	STAR T:Text Editing	
	10/07/2008	14:20:51	x lil pit 21 x	END: TextE diting	
	10/07/2008	14:20:55	x lil pit 21 x	STAR T:Text Editing	
8	10/07/2008	14:21:30	cammalleri	chat	hey
	10/07/2008	14:21:57	cammalleri	wb	[cammalleri deleted some object/s]
	10/07/2008	14:22:12	cammalleri	STAR T:Text Editing	
9	10/07/20	14:22:	x lil pit 21 x	chat	how you been

	08	26			
	10/07/2008	14:22:55	x lil pit 21 x	END: TextEditing	
	10/07/2008	14:22:55	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : 1. y,r,r,y 2. y,y,r,r 3. r,r,y,y 4.r,y,r,y 5. y,r,y,r 6. r,y,y,r]
	10/07/2008	14:23:06	cammalleri	END: TextEditing	
	10/07/2008	14:23:06	cammalleri	wb	[cammalleri created a textbox : yellow red red yellow red yellow yellow yellow red red yellow yellow red red yellow red yellow red]
	10/07/2008	14:23:10	cammalleri	wb	[cammalleri moved some object/s]
10	10/07/2008	14:23:24	cammalleri	chat	i think those are the only combos for the first question
11	10/07/2008	14:23:30	cammalleri	chat	ive been good you
	10/07/2008	14:23:33	cammalleri	wb	[cammalleri resized some objects]
	10/07/2008	14:23:35	cammalleri	wb	[cammalleri resized some objects]
	10/07/2008	14:23:36	cammalleri	wb	[cammalleri moved some object/s]
12	10/07/2008	14:23:50	x lil pit 21 x	chat	yea i think soo.
13	10/07/2008	14:23:56	x lil pit 21 x	chat	thats good i've been good too
14	10/07/2008	14:23:59	Merges	joins	joins the room
	10/07/2008	14:24:16	x lil pit 21 x	STAR T:TextEditing	
	10/07/2008	14:24:20	x lil pit 21 x	END: TextEditing	
	10/07/2008	14:24:20	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : 1.]
15	10/07/2008	14:24:28	cammalleri	chat	wait are you only allowed to have two colors in one combo
	10/07/2008	14:24:36	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]

16	10/07/2008	14:24:53	x lil pit 21 x	chat	no
17	10/07/2008	14:25:08	x lil pit 21 x	chat	they want a tower thats 4 cubes tall with two colors
	10/07/2008	14:25:28	cammalleri	STAR T:Text Editing	
	10/07/2008	14:26:05	cammalleri	STAR T:Text Editing	
	10/07/2008	14:26:15	cammalleri	END: TextE diting	
	10/07/2008	14:26:20	cammalleri	STAR T:Text Editing	
	10/07/2008	14:26:22	johnc250	wb	[johnc250 created a rectangle]
	10/07/2008	14:26:30	johnc250	STAR T:Text Editing	
	10/07/2008	14:27:53	johnc250	END: TextE diting	
	10/07/2008	14:27:53	johnc250	wb	[johnc250 created a textbox : r r y y r y r y r y r y r r y r y r]
	10/07/2008	14:28:41	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
18	10/07/2008	14:29:02	fflai	joins	joins the room
19	10/07/2008	14:29:25	cammalleri	chat	yeah i think thats it
	10/07/2008	14:29:35	cammalleri	END: TextE diting	
	10/07/2008	14:29:35	cammalleri	wb	[cammalleri created a textbox : yellow yellow red red yellow red yellow red yellow red red yellow red red yellow red red yellow red yellow]

20	10/07/2008	14:29:35	x lil pit 21 x	chat	im really lost
	10/07/2008	14:30:18	johnc250	STAR T:Text Editing	
	10/07/2008	14:30:19	johnc250	END: TextE diting	
	10/07/2008	14:30:22	johnc250	STAR T:Text Editing	
	10/07/2008	14:30:23	johnc250	END: TextE diting	
	10/07/2008	14:30:27	johnc250	STAR T:Text Editing	
	10/07/2008	14:30:29	johnc250	END: TextE diting	
	10/07/2008	14:30:29	johnc250	wb	[johnc250 moved some object/s]
	10/07/2008	14:30:33	johnc250	wb	[johnc250 moved some object/s]
	10/07/2008	14:30:38	johnc250	wb	[johnc250 deleted some object/s]
	10/07/2008	14:30:44	johnc250	STAR T:Text Editing	
	10/07/2008	14:30:47	johnc250	END: TextE diting	
	10/07/2008	14:30:49	johnc250	STAR T:Text Editing	
	10/07/2008	14:31:09	johnc250	END: TextE diting	
21	10/07/2008	14:31:17	cammalleri	chat	theres 6 different combos
22	10/07/2008	14:31:	cammalleri	chat	we did 1 and 2

	08	23			
23	10/07/2008	14:31:34	x lil pit 21 x	chat	yea
	10/07/2008	14:31:52	cammalleri	END: TextEditing	
	10/07/2008	14:31:52	cammalleri	wb	[cammalleri changed the text to:]
24	10/07/2008	14:31:58	x lil pit 21 x	chat	2. is asking about 5 and 3 cubes tall but then they throw in n-cubes tall
	10/07/2008	14:32:09	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:32:34	x lil pit 21 x	STAR T:TextEditing	
	10/07/2008	14:32:44	cammalleri		[cammalleri has fully erased the chat message]
	10/07/2008	14:32:45	cammalleri		[cammalleri has fully erased the chat message]
25	10/07/2008	14:32:47	cammalleri	chat	i know how
26	10/07/2008	14:32:48	cammalleri	chat	watch
	10/07/2008	14:32:55	x lil pit 21 x	END: TextEditing	
	10/07/2008	14:32:55	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : 3.]
	10/07/2008	14:32:56	cammalleri	STAR T:TextEditing	
	10/07/2008	14:33:00	x lil pit 21 x	STAR T:TextEditing	
27	10/07/2008	14:33:23	x lil pit 21 x	chat	ok
28	10/07/2008	14:34:07	cammalleri	chat	so theres 6 for 3 cubs
	10/07/2008	14:34:10	cammalleri	END: TextEditing	
	10/07/2008	14:34:	cammalleri	wb	[cammalleri created a textbox :

	08	10			3 cubes red red yellow red yellow red red yellow yellow yellow yellow red yellow red yellow yellow red red]
	10/07/2008	14:34:26	cammalleri	STAR T:TextEditing	
	10/07/2008	14:34:59	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/07/2008	14:35:07	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
29	10/07/2008	14:35:21	x lil pit 21 x	chat	write it on the workspace
30	10/07/2008	14:35:31	cammalleri	chat	wait for 1 theres more
	10/07/2008	14:35:56	cammalleri	STAR T:TextEditing	
	10/07/2008	14:36:36	x lil pit 21 x	END: TextEditing	
	10/07/2008	14:36:39	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:37:02	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:37:10	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
	10/07/2008	14:37:26	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/07/2008	14:37:31	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/07/2008	14:37:42	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:38:02	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
31	10/07/2008	14:38:16	x lil pit 21 x	chat	i dont kno how to do the c5cubes tall one
32	10/07/2008	14:38:34	cammalleri	chat	i think thats the correct answer for #1
	10/07/2008	14:38:37	cammalleri	END: TextEditing	
	10/07/2008	14:38:37	cammalleri	wb	[cammalleri created a textbox : 5 cubes]

	10/07/2008	14:38:39	cammalleri	wb	[cammalleri deleted some object/s]
	10/07/2008	14:38:41	cammalleri	wb	[cammalleri deleted some object/s]
	10/07/2008	14:38:48	cammalleri	wb	[cammalleri deleted some object/s]
	10/07/2008	14:38:51	cammalleri	wb	[cammalleri resized some objects]
	10/07/2008	14:38:52	cammalleri	wb	[cammalleri deleted some object/s]
	10/07/2008	14:39:09	cammalleri	END: TextEditing	
	10/07/2008	14:39:09	cammalleri	wb	[cammalleri created a textbox : red red red yellow red red yellow red red yellow red red yellow red yellow red yellow yellow red red red yellow yellow yellow red yellow red red yellow red red yellow]
33	10/07/2008	14:39:15	johnc250	chat	wich number are we doing?
	10/07/2008	14:39:17	cammalleri	wb	[cammalleri copied some object/s]
	10/07/2008	14:39:21	johnc250	wb	[johnc250 moved some object/s]
	10/07/2008	14:39:25	johnc250	wb	[johnc250 moved some object/s]
34	10/07/2008	14:39:26	x lil pit 21 x	chat	wheres number 1
	10/07/2008	14:39:26	cammalleri	wb	[cammalleri moved some object/s]
	10/07/2008	14:39:40	cammalleri		[cammalleri has fully erased the chat message]
35	10/07/2008	14:39:51	cammalleri	chat	look in the summary thats #1 and # 2
36	10/07/2008	14:39:58	cammalleri	chat	we just need 5 cubes for 2
37	10/07/2008	14:40:06	x lil pit 21 x	chat	ok'
38	10/07/2008	14:40:16	cammalleri	chat	idk for 5 cubes
39	10/07/2008	14:40:32	cammalleri	chat	wait yes i do

40	10/07/2008	14:40:33	cammalleri	chat	hold on
	10/07/2008	14:40:34	x lil pit 21 x	wb	[x lil pit 21 x created a icon]
	10/07/2008	14:40:38	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/07/2008	14:40:42	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/07/2008	14:40:45	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/07/2008	14:40:50	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/07/2008	14:40:57	cammalleri	STAR T:Text Editing	
	10/07/2008	14:40:57	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:40:58	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
41	10/07/2008	14:41:04	x lil pit 21 x	chat	ok
	10/07/2008	14:41:43	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:41:45	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:41:50	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:41:52	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:42:15	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/07/2008	14:42:15	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
42	10/07/2008	14:42:43	x lil pit 21 x	chat	good
	10/07/2008	14:43:32	johnc250		[johnc250 has fully erased the chat message]
43	10/07/2008	14:43:39	cammalleri	chat	i think thats it
44	10/07/2008	14:43:43	johnc250	chat	wait do we use 5 cubes for # 2?
45	10/07/2008	14:43:52	cammalleri	chat	yeah i just did that one
46	10/07/2008	14:44:	johnc250	chat	im so lost i just woke up

	08	09			
47	10/07/2008	14:44:23	cammalleri	chat	im sry to hear that
	10/07/2008	14:44:26	cammalleri		[cammalleri has fully erased the chat message]
48	10/07/2008	14:44:33	x lil pit 21 x	chat	hahahaha
49	10/07/2008	14:44:38	cammalleri	chat	make sure that there isnt anymore 5 cubes
	10/07/2008	14:45:51	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/07/2008	14:46:15	cammalleri	END: TextEditing	
	10/07/2008	14:46:15	cammalleri	wb	[cammalleri created a textbox : 5 cubes red red red yellow yellow red red yellow yellow red red yellow yellow red red red yellow red yellow red red yellow yellow red red red red yellow red yellow yellow red red red yellow]
50	10/07/2008	14:46:35	x lil pit 21 x	chat	lol
51	10/07/2008	14:46:53	x lil pit 21 x	leaves	leaves the room
	10/07/2008	14:47:42	cammalleri	wb	[cammalleri copied some object/s]
52	10/07/2008	14:47:42	x lil pit 21 x	joins	joins the room
	10/07/2008	14:48:17	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:48:21	johnc250	wb	[johnc250 moved some object/s]
	10/07/2008	14:48:29	johnc250	STAR T:TextEditing	
	10/07/2008	14:48:32	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/07/2008	14:48:44	johnc250	STAR T:TextEditing	

	10/07/2008	14:49:01	johnc250	END:TextEditing	
	10/07/2008	14:49:01	johnc250	wb	[johnc250 created a textbox : yellow red red yellow red]
	10/07/2008	14:49:04	johnc250	wb	[johnc250 moved some object/s]
	10/07/2008	14:49:09	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:49:14	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:49:18	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:49:21	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:49:24	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:49:25	x lil pit 21 x	wb	[x lil pit 21 x created a rectangle]
	10/07/2008	14:49:28	x lil pit 21 x	START:TextEditing	
	10/07/2008	14:49:29	x lil pit 21 x	END:TextEditing	
	10/07/2008	14:49:38	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/07/2008	14:49:45	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/07/2008	14:49:49	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/07/2008	14:49:53	johnc250	END:TextEditing	
53	10/07/2008	14:49:53	johnc250	leaves	leaves the room
54	10/07/2008	14:50:32	x lil pit 21 x	chat	how do you do the n-cubes
55	10/07/2008	14:50:52	cammalleri	chat	5 is the highest amount
56	10/07/2008	14:50:58	cammalleri	chat	theres only 3 red and 2 yellow
57	10/07/2008	14:51:13	x lil pit 21 x	chat	thats foer n cubes

58	10/07/2008	14:51:20	cammalleri	chat	i tink
	10/07/2008	14:51:23	cammalleri		[cammalleri has fully erased the chat message]
59	10/07/2008	14:51:29	cammalleri	chat	#1 #2 are done
60	10/07/2008	14:51:46	x lil pit 21 x	chat	yea
	10/07/2008	14:52:01	x lil pit 21 x	STAR T:Tex tEditi ng	
61	10/07/2008	14:52:05	cammalleri	chat	ok
	10/07/2008	14:52:08	x lil pit 21 x	END: TextE diting	
	10/07/2008	14:52:08	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : #2.]
	10/07/2008	14:52:11	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
62	10/07/2008	14:52:14	cammalleri	chat	we will do number 3 on monday
	10/07/2008	14:52:17	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/07/2008	14:52:21	x lil pit 21 x	STAR T:Tex tEditi ng	
	10/07/2008	14:52:24	x lil pit 21 x	END: TextE diting	
	10/07/2008	14:52:24	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : #1]
	10/07/2008	14:52:25	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
63	10/07/2008	14:52:40	x lil pit 21 x	chat	ok
64	10/07/2008	14:52:46	x lil pit 21 x	chat	see you monday then.
65	10/07/2008	14:52:48	x lil pit 21 x	chat	bye
66	10/07/2008	14:52:52	x lil pit 21 x	leaves	leaves the room
67	10/07/2008	14:53:16	cammalleri	leaves	leaves the room

