

TEACHING MIDDLE SCHOOL STUDENTS TO LEVEL-UP: A FORMATIVE  
EVALUATION OF INTEGRATING TECHNOLOGY INTO SECONDARY EDUCATION

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By

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The Undersigned Graduate Committee Approves the Project Report Titled

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## **ABSTRACT**

### **TEACHING MIDDLE SCHOOL STUDENTS TO LEVEL-UP: A FORMATIVE EVALUATION OF INTEGRATING TECHNOLOGY INTO SECONDARY EDUCATION**

This report follows the process of designing, conducting, and analyzing a formative evaluation based in anthropological methods on a program called Level Up, a program that seeks to educate students through a type of blended learning or "flipping" that integrates technology and video games into the learning process. This project was designed – through qualitative methods – (1) to analyze Level Up's functionality as a motivational tool, (2) to determine what factors may or may not contribute to a successful implementation or the exportability of Level Up, (3) to better understand the perceptions of a successful student held by the stakeholders (including parents, students, teachers, and administration), and (4) to organize a list of recommendations for Level Up. The data from this evaluation will be used to continue Level Up's development.

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Finally I would like to thank all of my participants, the educators, students, administration, and parents.

## INTRODUCTION

This report follows the process of designing, conducting, and analyzing a formative evaluation based in anthropological methods on a program called Level Up, a program that seeks to educate students through a type of blended learning or "flipping" that integrates technology and video games into the learning process. This program takes advantage of a website called Moodle.org, which is an open-source community based learning tool, describes itself as "...a Free web application that educators can use to create effective online learning sites" (<https://moodle.org>). Due to the lack of funding, the educators decided on a free service as a port for their program.

I first came across Level Up while working as an instructional associate at Washington Middle School with Mrs. Kathy Jones and Mrs. Janice Epling in 2012 (In order to protect the privacy and confidentiality of participants, pseudonyms are being used). During my first year working there, I was able to build up rapport with both individuals. It was within this first year of my employment when the educators told me about their program. At the time, Level Up was still in the conceptualization phase and no concrete implementation plans were established.

Level Up was designed to be a new, fun, and convenient way to incorporate technology into secondary education (primarily within grades 6, 7, and 8), while also adhering to the Common Core and International Baccalaureate Standards. Since the integration of technology to support face-to-face classroom interaction is relatively new, ethnographic evaluation was recommended to the creators of Level Up. The evaluation, I proposed to Jones and Epling, aims to examine stakeholder experiences and observe technology based classroom management

measures, and to create recommendations to improve the program based on a snapshot created from the data compiled and analyzed.

The next step to operationalizing my research project involved getting permission from the middle school to conduct research on their campus and to study and observe the students, classroom, and teachers. After the details were finalized with the school administration, the Institutional Review Board (IRB) requirements for research approval were completed. This process allowed me to create interview instruments and better finalize project goals. IRB approval was gained in early June 2013 and I began attending Level Up meetings on June nineteenth. Interviewing with the educators began in August and the students, parents, and administration in November. Classroom observations were conducted from September thru November.

### Level Up: Goals

Level Up is not just a website, but a virtual environment that structures the physical learning space: it creates an environment in which the classroom is run and sets up the structures for interaction. When interviewing, Jones and Epling stated that the primary goal of Level Up was to create successful students who are motivated to master lessons and skills. Another stated goal of Level Up is to improve the program's exportability, ability to be exported to other locations, to the point where it can be marketable and financially self-sustaining.

### Research Problem

When I started this project, Level Up was in the final stages of the design process. The educators had created a basic outline and materials for Level Up to use within Moodle's web service. In general, the major aspects missing from Level Up, at the time school started included:

avatars, classroom organization/structure, and a schedule. My part as an applied anthropologist was to produce an evaluation useful to the educators in appropriately developing Level Up. With applied social science research, my project aimed to be useful in collecting data that can be used for evaluative inferences about the overall quality of Level Up, how the program met its original goals, and suggest areas for improvement.

### Project Objectives

The objective of this research project was to conduct a formative evaluation of Level Up, its goals and process for the benefit of its creators. The hope of this project is that in helping the creators improve the program, students, parents, and administrators will also benefit.

Accomplishing a formative evaluation will act as a way to educate Level Up's creators on how it can improve with recommendations that are realistic and relevant. This project was designed – through qualitative methods – (1) to analyze Level Up's functionality as a motivational tool, (2) to determine what factors may or may not contribute to a successful implementation or the exportability of Level Up, (3) to better understand the perceptions of a successful student held by the stakeholders (including parents, students, teachers, and administration), and (4) to organize a list of recommendations for Level Up.

### Structure of Report

Background Information and Context, the first section of this report focuses on building the cultural context around the studied community. I introduce the key stakeholders and the relevant factors, such as the school and the International Baccalaureate Program, that play a role in creating the environment that surrounds the participants. Since I am also part of the

community, as a researcher and an employee, my ethics and self-involvement are also explained within Background Information and Context.

The Methodology section covers the steps taken to conduct a formative evaluation on Level Up. This section documents the traditional ethnographic methods including participant observation, semi-structured and informal interviews used to collect relevant data and the resulting cultural analysis. Figure 1 and 2 give a comprehensive model of why these methods were chosen and what information I was hoping to elicit from each group of stakeholders.

The evaluation approach section focuses on the theory and context from which the evaluation was designed. This section gives a more in-depth reasoning leading to my background as a researcher and what approaches provoked my actions as an evaluator.

Summary of findings and project closeout serve as a way to provide information on the results of the project. Summary of findings presents a culmination of themes and discoveries into conclusions that suggest recommendations and action. The project closeout gives final details on my relationship with the client and this project, the project's conclusions on the client's side.