68	10/07/2008	14:55:41	Merges	leaves	leaves the room
69	10/07/2008	14:59:01	powellab	leaves	leaves the room
70	10/08/2008	07:54:02	fflai	leaves	leaves the room
71	10/08/2008	15:31:06	fflai	joins	joins the room
72	10/08/2008	19:12:23	fflai	leaves	leaves the room
73	10/13/2008	12:37:23	kate22	joins	joins the room
74	10/13/2008	13:08:03	twesley84	joins	joins the room
75	10/13/2008	13:17:42	x lil pit 21 x	joins	joins the room
	10/13/2008	13:18:22	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
76	10/13/2008	13:20:00	16oncebabyje sus	joins	joins the room
77	10/13/2008	13:20:20	johnc250	joins	joins the room
78	10/13/2008	13:20:47	x lil pit 21 x	chat	HEY'
79	10/13/2008	13:22:23	16oncebabyje sus	chat	hey
80	10/13/2008	13:22:34	x lil pit 21 x	chat	ok
	10/13/2008	13:22:39	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
81	10/13/2008	13:22:50	x lil pit 21 x	chat	is the other kid here today
82	10/13/2008	13:22:54	johnc250	chat	no
83	10/13/2008	13:23:16	Merges	joins	joins the room
84	10/13/2008	13:23:49	16oncebabyje sus	chat	who john
85	10/13/2008	13:23:54	x lil pit 21 x	chat	yea
86	10/13/2008	13:23:55	johnc250	chat	im here
	10/13/2008	13:24:22	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:24:22	x lil pit 21 x	wb	[x lil pit 21 x deleted some

	08	25			object/s]
	10/13/2008	13:24:36	x lil pit 21 x	STAR T:Text Editing	
87	10/13/2008	13:24:46	16oncebabyjesus	chat	nah he mean da kid frm my skool
88	10/13/2008	13:24:50	fflai	joins	joins the room
89	10/13/2008	13:24:56	16oncebabyjesus	chat	idk i think he here
90	10/13/2008	13:25:12	x lil pit 21 x	chat	oo tell him to get on
91	10/13/2008	13:25:23	johnc250	chat	brb ima nap for a lil
92	10/13/2008	13:25:38	x lil pit 21 x	chat	iight gte out
93	10/13/2008	13:25:43	x lil pit 21 x	chat	*get
94	10/13/2008	13:25:54	johnc250	chat	out of where?
95	10/13/2008	13:26:02	x lil pit 21 x	chat	HERE
96	10/13/2008	13:26:07	johnc250	chat	why?
97	10/13/2008	13:26:21	x lil pit 21 x	chat	cuz i said sooo
98	10/13/2008	13:26:26	16oncebabyjesus	chat	lol
	10/13/2008	13:26:44	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
99	10/13/2008	13:26:47	16oncebabyjesus	chat	hahahahaha
100	10/13/2008	13:28:50	x lil pit 21 x	chat	im in puerto rico
101	10/13/2008	13:29:10	powellab	joins	joins the room
102	10/13/2008	13:29:44	x lil pit 21 x	chat	hows brazil mr powellab
	10/13/2008	13:30:19	16oncebabyjesus	wb	[16oncebabyjesus moved some object/s]
	10/13/2008	13:30:22	16oncebabyjesus	wb	[16oncebabyjesus moved some object/s]
	10/13/2008	13:30:24	16oncebabyjesus	wb	[16oncebabyjesus moved some object/s]

	10/13/2008	13:30:34	16oncebabyjesus	STAR T:TextEditing	
	10/13/2008	13:30:45	16oncebabyjesus	END:TextEditing	
103	10/13/2008	13:31:24	powellab	chat	It,
104	10/13/2008	13:31:37	powellab	chat	it is fine.
105	10/13/2008	13:31:50	x lil pit 21 x	chat	oo thats sweet
106	10/13/2008	13:32:13	johnc250	leaves	leaves the room
107	10/13/2008	13:34:46	16oncebabyjesus	chat	u found anything
	10/13/2008	13:35:17	16oncebabyjesus	wb	[16oncebabyjesus resized some objects]
	10/13/2008	13:35:20	16oncebabyjesus	STAR T:TextEditing	
	10/13/2008	13:35:46	16oncebabyjesus	END:TextEditing	
	10/13/2008	13:35:46	16oncebabyjesus	wb	[16oncebabyjesus changed the text to: 1#1#111]
	10/13/2008	13:37:01	x lil pit 21 x	END:TextEditing	
	10/13/2008	13:37:01	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : 3. The answers my fellow teammates and I have found are the answers for 1 and 2. #1only has 10 combinations when you use only two other colors. We used red and yellow and only came up with 10 combinations.#2 with 5 cubes only has 9 combinations and with 3 cubes theres only 6 combonations]
	10/13/2008	13:37:08	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]

	10/13/2008	13:37:13	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:37:18	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
108	10/13/2008	13:37:25	x lil pit 21 x	chat	all done
109	10/13/2008	13:37:43	x lil pit 21 x	chat	Kate22- im done
110	10/13/2008	13:38:10	x lil pit 21 x	chat	is it nice and hot in brazil?
111	10/13/2008	13:38:28	johnc250	joins	joins the room
112	10/13/2008	13:38:45	16oncebabyjesus	chat	good gob
113	10/13/2008	13:39:00	16oncebabyjesus	chat	*job
114	10/13/2008	13:39:31	x lil pit 21 x	chat	we did it last time and then i just had to write number 3
115	10/13/2008	13:39:36	johnc250	chat	im back
116	10/13/2008	13:39:54	16oncebabyjesus	chat	oo wasnt here
117	10/13/2008	13:40:03	16oncebabyjesus	chat	how was ur nap lol
118	10/13/2008	13:40:30	johnc250	chat	i didnt take a nap lol my internet wasnt working so i had to get a different computer
119	10/13/2008	13:40:38	16oncebabyjesus	chat	oo lol
120	10/13/2008	13:40:51	johnc250	chat	i agree
	10/13/2008	13:40:53	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:40:54	16oncebabyjesus	wb	[16oncebabyjesus moved some object/s]
	10/13/2008	13:40:55	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:40:59	16oncebabyjesus	wb	[16oncebabyjesus moved some object/s]
	10/13/2008	13:41:03	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:41:03	16oncebabyjesus	wb	[16oncebabyjesus moved some object/s]
	10/13/2008	13:41:07	16oncebabyjesus	wb	[16oncebabyjesus moved some object/s]

	10/13/2008	13:41:09	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:41:14	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:41:18	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:41:23	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:41:28	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
121	10/13/2008	13:41:29	johnc250	chat	why pedro why?
	10/13/2008	13:41:31	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:41:32	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:41:35	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:41:35	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:41:37	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:41:41	johnc250	wb	[johnc250 resized some objects]
122	10/13/2008	13:41:42	x lil pit 21 x	chat	cuz we had the answer already'
	10/13/2008	13:41:43	johnc250	wb	[johnc250 resized some objects]
	10/13/2008	13:41:47	johnc250	wb	[johnc250 resized some objects]
	10/13/2008	13:41:52	johnc250	wb	[johnc250 resized some objects]
	10/13/2008	13:41:53	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:41:56	johnc250	wb	[johnc250 resized some objects]
	10/13/2008	13:41:58	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:42:01	johnc250	wb	[johnc250 resized some objects]
	10/13/2008	13:42:05	johnc250	wb	[johnc250 resized some objects]
	10/13/2008	13:42:08	johnc250	wb	[johnc250 resized some objects]
	10/13/2008	13:42:	johnc250	wb	[johnc250 moved some object/s]

	08	10]
	10/13/2008	13:42:12	johnc250	wb	[johnc250 resized some objects]
	10/13/2008	13:42:19	johnc250	wb	[johnc250 resized some objects]
	10/13/2008	13:42:23	johnc250	wb	[johnc250 moved some object/s]
123	10/13/2008	13:42:30	johnc250	chat	true true
	10/13/2008	13:42:49	x lil pit 21 x	wb	[x lil pit 21 x created a image]
	10/13/2008	13:43:01	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:43:03	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:43:06	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:43:06	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:43:09	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:43:11	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:43:12	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:43:13	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:43:16	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:43:18	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:43:18	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:43:19	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:43:20	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:43:22	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:43:23	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:43:24	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:43:29	x lil pit 21 x	wb	[x lil pit 21 x created a scribble]

	10/13/2008	13:43:29	x lil pit 21 x	wb	[x lil pit 21 x created a scribble]
	10/13/2008	13:43:36	x lil pit 21 x	wb	[x lil pit 21 x created a scribble]
	10/13/2008	13:43:43	x lil pit 21 x	wb	[x lil pit 21 x created a scribble]
	10/13/2008	13:43:44	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:45	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:47	x lil pit 21 x	wb	[x lil pit 21 x created a scribble]
	10/13/2008	13:43:47	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:48	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:50	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:50	x lil pit 21 x	wb	[x lil pit 21 x created a scribble]
	10/13/2008	13:43:51	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:52	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:53	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:54	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:54	x lil pit 21 x	wb	[x lil pit 21 x created a scribble]
	10/13/2008	13:43:54	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:56	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:56	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:57	x lil pit 21 x	wb	[x lil pit 21 x created a scribble]
	10/13/2008	13:43:57	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:58	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:59	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:43:	johnc250	wb	[johnc250 created a line]

	08	59			
	10/13/2008	13:44:00	x lil pit 21 x	wb	[x lil pit 21 x created a scribble]
	10/13/2008	13:44:00	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:01	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:01	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:02	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:02	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:03	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:04	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:05	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:06	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:06	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:06	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:08	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:08	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:09	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:10	johnc250	wb	[johnc250 created a line]
	10/13/2008	13:44:14	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/13/2008	13:44:23	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:44:26	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:29	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:30	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/13/2008	13:44:33	johnc250	wb	[johnc250 created a scribble]

	10/13/2008	13:44:34	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:35	johnc250	wb	[johnc250 created a scribble]
124	10/13/2008	13:44:36	16oncebabyjesus	chat	good job
	10/13/2008	13:44:36	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:44:37	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:38	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:39	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:44:41	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:45	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:46	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/13/2008	13:44:47	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:49	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:51	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:55	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:44:56	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/13/2008	13:44:56	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:45:01	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:45:04	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:45:05	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
125	10/13/2008	13:45:05	16oncebabyjesus	chat	tell me y we got skool tday lol dis suks
	10/13/2008	13:45:06	johnc250	wb	[johnc250 created a scribble]
	10/13/2008	13:45:17	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:45:	x lil pit 21 x	wb	[x lil pit 21 x moved some

	08	18			object/s]
	10/13/2008	13:45:20	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:45:28	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
126	10/13/2008	13:45:29	johnc250	chat	yeah i know all the other schools around here are off
127	10/13/2008	13:45:36	x lil pit 21 x	chat	we do too
128	10/13/2008	13:45:58	x lil pit 21 x	chat	we had off thursday adn friday
	10/13/2008	13:46:18	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:46:32	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:46:32	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:46:33	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:46:34	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:46:39	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/13/2008	13:46:41	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:46:46	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/13/2008	13:46:48	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:46:51	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
129	10/13/2008	13:46:51	johnc250	chat	and saturday and sunday =)\
	10/13/2008	13:46:53	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:46:57	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/13/2008	13:47:02	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:47:08	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/13/2008	13:47:10	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:47:14	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]

	10/13/20 08	13:47: 35	johnc250	wb	[johnc250 locked some object/s]
	10/13/20 08	13:48: 19	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/20 08	13:48: 23	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/20 08	13:48: 41	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/20 08	13:48: 43	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
130	10/13/20 08	13:48: 44	16oncebabyje sus	chat	word
	10/13/20 08	13:49: 06	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
131	10/13/20 08	13:49: 31	x lil pit 21 x	chat	we just have to make our answer convincing so when other poeple look at it they can know why thats the answer not anything else
132	10/13/20 08	13:49: 46	16oncebabyje sus	chat	aite
133	10/13/20 08	13:50: 34	16oncebabyje sus	chat	do u lke john
134	10/13/20 08	13:50: 48	johnc250	chat	what?
135	10/13/20 08	13:50: 55	16oncebabyje sus	chat	not u lol
136	10/13/20 08	13:51: 02	johnc250	chat	oh haha
	10/13/20 08	13:51: 31	johnc250		[johnc250 has fully erased the chat message]
137	10/13/20 08	13:51: 39	johnc250	chat	predo what do we now?.
138	10/13/20 08	13:52: 56	16oncebabyje sus	chat	chill lol
139	10/13/20 08	13:53: 26	x lil pit 21 x	chat	hahaha
140	10/13/20 08	13:53: 34	x lil pit 21 x	chat	the other john is cool
	10/13/20 08	13:53: 40	johnc250		[johnc250 has fully erased the chat message]
141	10/13/20 08	13:53: 42	x lil pit 21 x	chat	he works unlike the one at my school
142	10/13/20 08	13:53: 46	johnc250	chat	john c yeah i know

	10/13/2008	13:53:49	x lil pit 21 x	STAR T:TextEditing	
143	10/13/2008	13:53:49	johnc250	chat	look at me
	10/13/2008	13:54:18	x lil pit 21 x	END:TextEditing	
144	10/13/2008	13:54:19	johnc250	chat	yo so what else do we do know?
145	10/13/2008	13:54:57	x lil pit 21 x	chat	we have to find the formula for number two b/c we didnt fibd that yet
	10/13/2008	13:55:08	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
146	10/13/2008	13:55:12	16oncebabyjesus	chat	oo aite
147	10/13/2008	13:55:16	x lil pit 21 x	chat	yea
148	10/13/2008	13:55:31	johnc250	chat	got you
	10/13/2008	13:56:14	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
149	10/13/2008	13:56:21	x lil pit 21 x	chat	the formula is n suare
	10/13/2008	13:56:30	x lil pit 21 x	STAR T:TextEditing	
150	10/13/2008	13:56:34	johnc250	chat	square**
	10/13/2008	13:56:58	x lil pit 21 x	END:TextEditing	
	10/13/2008	13:56:58	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : Formula= n Square]
	10/13/2008	13:57:01	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
151	10/13/2008	13:57:23	x lil pit 21 x	chat	haha
152	10/13/2008	13:57:50	16oncebabyjesus	chat	oo aite type it in
	10/13/2008	13:59:01	x lil pit 21 x	STAR T:TextEditing	

				ng	
	10/13/2008	13:59:03	x lil pit 21 x	END: TextEditing	
	10/13/2008	13:59:13	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/13/2008	13:59:17	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:59:20	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:59:21	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:59:24	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/13/2008	13:59:26	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:59:27	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:59:29	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/13/2008	13:59:31	x lil pit 21 x	STAR T:TextEditing	
	10/13/2008	13:59:33	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:59:36	johnc250	wb	[johnc250 moved some object/s]
	10/13/2008	13:59:51	x lil pit 21 x	END: TextEditing	
	10/13/2008	13:59:51	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: 5 cubes red red red yellow yellow red red yellow yellow red red yellow yellow red red red yellow red yellow red yellow red yellow red red yellow yellow red red red red red yellow red yellow red yellow red red yellow yellow red red red yellow]
	10/13/2008	13:59:52	x lil pit 21 x	STAR T:TextEditing	