Finally, the conclusion will focus on project closeout and give further explanations on the recommendations made to the clients in the deliverable. The section on lessons learned is also further discussed.

## **BACKGROUND INFORMATION AND CONTEXT**

To gain a better understanding of the community, it would be wise for an evaluator to understand the background of the participants and what organizations or pressures surround and shape daily life. This background information and context section is important to understand the environment in which research was done.

### Project Population

The goal in seeking stakeholders was to identify each group that was at the time and in some fashion being affected by Level Up and their stakes in the program. Preliminary stakeholders consisted of teachers and students but during early Level Up meetings, administrators and parents were also recognized as important populations to consider during evaluation.

My research population consisted of varied stakeholders: educators, administrators, parents, and students. Generally, research should assume that even within and among the groups in the population, there are value and conception differences (Hyde 1987:146). In order to best understand the program, Level Up, it is important to gain the perspectives of all stakeholders within the community and determine their investment.

In an effort to protect the privacy and confidentiality of participants, pseudonyms have been given to participants and locations, furthermore, information, such as the school's website, is also withheld.

*Educators: The deliverers of teaching*

Both creators/educators of Level Up envision a “classroom philosophy” that allows for the integration of technology and video game elements into the classroom. Level Up was thus created as a way to implement an environment reflective of their classroom philosophy.

I focused my educator data collection on the two educators involved with Level Up. Other educators expressed interest in Level Up, but never actively participated. I gained most of my data on the educators from observations, semi-structured interviews, and informal interviews eliciting data on their practices, interactions, plans and visions of a successful implementation. By understanding the educators’ perspectives, I could better see the connections between the educators, students, and Level Up. This group of stakeholders was easily the most involved and has the largest stake in Level Up. For the educators, Level Up makes their work more convenient since they can grade tests faster and have a smaller backlog of paper to deal with, thus improving grading management through digital means. If Level Up proves to be effective and exportable, the educators hope to enjoy a personal economic gain by marketing Level Up to other districts or companies to create a self-sustaining program.

*Students: The focus of education*

As the demographics show (see Appendix 1), there are over 800 students enrolled in Washington Middle School. To better understand this population of students, it is important to realize that a significant number of students are Hispanic (82.3%), socioeconomically disadvantaged (87.2%) and are English Learners or studying English as a Second Language (57.7%). These students are traditionally underrepresented within institutions of higher education. Due to this barrier, they are reminded at school via college days, posters, and announcements of the importance of attending college during the academic year. I used

convenience based sampling when deciding on my student population and focused on classes where Level Up was in use. The 25 8<sup>th</sup> grade students that were observed within Mrs. Jones' Level Up class were all given the option to participate in this research project. Nine students turned in agreement forms and were formally interviewed. Due to the permission gained through the school, observations were still conducted on all 25 students within the classroom.

Students are the main users of Level Up and the main reason it was created. Whether Level Up functions the way in which the educators intended depends on the student acceptance of it. This portion of the community is important to understand, specifically how students use Level Up, how Level Up may or may not affect their education, motivation, and learning, and how they view their own success.

*Administration: The educational leaders*

Administrators are the education leaders at any school site. These people are in charge of guiding students, educators, and parents towards common educational goals. (The goals for the study school are better defined within the “From California State Standards to Common Core,” “Washington Middle School,” and “Redesign” sections of this report). For this study, the Principal of the school and the Assistant Principal of Discipline recently promoted to Assistant Principal of Integration and Motivation were formally interviewed. These members of the administration were the only two that were present at Washington Middle when Level Up was implemented and were available and willing to participate in the project. The other two administrators were unable to participate due to maternity leave.

Sampling administration proved to be difficult during and before the period of data collection as three of the four administrators were going on maternity leave, and another leaving

to take a position at a different school. The few administrators left to participate were short on time and interviews were subject to interruptions from other school staff.

Considering the control administrators have on educational programs implemented within the school, their perspectives are vital in determining the perceived success of Level Up as a program and the amount of any extra support they may provide (such as funding or compensation and time allowances). Mrs. Eppling, during an interview, mentioned the positive support she received from the principal of her school. The teacher believes that Level Up can succeed if there is a “willing administrator and you have to have willing teachers.” These interviews helped to illuminate the goals of the schools, how administrators defined student success, and how programs might function within their school.

#### *Parents: The teachers at home*

As later explained in Lessons Learned, gaining the parent perspective proved to be the most difficult voice to obtain during research. Yet, parents, fulfill an important role into student learning and can act as a determining factor in student success. I wanted to understand the parental viewpoint of Level Up and student success, and their general involvement with their student's academic activities. This information would allow me to better gauge the impact parents have on student learning and motivation.

#### Blended Learning

Starting in the 21st century, blended learning is the incorporation of web-based (online) learning along with traditional methods of instruction. Blended learning takes advantage of technology within the classroom; combining face-to-face and digital environments (Duhaney 2012; Frey et al. 2013; Moe & Rye 2011). This allows students to take charge of their own

learning (Gecer and Dag 2012; Imbriale 2013), to have facilitated collaborative student groups (Gudmundsson and Southey 2012), and to form positive learning habits, such as analytical skills and reflection, with the help of the educator (Moe & Rye 2011).

Blended learning has generally received positive reception from the academic community and schools have been encouraged to adopt this model. Cluskey et al. (2006) found improvements in student performance and pass rates after changing his classroom from a traditional "face-to-face" classroom to a hybrid model. Sorden and Munene (2013:266) state that there are higher student satisfaction and completion rates when blended learning classrooms feature collaboration, social presence (sense of community), and student reflection or feedback.

Generally, when thinking about technology in the classroom, there are three common goals that are sought after in determining success. Cuban (2001:177) describes these goals as more productivity through better teaching and learning, a transformation from textbook to a learner-friendly approach, and an increase in computer literacy so students can compete in workplaces that increasingly require high-level technology skills.

### "Gamification" of Education and Edutainment

Gamification is defined as the use of video game elements in non-game settings or applications, such as making learning more game-like and fun (Dominguez et al. 2011; Kapp 2012; Simões et al. 2013). In this project, gamification is being applied to the classroom through Level Up. In much the same way that games allow players to always progress, or retry situations, Level Up mimics the same features by allowing students the ability to retake tests, and to "level themselves up."

Gamification emerged in the 21st century. It is meant to increase student motivation and the general user experience, supporting student engagement and in connection, learning.

Dominguez et al. (2011) state that the design of gamification should follow three fundamental elements (cognition, emotional, and social) in order to become a motivating mechanism for students. Following this model, cognition is based on the rules of a game, allowing students to easily understand the mission and how that may lead to another assignment, gaining levels or climbing the hierarchy of tasks. The emotional area functions much like a reward system, of experience points, resources, etc, that can motivate the student to a sense of achievement. Finally the social area allows for competition and/or cooperation to complete a task. In order to gamify education, many of the actions of the class setup can remain the same: the biggest difference lies in how to frame learning and assignments so that the class can motivate students with game-like elements.

As part of the effort to bring entertainment to education, games and other technologies have been entered into the classroom to form the concept of edutainment. According to Okan (2003), edutainment is a format that focuses heavily on visual material, narrative or game-like formats. This has been done to try and engage the student, where disengagement may be the norm. Hafen et al. (2011) explain how student engagement is "...a marker for healthy adjustment in adolescence and a precursor to attainment and performance in achievement and social domains." The 1980s saw the emergence of edutainment as a new genre of instructional media designed to both educate and entertain young children (Mizuko 2006). Games like Reader Rabbit, Oregon Trail, and Freddie Fish were among the first games that were implemented into schools to give students a chance to see historical facts in context or learn through gaming (Mizuko 2006).

Researchers and educators have often debated whether or not edutainment is an appropriate take on how learning should take place for young children (Bloom and Hanych 2002). For example, Walsh (2005) raises the question of females and technology, whether inserting technology would make learning difficult for females because of the stereotyping of technology being a male activity. To counter this, Kim and Kim (2001), in a middle school setting, actually explain how females proved to be more proficient Information and Computer Technology (ICT) users than males. Bloom and Hanych (2002) bring up another debate on the topic, that students will come to expect fun things from learning and will not learn if the material is not fun. Another side of this same issue is that educational software can motivate students to explore topics deeper and provides information in dynamic ways (Bloom and Hanych 2002). But motivation is a deeper concept that requires questioning on whether students are more motivated to learn or just to play with the computer (Okan 2002). Cognitive thought or 21st Century Skills have also been brought into the debate of edutainment. Gamers have been thought to be able to process large amounts of nonlinear information quickly and simultaneously, requiring multitasking and the ability to make quick decisions and connections (DeVary 2008) while others believe that gaming distracts from learning (Bloom and Hanych 2002). There are many debates on the topic of edutainment, this section is only meant to be a quick overview to the topic.

## Level-Up

### *Origins/Conceptualization*

The story of Level-Up's conception is told with fondness by both of the creator/educators. The story begins with their first meeting. Due to a chance wardrobe malfunction in 2012, the two educators met in the school parking lot. Level Up resulted from the combination of Eppling's interest and knowledge of technology and Jones' desire to create a small business and her love of gaming and curriculum. Once Eppling started telling Jones about Moodle, the idea took off from there. Jones and Eppling wanted to devise a way that motivated students to learn at home and school with the use of electronic resources already at their student's disposal.

As a way to promote student interest of Level Up, Eppling and Jones inserted video game terms into Level Up. In this way, the educators hoped to encourage student competition and willingness to actively learn while being entertained. Early meetings consisted of enhancing Level Up's vocabulary so that students would cognitively make connections to gaming (ex: Level Up, Writer Guilds, The Portal, etc.). By gamifying education, the educators hope to remove students' unwillingness to try or learn, and to create an environment that promotes student perception that they are 'leveling up' and always progressing in the classroom.

As a beta run of Level Up, Eppling took charge of the first year of implementation at her new school where she was teaching 7th grade Language Arts and Social Studies. Eppling described the principal at her school as very supportive and encouraged a policy of BYOD (Bring Your Own Device). Eppling also noted that she had good buy-in from all her students, seeing work on Level Up as easier and fun. Throughout the year, Eppling encouraged students to email her with questions about Level Up or assignments. Eppling also enforced proper email etiquette and brought it to the class' attention to not use multiple colors, all capital letters, or an overuse of exclamation marks. She made emailing a part of daily communication within and outside of the classroom. Her students went so far as to email her when they found the substitute

teacher disagreeable. They complained that they were there to learn and did not want the substitute to come back to the class and disrupt their learning. Through these stories, Epling shared with Jones and I the lessons she learned in what worked well and what did not. Epling found that students are more receptive to pictures and although she is herself partial to words, she forced herself to adjust the way in which she presented Level Up by inserting more pictures.

Both educators described themselves as two sides of a brain, Epling is considered logical and wise in technology (the left brain) and Jones is described as creative and more adaptable to quick changes (the right brain). From their perspective, they have created a program that is technological and creative. By October 7, 2013, Level Up was up and running in Jones' classroom.