	10/13/2008	14:00:02	johnc250	wb	[johnc250 changed layout]
153	10/13/2008	14:04:20	x lil pit 21 x	chat	you leave at 210
154	10/13/2008	14:04:23	x lil pit 21 x	chat	whats your name
155	10/13/2008	14:05:30	x lil pit 21 x	chat	why is your name 16ouncebabyjesus
	10/13/2008	14:06:42	johnc250		[johnc250 has fully erased the chat message]
	10/13/2008	14:06:43	johnc250		[johnc250 has fully erased the chat message]
156	10/13/2008	14:06:53	johnc250	chat	he's not there no more he left
157	10/13/2008	14:07:01	16oncebabyjesus	chat	nah im here
158	10/13/2008	14:07:03	x lil pit 21 x	chat	no he didnt
	10/13/2008	14:07:07	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
159	10/13/2008	14:07:19	x lil pit 21 x	chat	why is your name 16ouncebabyjesus
160	10/13/2008	14:07:30	johnc250	chat	because he wants it to be
161	10/13/2008	14:07:37	16oncebabyjesus	chat	its supposed to b 16ounce babyjesus frm ricky bobby in taigeda night
162	10/13/2008	14:07:44	johnc250	chat	why is your named x lil pit 21 x?
163	10/13/2008	14:07:58	x lil pit 21 x	chat	ooo
164	10/13/2008	14:08:06	16oncebabyjesus	chat	word
165	10/13/2008	14:08:25	x lil pit 21 x	chat	i was lost
	10/13/2008	14:08:31	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
166	10/13/2008	14:08:36	16oncebabyjesus	chat	dnt wrry bout it
167	10/13/2008	14:08:45	x lil pit 21 x	chat	ha
168	10/13/2008	14:08:49	16oncebabyjesus	chat	well im out gotta go
169	10/13/2008	14:08:55	16oncebabyjesus	leaves	leaves the room

170	10/13/2008	14:09:01	x lil pit 21 x	chat	that movie was funny
	10/13/2008	14:09:12	x lil pit 21 x	END: TextEditing	
171	10/13/2008	14:09:12	x lil pit 21 x	leaves	leaves the room
172	10/13/2008	14:09:49	johnc250	leaves	leaves the room
173	10/13/2008	14:10:14	kate22	leaves	leaves the room
174	10/13/2008	14:14:08	Merges	leaves	leaves the room
175	10/13/2008	14:17:31	fflai	leaves	leaves the room
176	10/13/2008	14:27:01	twesley84	leaves	leaves the room
177	10/13/2008	14:37:04	powellab	leaves	leaves the room
178	11/19/2008	17:39:19	kate22	joins	joins the room
179	11/19/2008	17:57:57	kate22	leaves	leaves the room

8.3.3 Pizza with Halves October 23 and 29, 2008

Chat Index	Date	Time of Posting	Author	Type	Content
1	10/23/2008	12:57:33	powellab	joins	joins the room
2	10/23/2008	13:14:49	Merges	joins	joins the room
3	10/23/2008	13:15:01	x lil pit 21 x	joins	joins the room
	10/23/2008	13:17:37	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/23/2008	13:17:45	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:17:51	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:17:58	x lil pit 21 x	wb	[x lil pit 21 x created a line]

	10/23/2008	13:18:06	x lil pit 21 x	wb	[x lil pit 21 x created a line]
4	10/23/2008	13:18:37	kate22	joins	joins the room
	10/23/2008	13:19:17	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:19:22	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:20:37	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/23/2008	13:20:45	x lil pit 21 x	wb	[x lil pit 21 x created a line]
5	10/23/2008	13:20:47	johnc250	joins	joins the room
	10/23/2008	13:20:52	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:21:00	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:21:09	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:21:17	johnc250		[johnc250 has fully erased the chat message]
6	10/23/2008	13:21:18	johnc250	chat	hmmmmmmmm m
7	10/23/2008	13:21:19	16oncebabyjesus	joins	joins the room
8	10/23/2008	13:21:19	johnc250	chat	hm
9	10/23/2008	13:21:22	johnc250	chat	hmhmmhmmh
10	10/23/2008	13:21:23	johnc250	chat	hii
11	10/23/2008	13:21:25	johnc250	chat	hii
12	10/23/2008	13:21:26	johnc250	chat	hii
13	10/23/2008	13:21:27	johnc250	chat	hii
14	10/23/2008	13:21:28	johnc250	chat	hii
	10/23/2008	13:21:28	johnc250		[johnc250 has fully erased the

					chat message]
15	10/23/2008	13:21:29	johnc250	chat	hii
16	10/23/2008	13:21:30	johnc250	chat	hii
17	10/23/2008	13:21:31	johnc250	chat	hii
18	10/23/2008	13:21:32	x lil pit 21 x	chat	hi
19	10/23/2008	13:21:33	x lil pit 21 x	chat	hi
20	10/23/2008	13:21:33	16oncebabyjesus	chat	yo wat up
21	10/23/2008	13:21:33	x lil pit 21 x	chat	hi
22	10/23/2008	13:21:34	x lil pit 21 x	chat	hi
23	10/23/2008	13:21:35	x lil pit 21 x	chat	hi
24	10/23/2008	13:21:43	x lil pit 21 x	chat	hey man how are you doing
	10/23/2008	13:21:48	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
	10/23/2008	13:21:57	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
25	10/23/2008	13:21:59	16oncebabyjesus	chat	pretty good u?
26	10/23/2008	13:22:05	johnc250	chat	im good you?
	10/23/2008	13:22:07	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:22:17	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/23/2008	13:22:20	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
27	10/23/2008	13:22:26	x lil pit 21 x	chat	im good
28	10/23/2008	13:22:31	x lil pit 21 x	chat	sick but hanging in there
29	10/23/2008	13:22:5	16oncebabyjesus	chat	oo

	8	9	s		
	10/23/2008	13:23:08	x lil pit 21 x	START:TextEditing	
30	10/23/2008	13:23:18	cammalleri	joins	joins the room
31	10/23/2008	13:23:56	cammalleri	chat	hey
32	10/23/2008	13:24:06	16oncebabyjesus	chat	wat up john
33	10/23/2008	13:24:13	cammalleri	chat	nothin eating
	10/23/2008	13:24:27	x lil pit 21 x	END:TextEditing	
	10/23/2008	13:24:27	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : plain w/ pepper plain w/ pepperoni whole w/ pepper whole w/ pepperoni]
	10/23/2008	13:24:35	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/23/2008	13:24:45	x lil pit 21 x	START:TextEditing	
	10/23/2008	13:24:47	x lil pit 21 x	END:TextEditing	
	10/23/2008	13:24:47	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : 1.]
	10/23/2008	13:24:50	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
34	10/23/2008	13:25:08	16oncebabyjesus	chat	can i get some ice tea lol
35	10/23/2008	13:25:16	x lil pit 21 x	chat	whats up cammalleri
36	10/23/2008	13:25:28	x lil pit 21 x	chat	where were you last time we came on. we needed your help
37	10/23/2008	13:25:34	cammalleri	chat	you can have a sip
38	10/23/2008	13:25:42	cammalleri	chat	haha im sry i was at college
39	10/23/2008	13:25:44	16oncebabyjesus	chat	yeesssssss

	8	5	s		
40	10/23/2008	13:25:53	x lil pit 21 x	chat	john want some water
	10/23/2008	13:26:05	cammalleri		[cammalleri has fully erased the chat message]
41	10/23/2008	13:26:12	x lil pit 21 x	chat	oo ok. what colleg?
42	10/23/2008	13:26:22	cammalleri	chat	muhlenberg college
	10/23/2008	13:26:26	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
43	10/23/2008	13:26:34	x lil pit 21 x	chat	oo ok
	10/23/2008	13:26:50	cammalleri	wb	[cammalleri moved some object/s]
	10/23/2008	13:26:53	cammalleri	wb	[cammalleri resized some objects]
	10/23/2008	13:27:26	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
44	10/23/2008	13:27:28	16oncebabyjesus	chat	wheres dat at??
	10/23/2008	13:27:31	x lil pit 21 x	START:TextEditing	
	10/23/2008	13:27:33	x lil pit 21 x	END:TextEditing	
	10/23/2008	13:27:33	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : 2.]
	10/23/2008	13:27:37	x lil pit 21 x	START:TextEditing	
	10/23/2008	13:27:39	cammalleri	START:TextEditing	
	10/23/2008	13:28:40	cammalleri	END:TextEditing	
	10/23/2008	13:28:40	cammalleri	wb	[cammalleri created a textbox : whole with pepparoni whole with peppers whole with both half with

					pepparoni half with pepper half with both]
45	10/23/2008	13:28:42	16oncebabyjesus	chat	y are all da problems proabability problems
46	10/23/2008	13:28:45	x lil pit 21 x	chat	lets do the work
47	10/23/2008	13:28:53	x lil pit 21 x	chat	thats how they are
48	10/23/2008	13:28:59	cammalleri	chat	i did the work
	10/23/2008	13:29:31	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/23/2008	13:29:37	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
49	10/23/2008	13:29:47	x lil pit 21 x	chat	theres only 6 different types
50	10/23/2008	13:29:54	16oncebabyjesus	chat	indeed
	10/23/2008	13:30:04	cammalleri	wb	[cammalleri copied some object/s]
	10/23/2008	13:30:08	cammalleri	wb	[cammalleri copied some object/s]
	10/23/2008	13:30:10	x lil pit 21 x	END:TextEditing	
	10/23/2008	13:30:13	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/23/2008	13:30:14	cammalleri	wb	[cammalleri moved some object/s]
	10/23/2008	13:30:15	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:30:20	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/23/2008	13:30:20	cammalleri	wb	[cammalleri deleted some object/s]

	10/23/2008	13:30:24	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/2008	13:30:24	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/23/2008	13:30:27	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:30:27	cammalleri	wb	[cammalleri moved some object/s]
	10/23/2008	13:30:30	cammalleri	wb	[cammalleri moved some object/s]
51	10/23/2008	13:30:35	x lil pit 21 x	chat	but it says in addition
52	10/23/2008	13:30:55	fflai	joins	joins the room
53	10/23/2008	13:30:56	x lil pit 21 x	chat	kate 22 can you help pedro
54	10/23/2008	13:31:14	johnc250	chat	lol
55	10/23/2008	13:31:15	cammalleri	chat	theres 8 different types
	10/23/2008	13:31:24	cammalleri	START:TextEditing	
	10/23/2008	13:31:25	cammalleri	END:TextEditing	
	10/23/2008	13:31:31	cammalleri	START:TextEditing	
	10/23/2008	13:31:42	cammalleri	END:TextEditing	
	10/23/2008	13:31:42	cammalleri	wb	[cammalleri changed the text to: whole with pepparoni whole with peppers whole with both half with pepparoni half with pepper half with both whole plain half plain]
	10/23/2008	13:31:42	x lil pit 21 x	START:TextEditing	

	8	7		g	
	10/23/2008	13:31:51	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/2008	13:31:55	cammalleri	wb	[cammalleri copied some object/s]
	10/23/2008	13:32:04	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/2008	13:32:07	cammalleri	wb	[cammalleri moved some object/s]
	10/23/2008	13:32:11	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/2008	13:32:13	cammalleri	wb	[cammalleri copied some object/s]
56	10/23/2008	13:32:17	16oncebabyjesus	chat	yea deres more than 6
57	10/23/2008	13:32:24	cammalleri	chat	just 8
	10/23/2008	13:32:27	cammalleri		[cammalleri has fully erased the chat message]
58	10/23/2008	13:32:43	cammalleri	chat	who wants to write the report
59	10/23/2008	13:32:57	16oncebabyjesus	chat	shoty not
60	10/23/2008	13:33:17	16oncebabyjesus	chat	isnt 1 n 2 da same question
	10/23/2008	13:33:27	johnc250		[johnc250 has fully erased the chat message]
61	10/23/2008	13:33:36	johnc250	chat	that's what i thought
	10/23/2008	13:33:47	cammalleri	wb	[cammalleri copied some object/s]
	10/23/2008	13:33:53	cammalleri	START:TextEditin g	
62	10/23/2008	13:33:59	cammalleri	chat	dont touch my work boys
63	10/23/2008	13:34:09	x lil pit 21 x	chat	i wont

	10/23/2008	13:34:16	cammalleri	END:TextEditing	
	10/23/2008	13:34:16	cammalleri	wb	[cammalleri created a textbox : 8 different choices]
	10/23/2008	13:34:50	johnc250	START:TextEditing	
64	10/23/2008	13:35:39	cammalleri	chat	lbhs boys..ill let you write the report since me and 16oncebabyjesus did the 8 choices
	10/23/2008	13:35:50	johnc250	END:TextEditing	
	10/23/2008	13:35:50	johnc250	wb	[johnc250 created a textbox : full peperoni full cheese full peppers half peperoni half cheese half peperoni and cheese]
65	10/23/2008	13:36:07	johnc250	chat	there's only 6
66	10/23/2008	13:36:16	cammalleri	chat	no theres 8
67	10/23/2008	13:36:20	cammalleri	chat	look at mine
68	10/23/2008	13:36:21	16oncebabyjesus	chat	8 son
69	10/23/2008	13:36:34	16oncebabyjesus	chat	take dat fake john
70	10/23/2008	13:36:36	johnc250	chat	how can you get a half plain?>
71	10/23/2008	13:36:47	cammalleri	chat	read the topic
72	10/23/2008	13:36:51	cammalleri	chat	it says you can get half
73	10/23/2008	13:37:18	johnc250	chat	yeah so you'll be getting only one half made not the other then
74	10/23/2008	13:37:2	16oncebabyjesus	chat	true

	8	6	s		
75	10/23/2008	13:37:50	cammalleri	chat	nooo you dont understad
76	10/23/2008	13:37:57	cammalleri	chat	those are the different choices you can get
77	10/23/2008	13:38:28	cammalleri	chat	you can get a whole with pepparoni
78	10/23/2008	13:38:34	cammalleri	chat	whole with pepper
	10/23/2008	13:38:36	cammalleri		[cammalleri has fully erased the chat message]
79	10/23/2008	13:38:39	cammalleri	chat	or whole with both
	10/23/2008	13:38:44	cammalleri		[cammalleri has fully erased the chat message]
80	10/23/2008	13:38:47	cammalleri	chat	and same for half
81	10/23/2008	13:38:55	cammalleri	chat	and then you can just get a whole plain
82	10/23/2008	13:39:00	cammalleri	chat	or a half plain
83	10/23/2008	13:39:00	x lil pit 21 x	chat	that gives you 6
84	10/23/2008	13:39:04	johnc250	chat	the pizza is plain so when you order it come ith tomato souce and cheese
	10/23/2008	13:39:27	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
85	10/23/2008	13:39:32	16oncebabyjesus	chat	dats 8 pedro
86	10/23/2008	13:39:34	cammalleri	chat	noo it says it comes with sauce and cheese
87	10/23/2008	13:39:42	16oncebabyjesus	chat	it comes with it
88	10/23/2008	13:39:50	x lil pit 21 x	chat	exactly
89	10/23/2008	13:39:55	cammalleri	chat	their standard