### *Implementation*

Level Up is not just an educational website; it is a way of organizing the physical teaching space, and functions as a classroom management tool. At the beginning of class, students walk in and sit at their assigned seats, such as in a traditional classroom. There are four groups of tables with each group composed of two tables pushed together and then surrounded by chairs. On average, 6 students sit at each group of tables. The teacher's desk is in the front of the room and tables with laptops on them line the back and left wall of the classroom. When the bell rings, all of the attending students sit in the four separate table groups and wait for instruction.

Every day in the classroom is slightly different. Some days Mrs. Jones gives lectures (i.e., on how to write an argumentative essay) or segments the class into different stations that are in charge of a particular assignment or activity. Each station is given 15-20 minutes to complete

their task. In some cases, the students are required to finish reading a chapter in the social studies textbook. Other times, the students are allowed to use the 15-20 minutes to log onto Level Up and study by playing games, answering questions, and correcting sentences. On average, 12 students can access Level Up at a time in the classroom, but this is only due to the limitations the classroom has on the amount of computer present within the classroom. At the end of the session, students are given additional time to fill out their passports. These passports (see Appendix 2) act as schedules for the students to write down what each station's activity was, what they have done during the time provided in the station, and to reflect on what they might need help on, or give suggestions to Mrs. Jones on Level Up. The most common suggestions from students include: needing more time for an activity or for Mrs. Jones to stay with groups longer when she comes to check on their progress.

Each station has a leader, where a new leader is chosen every few weeks (so that every student has a chance to be the leader), and only the leader is allowed to ask Mrs. Jones questions. In theory, this arrangement places peer pressure on the leader to pay attention to the assignment their station is currently handling. This is also meant to build group cohesion and allow the students to be in charge of their own groups and develop communication skills. There is also a level of accountability that when a student, who is not the leader, is forced to ask the teacher for help, the leader is the one to blame for the student not knowing what to do. Unfortunately, as one of the students, Jennifer, pointed out, the leader does not always pay attention and does not always know what to do. She noted that it was not quite embarrassing, but an inattentive leader makes completing tasks difficult.

The Level Up website was originally built as a very text based site. On the main page, students are encouraged to sign in and are then taken to a page with a list of teachers and their

classes (for example: "Mrs. Jones' LUE Language Arts"). Users are then taken to a page set up much like a forum website that gives a list of information in separate boxes. As Level Up evolved, pictures were added to allow students to find assignments and sections easily. At the top of the page, the week's filled in passport is posted. Students are encouraged to download the file to receive a preview of the week to come or to check something they may have missed (see Appendix 3).

"The kids can just go online and see it. It's all like one stop shopping. It's like if they didn't get it, or they want to revisit it, or study, they can go back and look at the material we used. So that's the good part about Level Up." (Jones 2013)

Lower down the webpage, other websites that might be helpful for students to learn from are posted. These sites include [noredink.com](http://noredink.com) and [Zondle.com](http://Zondle.com).

### Washington Middle School

Washington Academy originally opened in the early 1930s and recently went through a name change to Washington Middle School in order to accurately reflect the International Baccalaureate (IB) Middle Years Programme and the grade configuration of 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade. As is stated on the school's website, their mission is to "...eliminate the opportunity gap and provide every student with the finest 21st century education" (source withheld for anonymity). The opportunity gap is a common worry for the school where poverty plays a role in a student's "...ability to learn, their health, social and emotional well-being, and the opportunity to receive a quality education" (Jacobs 2013:46). Despite being socio-economically disadvantaged, Washington, as the mission statement would suggest, wants to give their students every opportunity to receive a better education. In the Adequate Yearly Progress Report, Washington recorded having 89% of its student population is socio-economically disadvantaged, a numerically significant percent (California Department of Education). While it would be nice

to think that students all have the same opportunities despite their socio-economic status, research has established class as a determining factor in educational and future employment opportunities available to children (Lareau 2003). Washington has focused on closing this opportunity gap by encouraging students to go to college, fighting student hunger with free or reduced lunch, and giving out free school and PE supplies to students.

In contrast to the "3 Rs", the foundation of educational skills established in the 19<sup>th</sup> century, the 21st Century Skills include the "5 Cs," critical thinking and problem solving, creative thinking skills, communication skills, collaboration skills, global citizenship, and digital literacy tied on as part of the primary skill set (School website source withheld for privacy). As another effort to close the opportunity gap and to complete the latter half of the mission statement, Washington Middle has encouraged blended learning classrooms and given a computer lab and iPads as resources for teachers and students to use in the classroom. Silicon Valley is easily considered "...the heartland of high-tech innovation (and) technological progress" (Cuban 2001:130). In this heartland of technology, where technology is seemingly ubiquitous, computer labs and other forms of technological tools that can commonly be found within the classroom. Washington Middle uses these resources to promote digital literacy and teachers are relied on to build a curriculum that supports the "5 Cs" and the application of digital literacy.

At the onset of my research, Washington Middle School was going through a transitional phase: it was shifting from the California State Standards to the Common Core Standards and implementing a redesign plan. The administration noted how difficult it was for everything to be solid and steady during the transition. Grading was shifting, curriculum was changing, and the standards had already been reinvented, the redesign became an excuse for why something did not

run smoothly in the school. In fact, some teachers, as described by the administrator, were not ready for the change and were going to need to get used to the redesign by the next school year where there would be forced implementation. Even in classrooms that had implemented criterion based grading, the letter grade terms (such as verbally telling a student they earned an A or a F) were still being used in the classroom between the teacher and students.