	8	3			"plain" pizza contains chese with tomato sauce
90	10/23/2008	13:40:40	johnc250	chat	yea so how can you get just have plain when the whole thing is with cheese?
91	10/23/2008	13:40:53	cammalleri	chat	plain is with cheese
92	10/23/2008	13:41:04	cammalleri	chat	if you order a pizza
93	10/23/2008	13:41:08	cammalleri	chat	you dont have to say with cheese
94	10/23/2008	13:41:10	cammalleri	chat	it comes on it
95	10/23/2008	13:41:11	johnc250	chat	yeah so you can't get half cause the whole thing will be with cheese
96	10/23/2008	13:41:21	cammalleri	chat	no its just half a pizze
97	10/23/2008	13:41:32	cammalleri	chat	4 slices not 8 slices
	10/23/2008	13:42:45	johnc250	START:TextEditing	
	10/23/2008	13:42:48	johnc250	END:TextEditing	
	10/23/2008	13:43:00	johnc250	START:TextEditing	
98	10/23/2008	13:43:08	x lil pit 21 x	chat	theres 7
99	10/23/2008	13:43:18	cammalleri	chat	how
	10/23/2008	13:43:19	johnc250		[johnc250 has fully erased the chat message]
100	10/23/2008	13:43:29	johnc250	chat	cause you cant get a half plain
101	10/23/2008	13:43:36	cammalleri	chat	read the topic
102	10/23/2008	13:43:39	cammalleri	chat	it says you can
	10/23/2008	13:44:14	Merges		[Merges has fully erased the chat message]

	10/23/2008	13:44:22	Merges	START:isTyping	[]
103	10/23/2008	13:44:27	x lil pit 21 x	chat	cuz u already have half with peppers or pepperoni or both but you cant have a half with cheese when the whole pie has cheese
104	10/23/2008	13:44:45	johnc250	chat	exactly
105	10/23/2008	13:45:09	16oncebabyjesus	chat	oo aite i see
	10/23/2008	13:45:18	x lil pit 21 x	END:TextEditing	
	10/23/2008	13:45:18	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : whole w/ pepperoni n cheese n sauce whole w/ peppers and cheese n sauce whole w/ both and cheese and sauce whole plain half w/ pepperoni and cheese and sauce half w/ pepper and cheese and suace half w/ both and cheese and sauce]
	10/23/2008	13:45:20	johnc250	END:TextEditing	
	10/23/2008	13:45:20	johnc250	wb	[johnc250 moved some object/s]
	10/23/2008	13:45:22	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:45:25	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:45:28	x lil pit 21 x	wb	[x lil pit 21 x moved some

					object/s]
	10/23/2008	13:45:28	johnc250	wb	[johnc250 moved some object/s]
	10/23/2008	13:45:32	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
106	10/23/2008	13:45:38	x lil pit 21 x	chat	yea
107	10/23/2008	13:45:45	cammalleri	chat	theres 6 then.i read the problem wrong
	10/23/2008	13:45:51	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
108	10/23/2008	13:45:55	johnc250	chat	told you
109	10/23/2008	13:46:11	x lil pit 21 x	chat	theres only 6
	10/23/2008	13:46:17	x lil pit 21 x	START:TextEditing	
	10/23/2008	13:46:23	x lil pit 21 x	END:TextEditing	
	10/23/2008	13:46:23	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: whole w/ pepperoni n cheese n sauce whole w/ peppers and cheese n sauce whole w/ both and cheese and sauce half w/ pepperoni and cheese and sauce half w/ pepper and cheese and suace half w/ both and cheese and sauce]
	10/23/2008	13:46:42	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/23/2008	13:46:45	x lil pit 21 x	START:TextEditing	
	10/23/2008	13:46:5	x lil pit 21 x	END:TextEditing	

	8	2			
	10/23/2008	13:46:52	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: 6 different choices]
	10/23/2008	13:46:56	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:47:01	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/23/2008	13:47:07	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:47:16	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
110	10/23/2008	13:47:19	cammalleri	chat	easy there..i read the problem wrong
	10/23/2008	13:47:25	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/2008	13:47:27	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/2008	13:47:33	cammalleri	wb	[cammalleri resized some objects]
111	10/23/2008	13:47:51	x lil pit 21 x	chat	its done. we just have to do the summary
	10/23/2008	13:47:57	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
112	10/23/2008	13:48:13	16oncebabyjesus	chat	it comes with cheese and sauce its a pizza
113	10/23/2008	13:48:15	cammalleri	chat	you still wrote it wrong
114	10/23/2008	13:48:20	cammalleri	chat	its whole pain
115	10/23/2008	13:48:26	cammalleri	chat	whole peppers
11	10/23/2008	13:48:33	cammalleri	chat	whole pepparoni

6	8	5			
11 7	10/23/2008	13:48:49	cammalleri	chat	half pepper half pepperoni
	10/23/2008	13:49:09	cammalleri	START:TextEditing	
	10/23/2008	13:49:29	x lil pit 21 x	START:TextEditing	
	10/23/2008	13:50:09	cammalleri	wb	[cammalleri copied some object/s]
	10/23/2008	13:50:12	cammalleri	wb	[cammalleri moved some object/s]
	10/23/2008	13:50:15	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/2008	13:50:18	cammalleri	wb	[cammalleri moved some object/s]
	10/23/2008	13:50:37	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/2008	13:51:01	cammalleri	wb	[cammalleri copied some object/s]
	10/23/2008	13:51:10	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/2008	13:51:16	cammalleri	END:TextEditing	
	10/23/2008	13:51:16	cammalleri	wb	[cammalleri created a textbox : whole plain whole pepper whole pepperoni half pepperoni half pepper half pepper half pepperoni]
	10/23/2008	13:51:22	cammalleri	wb	[cammalleri copied some object/s]
11 8	10/23/2008	13:51:28	cammalleri	chat	now look
11 9	10/23/2008	13:51:32	cammalleri	chat	thats right

	10/23/2008	13:51:54	johnc250	wb	[johnc250 deleted some object/s]
	10/23/2008	13:52:01	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:05	johnc250	START:TextEditing	
	10/23/2008	13:52:10	johnc250	END:TextEditing	
	10/23/2008	13:52:10	johnc250	wb	[johnc250 created a textbox : plain]
	10/23/2008	13:52:15	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:23	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:27	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:27	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:27	johnc250	wb	[johnc250 created a ellipse]
120	10/23/2008	13:52:29	16oncebabyjesus	chat	wat son
121	10/23/2008	13:52:29	cammalleri	chat	you dont need to do that
	10/23/2008	13:52:31	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:33	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:34	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:36	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:37	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:39	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:40	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:43	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:44	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:45	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:45	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:52:4	johnc250	START:TextEditing	

	8	9		g	
12 2	10/23/2008	13:52:52	cammalleri	chat	i have it all done in the summary
	10/23/2008	13:52:58	johnc250	END:TextEditing	
	10/23/2008	13:52:58	johnc250	wb	[johnc250 created a textbox : peroni]
	10/23/2008	13:52:58	johnc250	wb	[johnc250 created a ellipse]
12 3	10/23/2008	13:52:59	16oncebabyjesus	chat	are u drwing the peppronis lol
	10/23/2008	13:53:16	johnc250	wb	[johnc250 created a ellipse]
12 4	10/23/2008	13:53:24	16oncebabyjesus	chat	u dnt have to do all dat
	10/23/2008	13:53:25	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:53:25	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:53:26	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:53:30	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:53:31	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:53:33	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:53:34	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:53:35	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:53:36	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:53:36	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:53:37	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:53:37	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:53:38	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:53:39	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:53:39	johnc250	wb	[johnc250 created a scribble]

	8	9			a scribble]
	10/23/2008	13:53:44	johnc250	START:TextEditing	
	10/23/2008	13:53:52	johnc250	END:TextEditing	
	10/23/2008	13:53:52	johnc250	wb	[johnc250 created a textbox : pepers]
	10/23/2008	13:53:55	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:53:59	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:03	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:04	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:07	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:08	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:10	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:13	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:15	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:19	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:20	x lil pit 21 x	END:TextEditing	
	10/23/2008	13:54:20	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : There are only 7 different combinations for a customer to order. A Cutomer can not order a half of pie plain cuz the plain comes with cheese and sauce therefor you cant order a pie with half plain.]
	10/23/2008	13:54:2	johnc250	wb	[johnc250 created

	8	1			a ellipse]
	10/23/2008	13:54:27	johnc250	START:TextEditing	
	10/23/2008	13:54:33	x lil pit 21 x	START:TextEditing	
	10/23/2008	13:54:40	x lil pit 21 x	END:TextEditing	
	10/23/2008	13:54:40	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: pepperoni]
	10/23/2008	13:54:41	johnc250	END:TextEditing	
	10/23/2008	13:54:41	johnc250	wb	[johnc250 created a textbox : half plain peperoni]
	10/23/2008	13:54:43	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:54:45	x lil pit 21 x	START:TextEditing	
	10/23/2008	13:54:49	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:54	x lil pit 21 x	END:TextEditing	
	10/23/2008	13:54:54	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: pepperonieroni]
	10/23/2008	13:54:56	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:54:59	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:00	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:01	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:02	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:03	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:04	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:05	johnc250	wb	[johnc250 created a scribble]

	10/23/2008	13:55:06	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:08	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:09	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:10	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:13	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:55:18	johnc250	START:TextEditing	
125	10/23/2008	13:55:23	cammalleri	chat	bro i have all this done haha
	10/23/2008	13:55:29	cammalleri	wb	[cammalleri moved some object/s]
126	10/23/2008	13:55:31	x lil pit 21 x	chat	yea he doesnt but he's going to show how you get 7 combination
	10/23/2008	13:55:34	johnc250	END:TextEditing	
	10/23/2008	13:55:34	johnc250	wb	[johnc250 created a textbox : halp pepers half plain]
	10/23/2008	13:55:34	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:55:42	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:55:45	cammalleri	wb	[cammalleri resized some objects]
	10/23/2008	13:55:46	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:55:47	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:55:49	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:55:50	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:55:53	johnc250	wb	[johnc250 created a ellipse]
127	10/23/2008	13:55:55	cammalleri	chat	pedro theres only 6

	10/23/2008	13:55:56	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:55:57	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	13:56:00	johnc250	wb	[johnc250 created a ellipse]
128	10/23/2008	13:56:02	16oncebabyjesus	chat	dats only seis
	10/23/2008	13:56:04	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:06	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:06	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:06	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:07	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:07	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:08	johnc250	wb	[johnc250 created a scribble]
129	10/23/2008	13:56:09	16oncebabyjesus	chat	6
	10/23/2008	13:56:09	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:10	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:10	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:11	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	13:56:19	johnc250	START:TextEditing	
	10/23/2008	13:56:25	johnc250	END:TextEditing	
	10/23/2008	13:56:26	johnc250	START:TextEditing	
	10/23/2008	13:56:39	cammalleri	START:TextEditing	
	10/23/2008	13:56:43	cammalleri	END:TextEditing	
	10/23/2008	13:56:43	cammalleri	wb	[cammalleri changed the text to:

					There are only 6 different combinations for a customer to order. A Customer can not order a half of pie plain cuz the plain comes with cheese and sauce therefor you cant order a pie with half plain.]
	10/23/2008	13:57:23	johnc250	END:TextEditing	
	10/23/2008	13:57:23	johnc250	wb	[johnc250 created a textbox : half pepers half peproni]
	10/23/2008	13:57:50	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	13:58:04	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
130	10/23/2008	13:58:04	16oncebabyjesus	chat	pedro dta only six brother
	10/23/2008	13:58:08	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/23/2008	13:58:17	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:58:20	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:58:20	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:58:20	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:58:21	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:58:22	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:58:23	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:58:24	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/23/2008	13:58:25	x lil pit 21 x	wb	[x lil pit 21 x created a line]

13 1	10/23/200 8	13:58:3 2	16oncebabyjesu s	chat	is dat a sauce pizza
13 2	10/23/200 8	13:58:3 4	x lil pit 21 x	chat	i kno but im gonna finish it
	10/23/200 8	13:58:5 0	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/23/200 8	13:58:5 3	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/23/200 8	13:58:5 5	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/23/200 8	13:58:5 6	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/23/200 8	13:58:5 9	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/23/200 8	13:59:0 0	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/23/200 8	13:59:0 3	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
13 3	10/23/200 8	13:59:1 6	cammalleri	chat	you cant get a sauce pizza
	10/23/200 8	13:59:1 8	x lil pit 21 x	START:TextEditin g	
13 4	10/23/200 8	13:59:2 1	cammalleri	chat	they come with cheese and sauce
	10/23/200 8	13:59:5 7	johnc250	wb	[johnc250 created a ellipse]
	10/23/200 8	14:00:0 2	johnc250	wb	[johnc250 created a ellipse]
	10/23/200 8	14:00:0 3	johnc250	wb	[johnc250 created a ellipse]
	10/23/200 8	14:00:0 5	johnc250	wb	[johnc250 created a ellipse]
	10/23/200 8	14:00:0 6	johnc250	wb	[johnc250 created a ellipse]
	10/23/200 8	14:00:0 8	johnc250	wb	[johnc250 created a ellipse]
	10/23/200 8	14:00:1 1	johnc250	wb	[johnc250 created a ellipse]
	10/23/200 8	14:00:1 2	johnc250	wb	[johnc250 created a ellipse]
	10/23/200 8	14:00:1 3	x lil pit 21 x	END:TextEditing	
	10/23/200 8	14:00:1 3	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : half with both]

	10/23/2008	14:00:13	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:14	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:16	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:18	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:20	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:20	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:21	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:22	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:23	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:24	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:26	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:28	johnc250	wb	[johnc250 created a ellipse]
	10/23/2008	14:00:36	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:37	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:38	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:39	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:40	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:40	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:41	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:42	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:42	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:43	johnc250	wb	[johnc250 created a scribble]
13	10/23/2008	14:00:44	x lil pit 21 x	chat	i think theres