### Washington Middle School's Redesign

In 2013, Washington Middle School decided to implement a redesign that focused on three functions; blended learning, criterion based grading, and project based learning. In "The Five Redesign Schools Describe Their Plans" video hosted by the school district the principal boasts that they are "...reinvent(ing) the future of Washington." In the school's own words, during a redesign meeting held in October 30, 2013, the theory was described as

"Washington Middle School's redesign is focused on providing students with a more personalized learning experience. Blended learning is key in allowing students to master subject content at their own pace. Criterion Based Grading provides students with assessment from a growth model perspective. It is our belief that these measures will increase student engagement, further develop their 21st century skills and in turn help close the achievement gap." (2013)

The redesign plan for Washington Middle School will be completed at the beginning of the 2014-15 school year.

### From California State Standards to Common Core

Put plainly, the Common Core State Standards is a set of standards developed by the organization Achieve in collaboration with teachers, administrators, governors, and corporate leaders. On June 2, 2010, the Common Core State Standards were released and since then 45 states have begun the process of implementing the standards (Achieve, Inc. 2013). In the school year of 2013-14, Washington Middle moved from the California State Standards to the Common

Core State Standards and the district began employing teachers to write up the new assessments and curriculum.

From the interviews I conducted with administrators and educators and from observations around the school campus, this shift from the California State Standards to Common Core State Standards has created mixed feelings. Some educators feel the pressure of the extra work, created in having to readjust or rewrite their lessons to fit the Common Core State Standards. For Jones, these standards were "nothing new," she stated that she is keeping the same lessons because they already work. Where the California State Standards left students lost in the world of bubbling answers on Scantrons, Common Core State Standards are meant to give students a chance to express themselves and think more critically.

This change of assessments affect the students as well, since not only do educators have to adjust their lesson plans, students are forced to alter the way in which they learn. Students are presented with a new way in which to take tests and do assignments, whether online or with long or short answer questions. After speaking with a student after the new English assessment test (that required students to read two passages and write two essays) he mentioned how difficult the test was. The test was "...too hard. I miss the other tests, those were easier." I asked him which other tests and he admitted that he liked the tests with the bubbling Scantrons better and these new tests were too hard because he could not think of what to write. (This is not to suggest whether learning had improved or not). Some educators I spoke with, but did not formally interview, expressed concern over whether students were ready for this change to a more critical thinking oriented lesson plan. (A full list of the Common Core State Standards can be found here: <http://www.corestandards.org/>).

## International Baccalaureate Program (IB)

The International Baccalaureate Program (IB) is part of a nonprofit organization that is focused on "...creat(ing) a better world through education" (International Baccalaureate Program 2013). The IB Program encourages students to gain intercultural understanding and respect, a sense that they are part of a wider world culture. There is a general sense of pride at the school where IB is concerned. From the administration's perspective, IB has higher standards and assessments than Common Core and the California State Standards. Where Common Core might just focus on a part of the student, IB is, as one of the Washington administrators stated, "... trying to educate the whole child and not just the - say like the academics" Another administrator commented that "I do believe that we are doing better here at providing - getting our kids prepped... we're making them think higher order thinking. Making them think globally as citizens and it's nice to see and it's nice to watch."

At Washington Middle, the IB program is often publicized to the students. Staff on campus are expected to integrate IB standards and the Learner Profiles (a major part of the IB program that encourages students to aspire to be learners or inquirers), into the classroom. (A full list of the learner profiles can be found at this website: <http://www.ibo.org/programmes/profile/>).

In general, the staff I spoke with all had very positive things to say about the IB program and that they love seeing IB integrated into the classroom and school environment. Through the quotes that follow, it is possible to better understand student perception of the IB program and its connections with the school. One student described what the IB program means as:

"In professional words, means we're a professional school... The way teachers teach. The way students are. The way the school is. It's just, I don't know, makes us feel - makes me feel that this school (pause) we're professional because it has that big IB sign on it." (Ana, 8th grade, 2014)

When I asked the 8th grade students "What does it mean to be an IB student?" I received replies such as "Hm, it means that you're getting good learning. Because of the teachers, they um, they do like stuff that some other schools don't." Other students went back to the learner profiles and answered my question from their knowledge of that "an IB student means to help others, be responsible, be respectful, and (that) you are ready to learn." Another male student answered, "Um, they're respectful, responsible and reflective and I think they learn more than other schools because they have, like, better stuff to learn with... Like computers, iPads... The teachers are better, a little bit better than other schools, they have more skills." These student perceptions help establish how students see their schools and the quality of their learning.

### Ethics and Self-Involvement

I was hired to work at the Washington Middle School on March 8<sup>th</sup> 2012 as an Instructional Associate (IA) within the Resource Specialist Program (RSP). My general duties involve assisting the Special Education teacher in the delivery of instruction to individual students who are within RSP. My responsibilities often take me outside of the RSP classroom and into many other English, Social Studies, Math, Computers, and Music classrooms to assist 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade students and teachers. Many students and staff know who I am on-site either as a teacher or as a coworker.

At the beginning of the 2013-14 school year, the year I started my research, I was assigned to the 6<sup>th</sup> and 7<sup>th</sup> graders. Even though my research centered on 8<sup>th</sup> graders, I did not assist in any of the 8<sup>th</sup> grade classroom, nor did I have any control over their grades, assignments, or status within the school. To ensure that students did not feel pressured to participate in the research, I reminded them that I had no effect on their grade and that no negative effect on their

relations with San Jose State University or Washington Middle School will occur if they decline to participate.

My status as an employee of the school allowed me to build better rapport and trust with the students, educators, parents, and administrators. My position as someone who worked within the school system also gave the educators and administrators a sense of shared community. This was a difficult aspect of my research to work with. At some points the educators and administrators would end their comments with “Well, you know...” I had to respectfully ask them to explain what they meant anyways; regardless of my knowledge of what they were talking about. Another way I attempted to combat this was by asking them to explain a program or concept to me like I had never been to the school.

Another difficulty I faced was with the students. Since I had been working at Washington Middle School since the 2011-12 academic year, some of the 8<sup>th</sup> graders remembered me from when they were attending the school as 6<sup>th</sup> graders. Although I introduced myself as ‘Anne Newman,’ many of the students called me ‘Miss Newman.’ Calling me ‘Miss Newman’ could have been due to the fact that I have acted as their educator in the past, other students on site called me ‘Miss Newman,’ or simply because I was an adult. Since I was unsure of this factor, the idea of authority constantly came into consideration while observing or interviewing the students.

## METHODOLOGY

Data for this project was collected using several methods: participant observation, semi-structured interviews, informal interviews, gallery walks, and document analysis. Data and field notes were then transcribed and analyzed using summary forms and domain/theme analysis. These methods were chosen based on how each method might best serve data collection during the evaluation process. In total, I spent 21.33 hours collecting data in meetings, the classroom, interview settings, and the gallery walk between the months of June 2013 - November 2013.

Before starting data collection in the classroom, I introduced myself to students and parents as an Applied Anthropology graduate student studying at San Jose State University. My first introduction to parents was through a letter (in English and Spanish) sent home with the students. If the parent expressed interest in participating in the project and gave me their phone number, I called them and explained my project's purpose orally, answering any questions they may have had, and setting up an interview time and date if they agreed to participate. To the administrators and educators who already knew me, I reminded them of my student status and that I wanted to conduct research within their community.

Ending data collection in November 2013 allowed me to see Level Up in the classroom for two months. Since my research was focused as a formative evaluation, it was important that I resisted collecting an unusable mountain of information and not prolong data collection. Figure 1 and 2 offer a short overview of why certain methods were chosen and what I hoped to achieve through interviews, observations, document analysis, and a gallery walk. Since this project consists of four separate groups of stakeholders, Figure 2 offers an overview to the changes made between each participant group's interview instruments and participant observation.

<b>Methods</b>	<b>Date</b>	<b>Location</b>	<b>Activity</b>	<b>Purpose</b>
Participant Observation	June, September - November 2013	School Library, Mrs. Jones' Home, and Classrooms.	Observations were conducted at Level Up Design meetings and during 1-3 classroom meetings a week for the months of October and November. Written field notes were taken on occurrences and happenings within the classroom.	Develop an understanding of Level Up's goals and design from the educators' perspective. Observe classroom culture and the teacher-student relationship and interactions within the classroom setting.
Semi-Structured Interviews	June, August, and November 2013	Classrooms and Main School Office	Interviews with educators, students, and administrators in person in the classroom or their office. Parent interviews were conducted on the phone and 2 were conducted with Spanish interpreter.	Interviews were largely focused on Level Up, ideas on student success, and school activities.
Informal Interviews	August – November 2013	Classrooms	Informal interviews were conducted with educators, either before the semi-structured interviews or during classroom activities or breaks. Notes were taken during or directly after these types of interviews.	Informal interviews allowed educators to speak freely about what they were working on and their general thoughts on Level Up and its general implementation, students and their progress, interactions with stakeholders, and Common Core and the redesign of the school.
Gallery Walk	November 27, 2013	Classroom	The gallery walk consisted of taking general themes and skills discussed in semi-interviews and writing them on posters and placing them around the room. The students were then given post-it notes and asked questions about why the topic may be important and what it meant to them.	The gallery walk was used as a way to encourage students to give/form their own thoughts on success and the skills deemed important by other participants through a creative activity.
Document Analysis	November 2013		Essays about technology as a tool or toy written by students and passports students filled out while moving from station to station within the classroom were analyzed.	Analysis was done to gain insight into how students participated with assignments and their thoughts on how technology was meant to be used. Analysis of passports was another way to gain access to another aspect of Level Up.

Figure 1 - Methods Overview

<b>Stakeholders</b>	<b>Method of data collection</b>	<b>Information</b>
Educators	- Participant Observation	- Life and Work History - Expectations for Level Up - Pedagogy

	<ul style="list-style-type: none"> <li>- Semi-Structured Interviews</li> <li>- Informal Interviews</li> <li>- Document Analysis</li> </ul>	<ul style="list-style-type: none"> <li>- Classroom Interactions</li> <li>- Organizational Learning</li> <li>- Perspectives on a Successful Student</li> <li>- Communication/Interaction with other Stakeholders</li> <li>- Future of Level Up</li> </ul>
Students	<ul style="list-style-type: none"> <li>- Participant Observation</li> <li>- Semi-Structured Interviews</li> <li>- Document Analysis</li> <li>- Gallery Walk</li> </ul>	<ul style="list-style-type: none"> <li>- School History and Experiences</li> <li>- Expectations of School</li> <li>- Understandings and Expectations of Self and Student Identity</li> <li>- Classroom Interactions</li> <li>- Level Up Interactions</li> <li>- Perspectives on a Successful Student</li> <li>- Views of Level Up, Ease of Use, and Enjoyment</li> <li>- Personal Future</li> </ul>
Parents	<ul style="list-style-type: none"> <li>- Semi-Structured Interviews</li> </ul>	<ul style="list-style-type: none"> <li>- Home and Student History</li> <li>- Perspectives on a Successful Student</li> <li>- Parent Participation</li> <li>- Expectations of Student</li> <li>- Student's Future</li> </ul>
Administrators	<ul style="list-style-type: none"> <li>- Semi-Structured Interviews</li> </ul>	<ul style="list-style-type: none"> <li>- Life and Work History</li> <li>- Expectations for Level Up, School, and Teachers</li> <li>- Perspectives on a Successful Student</li> <li>- Future of Students and School</li> </ul>

Figure 2 - Stakeholder Overview

### Participant Observation

Throughout the course of my research I conducted participant observation in several settings: classrooms and meetings, looking for stakeholder interactions with each other and the physical and virtual space, actions involving motivation, educator expectations, and mid-course changes.