5	8	4			more then 8
	10/23/2008	14:00:44	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:45	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:46	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:47	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:49	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:49	johnc250	wb	[johnc250 created a scribble]
	10/23/2008	14:00:50	johnc250	wb	[johnc250 created a scribble]
136	10/23/2008	14:01:00	cammalleri	chat	pedro
137	10/23/2008	14:01:03	cammalleri	chat	you
138	10/23/2008	14:01:04	cammalleri	chat	can
139	10/23/2008	14:01:05	cammalleri	chat	not
140	10/23/2008	14:01:06	cammalleri	chat	order
141	10/23/2008	14:01:08	cammalleri	chat	a
142	10/23/2008	14:01:10	cammalleri	chat	sauce
143	10/23/2008	14:01:12	cammalleri	chat	or
144	10/23/2008	14:01:12	johnc250	chat	theres 8 right there
145	10/23/2008	14:01:13	cammalleri	chat	cheese
146	10/23/2008	14:01:17	cammalleri	chat	pizza
147	10/23/2008	14:01:19	cammalleri	chat	it
148	10/23/2008	14:01:21	cammalleri	chat	comes
149	10/23/2008	14:01:22	cammalleri	chat	with
150	10/23/2008	14:01:23	cammalleri	chat	both

15 1	10/23/200 8	14:01:3 1	16oncebabyjesu s	chat	cheese would b a grill sandwich
15 2	10/23/200 8	14:01:3 4	Absolut Dj	joins	joins the room
15 3	10/23/200 8	14:01:5 0	16oncebabyjesu s	chat	who is dis
15 4	10/23/200 8	14:02:0 6	x lil pit 21 x	chat	just someone whos looking at our work
15 5	10/23/200 8	14:02:0 6	johnc250	chat	some circle sitting next to me
15 6	10/23/200 8	14:02:4 2	cammalleri	chat	a pizza with just cheese is called a white pie but they say nothing about that every pizza is made with sauce and cheese
15 7	10/23/200 8	14:02:5 6	16oncebabyjesu s	chat	indeed
15 8	10/23/200 8	14:03:1 1	16oncebabyjesu s	chat	john is goin crazy
15 9	10/23/200 8	14:03:1 3	16oncebabyjesu s	chat	lol
	10/23/200 8	14:03:3 0	cammalleri	wb	[cammalleri deleted some object/s]
	10/23/200 8	14:03:3 5	cammalleri	wb	[cammalleri deleted some object/s]
16 0	10/23/200 8	14:03:3 6	x lil pit 21 x	chat	yes he is
16 1	10/23/200 8	14:03:4 0	johnc250	chat	what is he talking about?.
16 2	10/23/200 8	14:03:4 7	cammalleri	chat	ok
16 3	10/23/200 8	14:03:4 8	cammalleri	chat	guys
	10/23/200 8	14:03:5 0	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
16 4	10/23/200 8	14:03:5 0	cammalleri	chat	listen up
	10/23/200 8	14:03:5 4	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]

165	10/23/2008	14:03:55	cammalleri	chat	in the topic
166	10/23/2008	14:04:02	x lil pit 21 x	chat	ok
167	10/23/2008	14:04:06	cammalleri	chat	it clearly states that every pizza is made with cheese and sauce
168	10/23/2008	14:04:18	johnc250	chat	we know
169	10/23/2008	14:04:18	cammalleri	chat	therefor no pizz can be made without both cheese and sauce
170	10/23/2008	14:04:27	cammalleri	chat	there are 6 choices to order from
171	10/23/2008	14:04:28	johnc250	chat	we know that
172	10/23/2008	14:04:37	cammalleri	chat	ok good
173	10/23/2008	14:04:38	johnc250	chat	no theres 8
174	10/23/2008	14:04:42	x lil pit 21 x	chat	exactly then you'll be eating bread
175	10/23/2008	14:04:43	cammalleri	chat	how
176	10/23/2008	14:05:06	johnc250	chat	cause theres a full pizza with peppers and peperoni
177	10/23/2008	14:05:16	cammalleri	chat	yes i wrote that
178	10/23/2008	14:05:21	16oncebabyjesus	chat	lol
179	10/23/2008	14:05:24	johnc250	chat	and theres half a pizza with peppers and peperoni
180	10/23/2008	14:05:38	Absolut Dj	leaves	leaves the room
181	10/23/2008	14:05:40	johnc250	chat	and the other half is cheese
182	10/23/2008	14:05:43	cammalleri	chat	wait theres 7 pizzas
183	10/23/2008	14:05:55	cammalleri	chat	i forgot the whole

3	8	1			with both
18 4	10/23/200 8	14:05:5 5	cammalleri	chat	7 different types
	10/23/200 8	14:06:0 1	cammalleri	START:TextEditing	
18 5	10/23/200 8	14:06:0 6	johnc250	chat	no 8
	10/23/200 8	14:06:0 7	cammalleri	END:TextEditing	
	10/23/200 8	14:06:0 7	cammalleri	wb	[cammalleri changed the text to: whole plain whole pepper whole pepperoni half pepperoni half pepper half pepper half pepperoni whole with both]
	10/23/200 8	14:06:1 0	cammalleri	START:TextEditing	
	10/23/200 8	14:06:1 3	cammalleri	END:TextEditing	
	10/23/200 8	14:06:1 3	cammalleri	wb	[cammalleri changed the text to: 7 different choices]
	10/23/200 8	14:06:1 4	cammalleri	START:TextEditing	
	10/23/200 8	14:06:1 9	cammalleri	END:TextEditing	
	10/23/200 8	14:06:1 9	cammalleri	wb	[cammalleri changed the text to: There are only 7 different combinations for a customer to order. A Customer can not order a half of pie plain cuz the plain comes with cheese and sauce

					therefor you cant order a pie with half plain.]
18 6	10/23/200 8	14:06:2 9	cammalleri	chat	what are the 8
18 7	10/23/200 8	14:06:3 7	violetisla16	joins	joins the room
18 8	10/23/200 8	14:06:4 4	johnc250	chat	there at the workspace
18 9	10/23/200 8	14:06:5 5	cammalleri	chat	there is
19 0	10/23/200 8	14:06:5 7	cammalleri	chat	whole plain
	10/23/200 8	14:06:5 7	johnc250		[johnc250 has fully erased the chat message]
19 1	10/23/200 8	14:06:5 9	cammalleri	chat	whole both
19 2	10/23/200 8	14:07:0 6	cammalleri	chat	whole pepperoni
19 3	10/23/200 8	14:07:0 9	cammalleri	chat	whole peppers
19 4	10/23/200 8	14:07:1 3	powellab	leaves	leaves the room
19 5	10/23/200 8	14:07:1 3	cammalleri	chat	half both
	10/23/200 8	14:07:1 4	johnc250	wb	[johnc250 created a scribble]
	10/23/200 8	14:07:1 7	johnc250	wb	[johnc250 created a scribble]
	10/23/200 8	14:07:1 8	cammalleri		[cammalleri has fully erased the chat message]
	10/23/200 8	14:07:2 0	cammalleri		[cammalleri has fully erased the chat message]
19 6	10/23/200 8	14:07:2 0	cammalleri	chat	no
19 7	10/23/200 8	14:07:2 4	cammalleri	chat	i take that back
	10/23/200 8	14:07:3 1	johnc250	wb	[johnc250 created a ellipse]
19 8	10/23/200 8	14:07:3 5	cammalleri	chat	half pepperoni
19	10/23/200	14:07:4	cammalleri	chat	half peppers

9	8	1			
	10/23/2008	14:07:43	cammalleri		[cammalleri has fully erased the chat message]
	10/23/2008	14:07:50	cammalleri	wb	[cammalleri moved some object/s]
	10/23/2008	14:07:52	cammalleri	START:TextEditing	
	10/23/2008	14:08:05	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	14:08:07	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	14:08:10	x lil pit 21 x	START:TextEditing	
200	10/23/2008	14:08:18	cammalleri	chat	no theres 6
201	10/23/2008	14:08:19	cammalleri	chat	i was right
	10/23/2008	14:08:21	cammalleri	END:TextEditing	
	10/23/2008	14:08:21	cammalleri	wb	[cammalleri changed the text to: whole plain whole pepper whole pepperoni half pepperoni half pepper whole with both]
	10/23/2008	14:08:24	cammalleri	START:TextEditing	
202	10/23/2008	14:08:26	16oncebabyjesus	chat	son
	10/23/2008	14:08:29	cammalleri	END:TextEditing	
	10/23/2008	14:08:29	cammalleri	wb	[cammalleri changed the text to: 6 different choices]
	10/23/2008	14:08:30	cammalleri	START:TextEditing	
	10/23/2008	14:08:30	x lil pit 21 x	END:TextEditing	

	8	0			
	10/23/2008	14:08:30	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: whole w/ pepperoni n cheese n sauce whole w/ peppers and cheese n sauce whole w/ both and cheese and sauce half w/ pepperoni and cheese and sauce half w/ pepper and cheese and suace half w/ both and cheese and sauce whole w/ half pepperoni and half peppers]
	10/23/2008	14:08:36	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	14:08:44	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/23/2008	14:08:52	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/23/2008	14:08:54	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/23/2008	14:09:00	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/23/2008	14:09:09	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/23/2008	14:09:23	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/23/2008	14:09:26	cammalleri	END:TextEditing	
	10/23/2008	14:09:26	cammalleri	wb	[cammalleri changed the text

					to: There are only 6 different combinations for a customer to order. A Customer can not order a half of pie plain cuz the plain comes with cheese and sauce therefor you cant order a pie with half plain.]
	10/23/2008	14:09:33	x lil pit 21 x	START:TextEditing	
	10/23/2008	14:09:34	cammalleri	START:TextEditing	
	10/23/2008	14:09:38	x lil pit 21 x	END:TextEditing	
	10/23/2008	14:09:38	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: There are only 7 different combinations for a customer to order. A Customer can not order a half of pie plain cuz the plain comes with cheese and sauce therefor you cant order a pie with half plain.]
203	10/23/2008	14:09:38	violetisla16	leaves	leaves the room
	10/23/2008	14:09:40	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	14:09:44	cammalleri	END:TextEditing	
	10/23/2008	14:09:44	cammalleri	wb	[cammalleri created a textbox : 6 possible

					choices]
204	10/23/2008	14:09:53	cammalleri	chat	i gotta go
	10/23/2008	14:09:53	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
205	10/23/2008	14:09:55	16oncebabyjesus	chat	mr.merges is so cool
206	10/23/2008	14:09:57	16oncebabyjesus	chat	peace
	10/23/2008	14:09:58	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
207	10/23/2008	14:09:59	cammalleri	chat	theres six
208	10/23/2008	14:10:02	cammalleri	leaves	leaves the room
209	10/23/2008	14:10:03	16oncebabyjesus	chat	to the middle east
	10/23/2008	14:10:04	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	14:10:09	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
210	10/23/2008	14:10:15	16oncebabyjesus	leaves	leaves the room
	10/23/2008	14:10:29	johnc250	wb	[johnc250 moved some object/s]
211	10/23/2008	14:10:30	lbhsoftballgrl	joins	joins the room
	10/23/2008	14:10:36	johnc250	START:TextEditing	
212	10/23/2008	14:10:38	lbhsoftballgrl	leaves	leaves the room
	10/23/2008	14:10:51	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/23/2008	14:10:58	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/23/2008	14:11:02	x lil pit 21 x	START:TextEditing	
	10/23/2008	14:11:08	x lil pit 21 x	END:TextEditing	

	10/23/2008	14:11:08	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : 7 different choices]
213	10/23/2008	14:11:15	x lil pit 21 x	chat	good bye
214	10/23/2008	14:11:17	Merges	leaves	leaves the room
215	10/23/2008	14:11:17	x lil pit 21 x	chat	i did everything
216	10/23/2008	14:11:22	x lil pit 21 x	chat	i kno what im diong
	10/23/2008	14:11:46	johnc250	END:TextEditing	
217	10/23/2008	14:11:46	johnc250	leaves	leaves the room
218	10/23/2008	14:11:51	x lil pit 21 x	leaves	leaves the room
219	10/23/2008	14:13:11	fflai	leaves	leaves the room
220	10/23/2008	15:34:35	kate22	leaves	leaves the room
221	10/23/2008	20:40:48	fflai	joins	joins the room
222	10/24/2008	01:13:56	fflai	leaves	leaves the room
223	10/24/2008	21:28:14	kate22	joins	joins the room
224	10/24/2008	21:28:15	kate22	leaves	leaves the room
225	10/26/2008	13:59:24	Merges	joins	joins the room
226	10/26/2008	14:03:03	Merges	leaves	leaves the room
227	10/29/2008	13:23:05	kate22	joins	joins the room
228	10/29/2008	13:23:33	x lil pit 21 x	joins	joins the room
229	10/29/2008	13:24:11	x lil pit 21 x	leaves	leaves the room
230	10/29/2008	13:24:13	johnc250	joins	joins the room
231	10/29/2008	13:24:33	kate22	leaves	leaves the room
23	10/29/2008	13:36:1	powellab	joins	joins the room

2	8	0			
23	10/29/2008	13:36:46	johnc250	leaves	leaves the room
23	10/29/2008	13:40:45	kate22	joins	joins the room
23	10/29/2008	14:09:50	x lil pit 21 x	joins	joins the room
	10/29/2008	14:10:14	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:10:19	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:10:19	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: 8 different choices]
	10/29/2008	14:10:20	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:10:27	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:10:27	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: There are only 8 different combinations for a customer to order. A Cutomer can not order a half of pie plain cuz the plain comes with cheese and sauce therefor you cant order a pie with half plain.]
	10/29/2008	14:10:30	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:10:59	x lil pit 21 x	START:TextEditing	
23	10/29/2008	14:11:03	johnc250	joins	joins the room
	10/29/2008	14:14:44	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:14:44	x lil pit 21 x	wb	[x lil pit 21 x

	8	4			changed the text to: There are only 8 different combinations for a customer to order. A Customer can not order a half of pie plain because the plain comes with cheese and sauce therefore you can't order a pie with half plain. You can order a whole pie with three different toppings and a plain pie and half with three different toppings and]
	10/29/2008	14:14:44	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:15:16	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:15:16	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: whole w/ pepperoni and cheese and sauce whole w/ peppers and cheese and sauce whole w/ both and cheese and sauce half w/ pepperoni and cheese and sauce half w/ pepper and cheese and sauce half w/ both and cheese and sauce whole w/ half pepperoni and half peppers

					whole plain]
	10/29/2008	14:15:17	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:15:22	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:15:23	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:15:30	x lil pit 21 x	START:TextEditing	
237	10/29/2008	14:15:48	johnc250	chat	sapasm
238	10/29/2008	14:15:53	johnc250	chat	spasm*
239	10/29/2008	14:16:10	x lil pit 21 x	chat	haha i just finished it
240	10/29/2008	14:16:29	x lil pit 21 x	chat	yo
241	10/29/2008	14:16:48	x lil pit 21 x	chat	yo
	10/29/2008	14:17:39	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:17:42	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:17:42	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : both]
	10/29/2008	14:17:44	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:18:07	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:18:20	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:18:20	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: pepperoni]
	10/29/2008	14:18:22	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
242	10/29/2008	14:18:23	16oncebabyjesus	joins	joins the room
	10/29/2008	14:18:31	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]