*June 2013*

I conducted participant observation at two meetings concerning Level Up in June 2013, the two creator/educators were present for both. The first meeting involved another 8<sup>th</sup> grade Language Art and Social Studies educator who was being recruited into using Level Up in her classroom. This recruitment meeting consisted of explaining the program, promoting the educator convenience (in digital grading, communication, and organization), and the hope for student mastery of subject. The meetings I attended took place at the Washington Middle School's library on June 19<sup>th</sup>, 2013, and at the home of one of the educator on June 26<sup>th</sup>, 2013. In this context, participant observation served an exploratory purpose for my later research. During each observation, I took notes and in many ways became the time keeper/secretary.

These early sessions were centered on developing and designing Level Up. Through these observations, I gained insight into the initial goals of Level Up – what the educators were originally hoping the program would achieve. They also helped me better design the interviews to fit with the themes already emerging in the research.

### *September thru November 2013*

I conducted my classroom participant observation one period at a time in the month of September thru November (a standard class lasts 57 minutes). I always observed the same group of 25 students and therefore kept the same sample throughout my research. I focused most of my participant observation efforts on the nine students I interviewed. In this way, I was able to gain a better understanding of how they interacted with Level Up and be able to see patterns build between interviews and observations. In the month of September, Level Up had not been fully implemented, so I used this time to build a better rapport with students and gain an exploratory glance at the classroom environment before the program was put into action in October.

For all observations I took quick hand written field notes on what was said, general interactions among students, the educator, and myself, and the subject of the class period. From these initial field notes, I later expounded on what I saw and added more detail.

From the classroom observations, I was able to see Level Up in action, how the students interacted with the program, and how technology was blended into the classroom. These observations of Level Up allowed information to be gathered on the physical side of the screen. Information was gathered on interactions within the actual classroom (of the educator giving lectures, or students collaborating together) and I was not limited to only viewing exchanges through a digital environment. My focus during these observations included Level Up and ease of use, self-paced learning, and student motivation.

As part of the participant aspect of participant observation, I signed up for Level Up and Zondle (another website used for Level Up) and used these sites to read assignments, play games, and take practice tests. In this way, I was able to better understand the Level Up program and how it might be to use Level Up as a student. I was also allowed to access Level Up as a teacher under a class titled “Ms. Newman’s Master Project.” In this way I was able to practice posting assignments and forum posts following the steps teachers would when using Level Up.

### Semi-Structured Interviews

Interviews are an indispensable part of ethnographic work that allow the researcher to access more of the emic perspective outside of observations. In an attempt to gain a full understanding of the perspectives within the community, I interviewed educators, administrators, students, and parents.

I conducted three semi-structured interviews with educators, two with administrators, ten with nine students, and four with parents. In total, I conducted nineteen interviews ranging between thirty minutes to one and a half hours in length. I personally interviewed all participants, although two parent interviews were conducted via a Spanish interpreter. Most interviews were fully transcribed, the only exceptions being the one participant that requested that the interview not be recorded and the interviews done with a Spanish interpreter.

### Informal Interviews

Generally, informal interviews have no structure and are conducted in a conversational way that allows the participant to form their own train of thought. The interviewer does not have formalized interview questions ready but still keeps the general theme of research in mind.

I conducted 1 half hour informal interview with Mrs. Eppling. This was conducted immediately before her formal interview and I used this informal interview as a way to check in with her about the projects she was working on and the programs she was using in conjuncture with Level Up in her classroom. To show me, Eppling brought out various electronics and spoke about two application programs and what Level Up looked like at that time.

Five to seven informal interviews were also conducted with Mrs. Jones as a way to check in with her about Level Up, her students, and classroom. None of these were timed, but acted as check-ins that allowed me to see Level Up as it progressed throughout the school year.

Throughout these interviews my focus was on communication between all stakeholders, explanations of change in physical environment or virtual structure, and understandings of responsibility (stakeholder perspectives on placement of responsibility as to teaching, acquiring grants etc.).

## Gallery Walk

In general, "A gallery walk is a discussion technique that gets students ... actively involved in synthesizing important concepts" (Francek 2006:27). On November 27th, as a way to encourage student participation in a creative way, I conducted a modified gallery walk with the students of Level Up.

For the gallery walk, I took eight skills that were discussed during interviews with parents, educators, students, and administration and put each one at the top of each poster. These skills included; communication, collaboration, perseverance, self-motivation, respectful, problem solve, critical thinking, and caring. After listing these skills for the students, I wrote them on the board and then wrote three questions for them to think about while they worked on their post-it notes. The questions were:

1. What does this skill mean to you?
2. How can this skill help you succeed?
3. How can you learn this skill?

If Level Up's goal is to make a successful student, I wanted to understand from a broader student perspective, what that meant. For the other two posters I had taped to the wall, I titled them "Level Up" and "Success." I explained each category to the students as I was giving them sticky notes to write on and affix to the posters. The Level Up poster was meant to catch any general impressions of Level Up and how this program might or might not lead to their own success. The poster titled "Success" was meant to be a "catch all" for what I might have missed, to allow the students to think freely on what they thought made them successful, or what skills lead to that vision of success. After I gave the attending 24 students all sticky notes, they sat at their tables and thought about each skill and the three questions I wrote on the board. I did not

mean for the questions to be binding, but more as a place to start. The students took to the questions like an assignment and answered every question the best they could for each poster.