	10/29/2008	14:18:34	x lil pit 21 x	START:TextEditing	
243	10/29/2008	14:18:37	johnc250	chat	yo
244	10/29/2008	14:18:37	johnc250	chat	yo
245	10/29/2008	14:18:38	johnc250	chat	yoy
	10/29/2008	14:18:39	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:18:39	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: peppers]
	10/29/2008	14:18:50	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:18:53	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:18:57	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:18:59	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:19:02	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:19:09	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:19:14	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
246	10/29/2008	14:19:18	16oncebabyjesus	chat	wat up wat up wat up
	10/29/2008	14:19:25	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:19:27	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/29/2008	14:19:42	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]

	10/29/2008	14:19:45	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:19:49	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/29/2008	14:19:54	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:19:59	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:20:02	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:20:14	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/29/2008	14:20:17	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/29/2008	14:20:24	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:20:29	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:20:34	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/29/2008	14:20:40	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:20:41	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
247	10/29/2008	14:20:43	johnc250	chat	pedro you hear me?
248	10/29/2008	14:20:52	x lil pit 21 x	chat	hi
	10/29/2008	14:21:00	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:21:00	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:21:00	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]

	8	4			created a line]
	10/29/2008	14:21:14	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:21:15	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:21:15	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:21:16	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:21:16	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:21:17	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:21:17	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:21:17	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:21:17	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:21:24	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:21:31	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:21:33	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/29/2008	14:21:38	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
249	10/29/2008	14:21:40	johnc250	chat	yo i dont get this problem no more
	10/29/2008	14:21:41	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:21:41	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:21:46	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
250	10/29/2008	14:21:52	x lil pit 21 x	chat	lol
	10/29/2008	14:22:01	johnc250		[johnc250 has fully erased the chat message]
25	10/29/2008	14:22:1	x lil pit 21 x	chat	im drawing all the

	8	1			created a line]
	10/29/2008	14:23:01	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:23:01	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:23:02	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:23:03	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:23:03	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:23:14	johnc250	wb	[johnc250 deleted some object/s]
	10/29/2008	14:23:21	johnc250	wb	[johnc250 deleted some object/s]
253	10/29/2008	14:23:47	johnc250	chat	they were already drawn out/
254	10/29/2008	14:23:48	johnc250	chat	
255	10/29/2008	14:23:50	johnc250	chat	
256	10/29/2008	14:23:50	johnc250	chat	
257	10/29/2008	14:23:50	johnc250	chat	
258	10/29/2008	14:23:50	johnc250	chat	
259	10/29/2008	14:23:50	johnc250	chat	
260	10/29/2008	14:23:51	johnc250	chat	
261	10/29/2008	14:24:02	x lil pit 21 x	chat	i kno im fixing them
262	10/29/2008	14:24:18	fflai	joins	joins the room
263	10/29/2008	14:25:01	Merges	joins	joins the room
	10/29/2008	14:25:01	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:25:01	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: There are only 8 different combinations for

					a customer to order. A Customer can not order a half of pie plain because the plain comes with cheese and sauce therefore you can't order a pie with half plain. You can order a whole pie with two different toppings and a plain pie and half with two different toppings.]
	10/29/2008	14:25:27	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:25:30	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/29/2008	14:26:51	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:26:51	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:26:51	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:26:53	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:26:54	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:26:56	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
264	10/29/2008	14:27:32	16oncebabyjesus	chat	we gota add the sausage topics to the possibilities now
265	10/29/2008	14:28:07	johnc250	leaves	leaves the room
266	10/29/2008	14:28:47	x lil pit 21 x	chat	yea we'll do it later when everything's done
	10/29/2008	14:28:57	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]

26 7	10/29/2008	14:29:19	x lil pit 21 x	chat	wheres john c
	10/29/2008	14:30:03	x lil pit 21 x	wb	[x lil pit 21 x created a line]
	10/29/2008	14:30:07	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:09	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:10	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:11	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:13	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:14	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:16	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:18	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:19	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:24	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:26	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:28	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:30	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:31	x lil pit 21 x	wb	[x lil pit 21 x created a ellipse]
	10/29/2008	14:30:42	x lil pit 21 x	START:TextEditing	
26 8	10/29/2008	14:30:54	16oncebabyjesus	chat	oo aite....um which one???
	10/29/2008	14:31:00	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:31:00	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: half with pepperoni]
	10/29/2008	14:31:03	x lil pit 21 x	wb	[x lil pit 21 x moved some

					object/s]
	10/29/2008	14:31:07	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:31:10	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:31:17	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:31:19	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:31:23	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
269	10/29/2008	14:32:06	x lil pit 21 x	chat	im just drawing the pies
	10/29/2008	14:32:18	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:32:20	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:32:20	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : plain]
	10/29/2008	14:32:23	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:32:42	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:33:00	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
270	10/29/2008	14:33:04	16oncebabyjesus	chat	oo dere beatiful lol
	10/29/2008	14:33:08	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:33:19	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:33:36	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:33:38	x lil pit 21 x	wb	[x lil pit 21 x

	8	8			moved some object/s]
	10/29/2008	14:33:43	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/29/2008	14:33:54	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:33:55	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:33:58	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/29/2008	14:34:00	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:34:05	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:34:12	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/29/2008	14:34:18	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:34:22	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:34:28	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:34:33	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:34:43	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
27 1	10/29/2008	14:35:18	x lil pit 21 x	chat	yea they are
	10/29/2008	14:35:26	x lil pit 21 x	wb	[x lil pit 21 x deleted some object/s]
	10/29/2008	14:35:26	kate22	wb	[kate22 moved some object/s]
27	10/29/2008	14:35:33	johnc250	joins	joins the room

2	8	1			
	10/29/2008	14:35:32	kate22	wb	[kate22 moved some object/s]
	10/29/2008	14:35:44	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:35:50	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:36:26	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:36:26	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: whole w/ pepperoni n cheese n sauce n sausage whole w/ peppers and cheese n sauce n sausage whole w/ both and cheese and sauce n sausage half w/ pepperoni and cheese and sauce n sausage half w/ pepper and cheese and suace half w/ both and cheese and sauce whole w/ half pepperoni and half peppers]
	10/29/2008	14:36:27	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:36:32	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:36:54	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:36:54	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: whole w/ pepperoni n cheese n sauce n sausage whole w/

					peppers and cheese n sauce n sausage whole w/ both and cheese and sauce n sausage half w/ pepperoni and cheese and sauce n sausage half w/ pepper and cheese and suace n sausage half w/ both and cheese and sauce n sausage whole w/ half pepperoni and half peppers n sausage]
	10/29/2008	14:36:57	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
273	10/29/2008	14:37:52	johnc250	chat	yo pedro so what do we do now?
274	10/29/2008	14:38:10	x lil pit 21 x	chat	we have to find out how many we can make now with the sausages
	10/29/2008	14:38:35	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:38:50	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
275	10/29/2008	14:39:01	johnc250	chat	3
276	10/29/2008	14:39:15	x lil pit 21 x	chat	no
277	10/29/2008	14:39:16	16oncebabyjesus	chat	3 wat?
	10/29/2008	14:39:22	johnc250		[johnc250 has fully erased the chat message]
278	10/29/2008	14:39:25	x lil pit 21 x	chat	nothing
279	10/29/2008	14:39:29	johnc250	chat	with sausage
28	10/29/2008	14:39:5	x lil pit 21 x	chat	im trying to do

0	8	4			the part with the sausage'
281	10/29/2008	14:40:34	johnc250	chat	yeah i think theres only 3
	10/29/2008	14:40:39	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:40:39	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: whole w/ pepperoni n cheese n sauce n sausage whole w/ peppers and cheese n sauce n sausage whole w/ both and cheese and sauce n sausage half w/ pepperoni and cheese and sauce n sausage half w/ pepper and cheese and suace n sausage half w/ both and cheese and sauce n sausage whole w/ half pepperoni and half peppers n sausage whole plain]
	10/29/2008	14:40:44	x lil pit 21 x	START:TextEditing	
282	10/29/2008	14:41:05	x lil pit 21 x	chat	nopt all together
283	10/29/2008	14:42:14	johnc250	chat	just sausage
	10/29/2008	14:42:42	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
284	10/29/2008	14:43:04	x lil pit 21 x	chat	we have to do all the pies with sausage pepperoni and peppers

28 5	10/29/200 8	14:44:0 6	johnc250	chat	i know
28 6	10/29/200 8	14:44:1 4	johnc250	chat	this isso confusing
28 7	10/29/200 8	14:44:2 1	x lil pit 21 x	chat	yea it is
	10/29/200 8	14:44:2 1	johnc250		[johnc250 has fully erased the chat message]
28 8	10/29/200 8	14:44:3 7	johnc250	chat	idk what else to do like im thinking but i dont get it
28 9	10/29/200 8	14:44:3 8	johnc250	chat	
29 0	10/29/200 8	14:44:4 0	johnc250	chat	
29 1	10/29/200 8	14:45:0 1	x lil pit 21 x	chat	me 2
29 2	10/29/200 8	14:45:4 3	16oncebabyjesu s	chat	yea i jus tried doin it on paper but i got lost
29 3	10/29/200 8	14:45:5 4	16oncebabyjesu s	chat	its pretty confusing
29 4	10/29/200 8	14:46:0 6	x lil pit 21 x	chat	yea it is
29 5	10/29/200 8	14:46:1 1	x lil pit 21 x	chat	how can you get paper
29 6	10/29/200 8	14:49:1 0	johnc250	chat	yo im real lost
29 7	10/29/200 8	14:49:2 6	x lil pit 21 x	chat	im doing it
29 8	10/29/200 8	14:49:2 9	x lil pit 21 x	chat	just try it
	10/29/200 8	14:49:3 0	x lil pit 21 x		[x lil pit 21 x has fully erased the chat message]
	10/29/200 8	14:49:5 1	x lil pit 21 x	END:TextEditing	
	10/29/200 8	14:49:5 1	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: whole w/ pepperoni n sausage whole w/ peppers n sausage

					whole w/ both n sausage whole w/ suasage half w/ pepperoni n sausage half w/ pepper n sausage half w/ both n sausage half w/ suasage whole w/ half pepperoni and half peppers n sausage whole w/ half pepperoni n suasage and half peppers whole w/ half of all three]
	10/29/2008	14:49:53	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:49:55	x lil pit 21 x	START:TextEditing	
299	10/29/2008	14:50:37	johnc250	leaves	leaves the room
300	10/29/2008	14:51:04	16oncebabyjesus	chat	from my bookbag lol
301	10/29/2008	14:51:25	x lil pit 21 x	chat	oo.lol.your really not suppose to use paper
302	10/29/2008	14:51:25	16oncebabyjesus	chat	il try do it in daa workshop
303	10/29/2008	14:51:39	x lil pit 21 x	chat	keep trying
304	10/29/2008	14:51:46	16oncebabyjesus	chat	i know i ddnt want to put it in da workshop n it b wrong
305	10/29/2008	14:52:16	x lil pit 21 x	chat	lol. thats why we're working in groups so that we can coorrect eachother
306	10/29/2008	14:56:05	16oncebabyjesus	chat	lol
307	10/29/2008	14:57:12	x lil pit 21 x	chat	its alright tho

	10/29/2008	14:57:14	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:57:14	x lil pit 21 x	wb	[x lil pit 21 x changed the text to: whole w/ pepperoni n sausage whole w/ peppers n sausage whole w/ both n sausage whole w/ suasage half w/ pepperoni n sausage half w/ pepper n sausage half w/ both n sausage half w/ sausage whole w/ half pepperoni and half peppers n sausage whole w/ half pepperoni n suasage and half peppers whole w/ half of all three whole w/ half sausage n half pepperoni n peppers]
	10/29/2008	14:57:16	x lil pit 21 x	wb	[x lil pit 21 x resized some objects]
	10/29/2008	14:57:25	x lil pit 21 x	wb	[x lil pit 21 x copied some object/s]
	10/29/2008	14:57:30	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:57:33	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:57:36	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
	10/29/2008	14:57:40	x lil pit 21 x	START:TextEditing	

	10/29/2008	14:57:47	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:58:09	x lil pit 21 x	START:TextEditing	
	10/29/2008	14:58:12	x lil pit 21 x	END:TextEditing	
	10/29/2008	14:58:12	x lil pit 21 x	wb	[x lil pit 21 x created a textbox : 4b.]
	10/29/2008	14:58:15	x lil pit 21 x	wb	[x lil pit 21 x moved some object/s]
308	10/29/2008	14:58:40	x lil pit 21 x	chat	i have to go tho
309	10/29/2008	14:58:54	x lil pit 21 x	chat	try and do the summary since you dont leave until 3
310	10/29/2008	14:59:01	x lil pit 21 x	chat	`p` out
311	10/29/2008	14:59:04	x lil pit 21 x	leaves	leaves the room
312	10/29/2008	14:59:58	16oncebabyjesus	leaves	leaves the room
313	10/29/2008	15:00:12	Merges	leaves	leaves the room
314	10/29/2008	15:00:17	kate22	leaves	leaves the room
315	10/29/2008	15:13:41	fflai	leaves	leaves the room
316	10/29/2008	16:18:49	powellab	leaves	leaves the room
317	10/29/2008	17:13:37	fflai	joins	joins the room
318	10/29/2008	17:14:34	fflai	leaves	leaves the room
319	10/29/2008	17:17:35	fflai	joins	joins the room
320	10/29/2008	17:18:59	fflai	leaves	leaves the room

8.3.4 Towers Three Tall December 12, 2008

Chat Index	Date	Time of Posting	Author	Type	Content
1	12/12/2008	14:03:31	powellab	joins	joins the room
2	12/12/2008	14:16:36	kate22	joins	joins the room
3	12/12/2008	14:16:39	x Lil Pit 21 x	joins	joins the room
4	12/12/2008	14:17:30	cammalleri	joins	joins the room
5	12/12/2008	14:17:53	johnc250	joins	joins the room
6	12/12/2008	14:18:02	16oncebabyjesus	joins	joins the room
7	12/12/2008	14:18:20	16oncebabyjesus	chat	wat up wat up wat up
8	12/12/2008	14:18:33	CaliforniaSquirrels	joins	joins the room
	12/12/2008	14:18:35	cammalleri		[cammalleri has fully erased the chat message]
9	12/12/2008	14:18:40	cammalleri	chat	hes with us
10	12/12/2008	14:18:50	16oncebabyjesus	chat	hes cool
11	12/12/2008	14:18:50	x Lil Pit 21 x	chat	yrea wekno
12	12/12/2008	14:19:31	x Lil Pit 21 x	chat	ok
13	12/12/2008	14:19:45	16oncebabyjesus	chat	word
	12/12/2008	14:19:47	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a rectangle]
	12/12/2008	14:19:53	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a rectangle]
	12/12/2008	14:19:58	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a rectangle]
	12/12/2008	14:20:01	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a rectangle]
	12/12/2008	14:20:04	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a rectangle]
	12/12/2008	14:20:10	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a rectangle]
14	12/12/2008	14:20:10	cammalleri	chat	ok

15	12/12/20 08	14:20: 12	cammalleri	chat	ill work on 1
	12/12/20 08	14:20: 13	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a rectangle]
	12/12/20 08	14:20: 17	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a rectangle]
	12/12/20 08	14:20: 20	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a rectangle]
16	12/12/20 08	14:20: 25	x Lil Pit 21 x	chat	ok
17	12/12/20 08	14:20: 31	cammalleri	chat	red red red
	12/12/20 08	14:20: 34	x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
18	12/12/20 08	14:20: 37	cammalleri	chat	red red yellow
19	12/12/20 08	14:20: 43	x Lil Pit 21 x	chat	writethemdown
20	12/12/20 08	14:20: 44	cammalleri	chat	red yellow red
	12/12/20 08	14:20: 47	cammalleri		[cammalleri has fully erased the chat message]
	12/12/20 08	14:20: 52	cammalleri		[cammalleri has fully erased the chat message]
21	12/12/20 08	14:20: 55	cammalleri	chat	yellow red red
22	12/12/20 08	14:21: 03	cammalleri	chat	yellow yellow yellow
23	12/12/20 08	14:21: 03	16oncebabyjes us	chat	he is
24	12/12/20 08	14:21: 10	cammalleri	chat	yellow yellow red
25	12/12/20 08	14:21: 18	cammalleri	chat	yellow red yellow
26	12/12/20 08	14:21: 28	cammalleri	chat	red yellow yellow
27	12/12/20 08	14:21: 38	x Lil Pit 21 x	chat	californiaSquirrels u can talk
28	12/12/20 08	14:22: 09	16oncebabyjes us	chat	he will hes shy
	12/12/20 08	14:22: 14	16oncebabyjes us		[16oncebabyjesus has fully erased the chat message]

29	12/12/2008	14:22:16	CaliforniaSquirrels	chat	yeah i know i'm just trying to figure out what to do
30	12/12/2008	14:22:22	cammalleri	chat	ok
31	12/12/2008	14:22:24	cammalleri	chat	#1
32	12/12/2008	14:22:27	x Lil Pit 21 x	chat	ok
	12/12/2008	14:22:35	x Lil Pit 21 x	STAR T:Text Editing	
33	12/12/2008	14:22:38	cammalleri	chat	can anyone else give me more options
34	12/12/2008	14:23:02	Merges	joins	joins the room
35	12/12/2008	14:23:11	cammalleri	chat	hey cutie
36	12/12/2008	14:23:12	16oncebabyjesus	chat	wat up
37	12/12/2008	14:23:18	16oncebabyjesus	chat	we love uuuu
38	12/12/2008	14:23:23	cammalleri	chat	in those jeans
39	12/12/2008	14:23:25	fflai	joins	joins the room
40	12/12/2008	14:23:28	x Lil Pit 21 x	chat	wow
	12/12/2008	14:23:38	x Lil Pit 21 x		[x Lil Pit 21 x has fully erased the chat message]
41	12/12/2008	14:23:51	cammalleri	chat	ok #1 is done
42	12/12/2008	14:23:53	cammalleri	chat	#2
43	12/12/2008	14:24:03	x Lil Pit 21 x	chat	i dont think we can do red red red
44	12/12/2008	14:24:29	x Lil Pit 21 x	chat	californiasquirrels wats ur name
45	12/12/2008	14:24:37	16oncebabyjesus	chat	ricky bobby
46	12/12/2008	14:24:43	CaliforniaSquirrels	chat	word it up
47	12/12/2008	14:24:47	cammalleri	chat	ok

48	12/12/20 08	14:24: 52	cammalleri	chat	listen pedro
49	12/12/20 08	14:24: 55	x Lil Pit 21 x	chat	na for real
50	12/12/20 08	14:24: 55	cammalleri	chat	in the problem
51	12/12/20 08	14:24: 59	cammalleri	chat	it states that
52	12/12/20 08	14:25: 05	cammalleri	chat	we have unlimited colors
53	12/12/20 08	14:25: 08	cammalleri	chat	therefor
54	12/12/20 08	14:25: 08	16oncebabyjes us	chat	his name is tyrone
55	12/12/20 08	14:25: 18	16oncebabyjes us	chat	he jus moved from ny
56	12/12/20 08	14:25: 22	cammalleri	chat	we can use red red red as a possiblilty for a 3cube tower
57	12/12/20 08	14:25: 55	x Lil Pit 21 x	chat	but it says from selecting from two colors
58	12/12/20 08	14:26: 18	CaliforniaSquir rels	chat	it doesnt say u have to use both of them though
59	12/12/20 08	14:26: 18	x Lil Pit 21 x	chat	read 1 again
60	12/12/20 08	14:26: 44	cammalleri	chat	yes
	12/12/20 08	14:26: 47	cammalleri		[cammalleri has fully erased the chat message]
61	12/12/20 08	14:26: 49	x Lil Pit 21 x	chat	ok
62	12/12/20 08	14:26: 59	cammalleri	chat	but those are the two colors we can choose from
63	12/12/20 08	14:27: 06	cammalleri	chat	those two dont have to bee in the cube
64	12/12/20 08	14:27: 15	x Lil Pit 21 x	chat	lets make a box and write some solutions
65	12/12/20 08	14:27: 24	16oncebabyjes us	chat	alrite
66	12/12/20 08	14:27: 31	cammalleri	chat	i will write the solutions again

	12/12/2008	14:27:31	x Lil Pit 21 x	END:TextEditing	
67	12/12/2008	14:27:32	cammalleri	chat	pedro
68	12/12/2008	14:27:37	cammalleri	chat	you can make the boxes
69	12/12/2008	14:27:46	x Lil Pit 21 x	chat	ok
70	12/12/2008	14:27:55	cammalleri	chat	ok
71	12/12/2008	14:27:59	16oncebabyjesus	chat	yo john where u at
72	12/12/2008	14:28:04	cammalleri	chat	red red red
73	12/12/2008	14:28:07	16oncebabyjesus	chat	#1
74	12/12/2008	14:28:12	cammalleri	chat	red red yellow
75	12/12/2008	14:28:14	16oncebabyjesus	chat	#2
76	12/12/2008	14:28:18	cammalleri	chat	red yellow red
	12/12/2008	14:28:19	x Lil Pit 21 x	STAR T:Text Editing	
77	12/12/2008	14:28:19	16oncebabyjesus	chat	#3
78	12/12/2008	14:28:24	cammalleri	chat	yellow red red
79	12/12/2008	14:28:25	16oncebabyjesus	chat	#4
	12/12/2008	14:28:25	CaliforniaSquirrels	wb	[CaliforniaSquirrels created a rectangle]
80	12/12/2008	14:28:32	cammalleri	chat	yellow yellow yellow
81	12/12/2008	14:28:34	16oncebabyjesus	chat	#4
	12/12/2008	14:28:36	CaliforniaSquirrels	wb	[CaliforniaSquirrels created a rectangle]
82	12/12/2008	14:28:37	cammalleri	chat	yellow yellow red
83	12/12/2008	14:28:38	16oncebabyjesus	chat	#5
	12/12/2008	14:28:	johnc250	wb	[johnc250 created a

	08	39			rectangle]
84	12/12/2008	14:28:41	cammalleri	chat	yellow red yellow
85	12/12/2008	14:28:42	16oncebabyjesus	chat	#6
86	12/12/2008	14:28:44	cammalleri	chat	red yellow yellow
87	12/12/2008	14:28:45	16oncebabyjesus	chat	#7
	12/12/2008	14:28:48	CaliforniaSquirrels	wb	[CaliforniaSquirrels resized some objects]
	12/12/2008	14:28:48	johnc250	wb	[johnc250 created a rectangle]
	12/12/2008	14:28:56	CaliforniaSquirrels	wb	[CaliforniaSquirrels resized some objects]
	12/12/2008	14:29:04	CaliforniaSquirrels	wb	[CaliforniaSquirrels resized some objects]
	12/12/2008	14:29:05	CaliforniaSquirrels	wb	[CaliforniaSquirrels resized some objects]
88	12/12/2008	14:29:12	16oncebabyjesus	chat	#8
89	12/12/2008	14:29:17	16oncebabyjesus	chat	my bad lol
	12/12/2008	14:29:26	johnc250	wb	[johnc250 created a line]
90	12/12/2008	14:29:27	16oncebabyjesus	chat	theres 8 solutiones
	12/12/2008	14:29:30	johnc250	wb	[johnc250 created a line]
	12/12/2008	14:29:48	johnc250	wb	[johnc250 created a line]
	12/12/2008	14:29:48	johnc250	wb	[johnc250 created a line]
91	12/12/2008	14:30:00	cammalleri	chat	#2
92	12/12/2008	14:30:00	x Lil Pit 21 x	chat	ok
93	12/12/2008	14:30:05	johnc250	chat	im here
	12/12/2008	14:30:05	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:30:06	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : rrr ryr rry yr yyy yyr yry ryy]

	12/12/2008	14:30:14	x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	12/12/2008	14:30:20	x Lil Pit 21 x	wb	[x Lil Pit 21 x deleted some object/s]
	12/12/2008	14:30:24	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:30:28	x Lil Pit 21 x	STAR T:Text Editing	
	12/12/2008	14:30:38	x Lil Pit 21 x	END:Text Editing	
	12/12/2008	14:30:38	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : 8 solutions]
	12/12/2008	14:30:50	cammalleri	wb	[cammalleri moved some object/s]
94	12/12/2008	14:30:51	johnc250	chat	which one are we doing the 3 tower or 4 tower?
	12/12/2008	14:30:57	cammalleri	wb	[cammalleri resized some objects]
	12/12/2008	14:31:16	cammalleri		[cammalleri has fully erased the chat message]
95	12/12/2008	14:31:18	cammalleri	chat	john
96	12/12/2008	14:31:27	cammalleri	chat	you can write the summary for #1
	12/12/2008	14:31:32	johnc250		[johnc250 has fully erased the chat message]
97	12/12/2008	14:31:33	cammalleri	chat	ill work on #3
	12/12/2008	14:31:47	x Lil Pit 21 x	wb	[x Lil Pit 21 x resized some objects]
98	12/12/2008	14:31:50	cammalleri	chat	red red red red
	12/12/2008	14:31:50	x Lil Pit 21 x	wb	[x Lil Pit 21 x resized some objects]
99	12/12/2008	14:31:52	16oncebabyjesus	chat	1
100	12/12/2008	14:31:58	cammalleri	chat	red red red yellow
101	12/12/2008	14:31:59	16oncebabyjesus	chat	2

	12/12/2008	14:32:02	CaliforniaSquirrels		[CaliforniaSquirrels has fully erased the chat message]
	12/12/2008	14:32:05	johnc250	wb	[johnc250 created a line]
	12/12/2008	14:32:07	johnc250	wb	[johnc250 created a line]
	12/12/2008	14:32:07	johnc250	wb	[johnc250 created a line]
102	12/12/2008	14:32:07	CaliforniaSquirrels	chat	red red yellow yellow
103	12/12/2008	14:32:09	16oncebabyjesus	chat	3
104	12/12/2008	14:32:10	cammalleri	chat	red red yellow red
105	12/12/2008	14:32:14	16oncebabyjesus	chat	3
106	12/12/2008	14:32:20	cammalleri	chat	red yellow red red
107	12/12/2008	14:32:22	16oncebabyjesus	chat	4
108	12/12/2008	14:32:26	cammalleri	chat	yellow red red red
109	12/12/2008	14:32:28	16oncebabyjesus	chat	5
	12/12/2008	14:32:29	johnc250	wb	[johnc250 created a line]
110	12/12/2008	14:32:38	cammalleri	chat	red red yellow yellow
111	12/12/2008	14:32:40	16oncebabyjesus	chat	6
	12/12/2008	14:32:48	x Lil Pit 21 x	START:Text Editing	
	12/12/2008	14:32:55	CaliforniaSquirrels		[CaliforniaSquirrels has fully erased the chat message]
112	12/12/2008	14:32:56	cammalleri	chat	red yellow red yellow
113	12/12/2008	14:32:57	16oncebabyjesus	chat	7
114	12/12/2008	14:33:04	cammalleri	chat	yellow red red yellow
115	12/12/2008	14:33:05	16oncebabyjesus	chat	8

116	12/12/2008	14:33:08	cammalleri	chat	yellow red yellpw red
117	12/12/2008	14:33:10	16oncebabyjesus	chat	9
118	12/12/2008	14:33:11	johnc250	chat	yo pedro
119	12/12/2008	14:33:17	johnc250	chat	what are we doing?
120	12/12/2008	14:33:19	cammalleri	chat	yellow yellow yellow yellow
121	12/12/2008	14:33:21	16oncebabyjesus	chat	10
	12/12/2008	14:33:27	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
	12/12/2008	14:33:27	cammalleri		[cammalleri has fully erased the chat message]
122	12/12/2008	14:33:33	cammalleri	chat	red yellpw yellpw yellow
123	12/12/2008	14:33:35	16oncebabyjesus	chat	once
124	12/12/2008	14:33:46	16oncebabyjesus	chat	11
	12/12/2008	14:33:50	cammalleri		[cammalleri has fully erased the chat message]
125	12/12/2008	14:33:51	16oncebabyjesus	chat	for spanish
126	12/12/2008	14:34:00	cammalleri	chat	y y y r
127	12/12/2008	14:34:03	16oncebabyjesus	chat	12
128	12/12/2008	14:34:04	cammalleri	chat	y y r y
129	12/12/2008	14:34:07	x Lil Pit 21 x	chat	john look over what i wrote and see if there are more
130	12/12/2008	14:34:07	16oncebabyjesus	chat	13
131	12/12/2008	14:34:09	cammalleri	chat	y r y y
132	12/12/2008	14:34:12	16oncebabyjesus	chat	14
133	12/12/2008	14:34:	cammalleri	chat	r y y y

	08	14			
	12/12/2008	14:34:21	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
134	12/12/2008	14:34:22	cammalleri	chat	nvm
135	12/12/2008	14:34:38	cammalleri	chat	yellow yellow red red
	12/12/2008	14:34:46	cammalleri		[cammalleri has fully erased the chat message]
136	12/12/2008	14:35:00	cammalleri	chat	y r r r
137	12/12/2008	14:35:06	johnc250	chat	i think thats it pedro
138	12/12/2008	14:35:08	16oncebabyjesus	chat	15
139	12/12/2008	14:35:15	16oncebabyjesus	chat	15
140	12/12/2008	14:35:32	CaliforniaSquirrels	chat	r y y r
141	12/12/2008	14:35:32	cammalleri	chat	y r r y
142	12/12/2008	14:35:48	16oncebabyjesus	chat	16
143	12/12/2008	14:35:52	16oncebabyjesus	chat	17
	12/12/2008	14:36:15	johnc250		[johnc250 has fully erased the chat message]
144	12/12/2008	14:36:25	johnc250	chat	you got all the ones i can think of for 3 pedro
	12/12/2008	14:36:56	16oncebabyjesus	STAR T:Text Editing	
	12/12/2008	14:36:57	16oncebabyjesus	END:T extEditing	
	12/12/2008	14:36:59	16oncebabyjesus	STAR T:Text Editing	
	12/12/2008	14:37:00	16oncebabyjesus	END:T extEditing	
	12/12/2008	14:37:	16oncebabyjesus	STAR	

	08	02	us	T:Text Editing	
	12/12/2008	14:37:03	16oncebabyjesus	END:TextEditing	
145	12/12/2008	14:37:13	16oncebabyjesus	chat	wat did he write
146	12/12/2008	14:37:18	cammalleri	chat	woah
147	12/12/2008	14:37:18	16oncebabyjesus	chat	y u take his crddit
148	12/12/2008	14:37:19	cammalleri	chat	woah
149	12/12/2008	14:37:20	cammalleri	chat	woah
150	12/12/2008	14:37:21	CaliforniaSquirrels	chat	whoa
151	12/12/2008	14:37:24	cammalleri	chat	i did number 3
152	12/12/2008	14:37:28	16oncebabyjesus	chat	son we dnt play dat
153	12/12/2008	14:37:30	cammalleri	chat	pedro put it in the workspace
154	12/12/2008	14:37:49	cammalleri	chat	were the 3 amigos
155	12/12/2008	14:38:06	16oncebabyjesus	chat	slash three musketeers
156	12/12/2008	14:38:13	16oncebabyjesus	chat	SON
	12/12/2008	14:38:36	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:38:36	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : rrrr rrry rryy rryr ryrr yrrr ryry yrry yryr yyyy ryyy yyyr yyry yryy yrrr rryr]
	12/12/2008	14:38:49	cammalleri	wb	[cammalleri resized some objects]
157	12/12/2008	14:39:20	x Lil Pit 21 x	chat	im not taking no oneswork i just wrotewhatthey wroteon the message box
	12/12/2008	14:39:	x Lil Pit 21 x	wb	[x Lil Pit 21 x resized

	08	32			some objects]
	12/12/2008	14:39:37	cammalleri	wb	[cammalleri resized some objects]
158	12/12/2008	14:39:41	16oncebabyjesus	chat	o aite
159	12/12/2008	14:39:48	x Lil Pit 21 x	chat	i got 16 combos
	12/12/2008	14:39:52	x Lil Pit 21 x	wb	[x Lil Pit 21 x resized some objects]
160	12/12/2008	14:39:54	16oncebabyjesus	chat	we got 18
	12/12/2008	14:39:54	x Lil Pit 21 x	STAR T:Text Editing	
	12/12/2008	14:39:56	cammalleri	wb	[cammalleri resized some objects]
	12/12/2008	14:40:04	x Lil Pit 21 x	END:Text Editing	
	12/12/2008	14:40:04	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : 16 solutions]
	12/12/2008	14:40:06	x Lil Pit 21 x	wb	[x Lil Pit 21 x resized some objects]
161	12/12/2008	14:40:07	16oncebabyjesus	chat	or 17
	12/12/2008	14:40:12	x Lil Pit 21 x	wb	[x Lil Pit 21 x resized some objects]
	12/12/2008	14:40:18	x Lil Pit 21 x	wb	[x Lil Pit 21 x resized some objects]
	12/12/2008	14:40:20	16oncebabyjesus	STAR T:Text Editing	
162	12/12/2008	14:40:21	cammalleri	chat	theres 17
	12/12/2008	14:40:24	16oncebabyjesus	END:Text Editing	
	12/12/2008	14:40:24	16oncebabyjesus	wb	[16oncebabyjesus changed the text to: 17 solutions]
163	12/12/2008	14:40:40	x Lil Pit 21 x	chat	look at the box and tell me what i missed
	12/12/2008	14:40:41	johnc250	wb	[johnc250 created a line]

	12/12/2008	14:40:44	johnc250	wb	[johnc250 created a line]
	12/12/2008	14:40:44	johnc250	wb	[johnc250 created a line]
	12/12/2008	14:40:48	16oncebabyjesus	STAR T:Text Editing	
	12/12/2008	14:40:51	16oncebabyjesus	END:TextEditing	
	12/12/2008	14:40:51	16oncebabyjesus	wb	[16oncebabyjesus changed the text to: 16 solutions]
164	12/12/2008	14:41:12	16oncebabyjesus	chat	ur rite
165	12/12/2008	14:41:26	x Lil Pit 21 x	chat	16 right
	12/12/2008	14:41:35	x Lil Pit 21 x	wb	[x Lil Pit 21 x copied some object/s]
	12/12/2008	14:41:40	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
166	12/12/2008	14:41:41	johnc250	chat	yeah there's no more
	12/12/2008	14:41:43	x Lil Pit 21 x	STAR T:Text Editing	
	12/12/2008	14:41:44	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:41:45	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:41:46	x Lil Pit 21 x	STAR T:Text Editing	
167	12/12/2008	14:41:46	johnc250	chat	you got them all
	12/12/2008	14:41:46	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:41:52	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:41:55	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:41:56	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:41:	x Lil Pit 21 x	STAR	

	08	59		T:Text Editing	
	12/12/2008	14:42:01	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:42:01	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : 1.]
	12/12/2008	14:42:04	x Lil Pit 21 x	STAR T:Text Editing	
	12/12/2008	14:42:05	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:42:05	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : 2.]
168	12/12/2008	14:42:56	x Lil Pit 21 x	chat	ok
169	12/12/2008	14:43:12	x Lil Pit 21 x	chat	lets right the summary
170	12/12/2008	14:43:15	cammalleri	chat	ok good
	12/12/2008	14:44:09	x Lil Pit 21 x	STAR T:Text Editing	
	12/12/2008	14:44:12	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:44:12	x Lil Pit 21 x	wb	[x Lil Pit 21 x changed the text to: 3.]
171	12/12/2008	14:45:12	cammalleri	chat	whos writing the summary
172	12/12/2008	14:45:19	x Lil Pit 21 x	chat	idk
173	12/12/2008	14:45:22	CaliforniaSquirrels	chat	pedro's got it
174	12/12/2008	14:45:28	CaliforniaSquirrels	chat	i nominate him
175	12/12/2008	14:45:28	x Lil Pit 21 x	chat	i wrote the solutions
176	12/12/2008	14:45:34	CaliforniaSquirrels	chat	haha
177	12/12/2008	14:45:39	x Lil Pit 21 x	chat	i nominate the new kid
178	12/12/2008	14:45:45	x Lil Pit 21 x	chat	tyrone

179	12/12/2008	14:45:48	johnc250	chat	yeah me too
180	12/12/2008	14:46:01	powellab	chat	Explain in the summary why you are convinced that it is correct and the connection between how you worked on 3-tall towers and 4-tall towers.
181	12/12/2008	14:46:07	x Lil Pit 21 x	chat	lets do it together
	12/12/2008	14:47:01	x Lil Pit 21 x	STAR T:Text Editing	
	12/12/2008	14:47:29	16oncebabyjesus	wb	[16oncebabyjesus resized some objects]
	12/12/2008	14:47:31	16oncebabyjesus	STAR T:Text Editing	
	12/12/2008	14:47:33	16oncebabyjesus	END:T extEditing	
	12/12/2008	14:47:34	16oncebabyjesus	STAR T:Text Editing	
	12/12/2008	14:47:35	16oncebabyjesus	END:T extEditing	
182	12/12/2008	14:48:41	cammalleri	chat	id say pedro and i are out since we did most of the work
	12/12/2008	14:48:53	cammalleri		[cammalleri has fully erased the chat message]
183	12/12/2008	14:49:05	johnc250	chat	i g2g
184	12/12/2008	14:49:09	johnc250	chat	later
185	12/12/2008	14:49:12	johnc250	leaves	leaves the room
	12/12/2008	14:49:13	CaliforniaSquirrels		[CaliforniaSquirrels has fully erased the chat message]
186	12/12/2008	14:49:28	16oncebabyjesus	chat	well i helped count lol

	12/12/2008	14:49:38	CaliforniaSquirrels		[CaliforniaSquirrels has fully erased the chat message]
187	12/12/2008	14:49:42	16oncebabyjesus	chat	gota go to the bathroom il b rite back
188	12/12/2008	14:50:04	x Lil Pit 21 x	chat	ok
	12/12/2008	14:50:59	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:50:59	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : In the following question we found that we were only able to make 8 possible solutions for 3-tall towers. The question states that we have unlimited boxes and we can use two colors so we wrote down all the solutions for the red color and then we wrote down the solutions for yellow.]
	12/12/2008	14:51:02	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:51:06	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:51:08	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:51:11	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:51:15	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:51:16	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
	12/12/2008	14:51:18	x Lil Pit 21 x	STAR T:TextEditing	
	12/12/2008	14:51:24	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:51:24	x Lil Pit 21 x	wb	[x Lil Pit 21 x changed the text to:

					8 solutions solutions]
189	12/12/2008	14:51:56	cammalleri	chat	pedro did you do the summary
190	12/12/2008	14:52:07	x Lil Pit 21 x	chat	whos going to do the other solution
	12/12/2008	14:52:16	cammalleri	wb	[cammalleri resized some objects]
191	12/12/2008	14:52:19	x Lil Pit 21 x	chat	i did it for number 2
	12/12/2008	14:52:22	CaliforniaSquirrels	STAR T:Text Editing	
	12/12/2008	14:52:23	x Lil Pit 21 x	STAR T:Text Editing	
	12/12/2008	14:52:25	x Lil Pit 21 x	END:TextEditing	
	12/12/2008	14:52:25	x Lil Pit 21 x	wb	[x Lil Pit 21 x created a textbox : 2.]
192	12/12/2008	14:52:27	cammalleri	chat	tyrone
	12/12/2008	14:52:27	x Lil Pit 21 x	wb	[x Lil Pit 21 x moved some object/s]
193	12/12/2008	14:52:54	x Lil Pit 21 x	chat	i just have to leave cuz i have to get my team.
194	12/12/2008	14:53:01	x Lil Pit 21 x	chat	g2g see yo later
195	12/12/2008	14:53:08	16oncebabyjesus	chat	huh
196	12/12/2008	14:53:29	x Lil Pit 21 x	chat	bye everyone john tyrone n 16 ounce
197	12/12/2008	14:53:36	x Lil Pit 21 x	leaves	leaves the room
	12/12/2008	14:54:08	CaliforniaSquirrels	END:TextEditing	
	12/12/2008	14:54:08	CaliforniaSquirrels	wb	[CaliforniaSquirrels created a textbox : In question 3, we found there were only 16 possible solutions for the 4-tall towers. We wrote down the solutions for the red blocks, then wrote

					down the solutions for the yellow]
198	12/12/2008	14:54:15	CaliforniaSquirrels	chat	i dunno if thats right
199	12/12/2008	14:54:32	CaliforniaSquirrels	chat	i just like copied #1s explanation
	12/12/2008	14:54:45	CaliforniaSquirrels	STAR T:Text Editing	
	12/12/2008	14:54:50	CaliforniaSquirrels	END:TextEditing	
	12/12/2008	14:54:50	CaliforniaSquirrels	wb	[CaliforniaSquirrels created a textbox : 4]
200	12/12/2008	14:55:06	16oncebabyjesus	chat	good tyrone
201	12/12/2008	14:55:15	CaliforniaSquirrels	chat	sweet
202	12/12/2008	14:55:27	cammalleri	chat	nice
203	12/12/2008	14:58:24	16oncebabyjesus	chat	totally
204	12/12/2008	14:58:27	16oncebabyjesus	chat	dude
205	12/12/2008	14:58:29	16oncebabyjesus	chat	bro
	12/12/2008	14:58:36	CaliforniaSquirrels		[CaliforniaSquirrels has fully erased the chat message]
206	12/12/2008	14:58:40	CaliforniaSquirrels	chat	whatsup
207	12/12/2008	14:58:40	CaliforniaSquirrels	chat	
	12/12/2008	14:58:43	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
208	12/12/2008	14:58:48	CaliforniaSquirrels	chat	
	12/12/2008	14:58:51	16oncebabyjesus		[16oncebabyjesus has fully erased the chat message]
209	12/12/2008	14:59:03	16oncebabyjesus	chat	donald has white socks on so tacky
210	12/12/2008	14:59:11	16oncebabyjesus	chat	with church shoes

211	12/12/2008	14:59:17	CaliforniaSquirrels	chat	thats a shame
212	12/12/2008	14:59:21	16oncebabyjesus	chat	lol
213	12/12/2008	14:59:24	16oncebabyjesus	chat	i know
214	12/12/2008	14:59:29	CaliforniaSquirrels	chat	what a waste of perfectly good church shoes
215	12/12/2008	14:59:30	16oncebabyjesus	chat	wats good john
216	12/12/2008	14:59:55	cammalleri	chat	nothin
217	12/12/2008	14:59:56	cammalleri	chat	man
218	12/12/2008	15:00:00	cammalleri	chat	i love cubes
219	12/12/2008	15:00:19	16oncebabyjesus	chat	lol wat game are u playing
220	12/12/2008	15:00:29	16oncebabyjesus	chat	yo tyrone how u like this class
	12/12/2008	15:00:41	CaliforniaSquirrels		[CaliforniaSquirrels has fully erased the chat message]
221	12/12/2008	15:00:44	CaliforniaSquirrels	chat	its cool
222	12/12/2008	15:00:45	CaliforniaSquirrels	chat	haha
223	12/12/2008	15:00:58	16oncebabyjesus	chat	merge is the king
224	12/12/2008	15:01:03	CaliforniaSquirrels	chat	yea
225	12/12/2008	15:01:22	16oncebabyjesus	leaves	leaves the room
226	12/12/2008	15:01:42	CaliforniaSquirrels	leaves	leaves the room
227	12/12/2008	15:02:30	cammalleri	leaves	leaves the room
228	12/12/2008	15:02:42	Merges	leaves	leaves the room
229	12/12/2008	15:02:47	kate22	leaves	leaves the room
230	12/12/2008	15:03:24	fflai	leaves	leaves the room
231	12/12/2008	15:04:	powellab	leaves	leaves the room

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