Since I did not interview all of the students, I used the gallery walk as an active way for students to share their ideas about Level Up and success. The gallery walk was also used as a way to gather some more specific information that might have been missed during interviews. For middle school students, I had to be creative. For some of them, a semi-structured interview was not the best way to gain information from them. The gallery walk allowed the students to be more active as they walked around looking at each poster, this also gave them the chance to collaborate with each other and gain ideas from the people around them. During this process, I noticed students sharing post-it notes, or talking amongst themselves.

### Document Analysis

Document analysis was done to gain insight into how students participated with assignments and their thoughts on how technology was meant to be used. Essays written by students about technology as a tool or toy and passports (Appendix 2) that students filled out while moving from station to station within the classroom were analyzed.

### Data Analysis

The collection of data is not the end goal of research. To properly conduct an evaluation of Level Up, there needs to be findings and analysis of collected data. The purpose of analysis, as described by Patton (1990:371), is to "...make sense of massive amounts of data, reduce the

volume of information, identify significant patterns, and construct a framework for communicating the essence of what the data revealed."

Data analysis occurred at multiples stages of the evaluation. I used early observations and data analysis to better construct interview instruments that were understandable and relevant to the community. I engaged in analysis as data was collected, examined discrete units of data, such as individual interviews, to identify recurrent patterns and themes. Once data collection was completed, analysis shifted from individual units of data to the collective data set to identify dominant patterns and themes. I initially organized the interviews into piles based on their occupation (i.e. student, educator, administrator, or parents). I read the interviews grouped together to gain a better sense of possible themes emerging from each one. Eventually, the themes, student mastery, motivation, student success, edutainment, and responsibility emerged as reoccurring throughout. Once I had these themes established for the project, I tried to categorize them to also fit my project goals - to better communicate what the data reveals. Finally, interviews were reread with these themes in mind and they were coded with highlighters accordingly (ex: student mastery: pink, motivation: yellow, student success: orange, etc.).

Any other themes or domains that were found in some interviews, but not most were added to that particular interview's summary sheet. Generally, I used summary forms and domain analysis to "make sense" of the data.

### *Summary Forms*

For every interview and meeting I attended, I created summary forms (Appendix 4). The purpose of summary forms, as described by Miles and Huberman (1994:52), is to "capture thoughtful impressions and reflections. It pulls together the data ... and makes them available for

further reflection and analysis." I used summary forms as a way to quickly categorize major themes and key ideas within interviews and meetings, thus allowing me to compare and contrast these different datasets.

I would fill out one summary form for each interview and meeting I conducted or observed. Each summary form would list the participants in attendance, the setting, and then a list of themes. I would then read through the interview to find salient points or key ideas that matched the listed themes and file them next to the corresponding theme on the summary form this process is similar to pile sorting data in processing themes as described by Ryan and Bernard (2003). This process can also be easily compared to traditional ethnographic coding. In this way, I organized the information I received from interviews and meetings in a meaningful way.

#### *Cultural Domain/Theme Analysis*

As noted, the summary forms helped me section data into categories I could then use to identify patterns and domains. To categorize themes, individual happenings, events, personal interactions, and other instances of interest were noted - therefore allowing for an inductive approach to defining themes. These categories for themes emerged from interviews, meetings and participant observation. Ryan and Bernard (2003) state that to find themes, the researcher must look for repetitions, local terms, the use of metaphors, similarities and differences, and for information not stated.

For this particular research project, I focused theme searching through repetitious language used by participants and, due to having multiple groups of stakeholders, comparing and contrasting the similarities and differences of each group through their actions and ideas stated during interviews. For example, using word lists to understand the repetitious nature of

participant word choice, I highlighted the words 'easy' and 'fun.' Easy and fun were both words that were repeatedly used, especially by students. By physically sorting these words and the surrounding context, the theme of edutainment within the overarching theme of motivation was distinguished within the research.

When creating the gallery walk or improving interviews, I used the themes found during the exploratory portion of research. The early meetings held by the educators proved most helpful when creating a preliminary list of themes. With this list, I could then focus interview instruments on different perspectives concerning these themes. In order to ensure the cultural domains were relevant and not due to bias, I brought them to the client to confer on the issues' significance.

### *Force Field Analysis*

Evaluation is also only possible if there is a goal or a change objective. Traditionally, a force field analysis is described as a way to analyze the driving and restraining forces of change (Werner and DeSimone 2012). Level Up's goals can be described as:

1. acting as a motivational tool to students
2. reaching exportability to gain program self-sustainability, and
3. creating a successful student.

Figure 1 illustrates the completed force field analysis. To create a force field analysis, the researcher must take the change objective and explore factors that are driving the change to happen and factors that are resisting. To go into more detail, each force would then be given a percentage of push - or how much ability that force has to drive or resist the change. As a predictive instrument, a force field analysis could also be used to predict how likely the change is

to succeed by comparing driving and resisting forces to decide which side has more percentage of push. In order to create relevant recommendations or action plans to meet these needs, a force field analysis is an appropriate evaluation tool. A force field analysis allows the researcher a chance to see the big picture on what forces may be working against or for the change objective or goal. Recommendations were based on minimizing the effects of the restraining forces.

<b>DRIVING FORCE ►</b>	<b>CHANGE OBJECTIVE</b>	<b>◀ RESTRAINING FORCE</b>
Level Up seen as "fun" and "easy"	LEVEL UP AS A MOTIVATIONAL TOOL FOR STUDENTS	Level Up seen as "hard" or "confusing"
Level Up's ease of access		The inability to access Level Up
Games		Level Up's server being down, lag, or other glitches
Being able to retake tests		

<b>DRIVING FORCE ►</b>	<b>CHANGE OBJECTIVE</b>	<b>◀ RESTRAINING FORCE</b>
Jones is willing to go to other locations to train other educators	LEVEL UP ABLE TO BE EXPORTED TO OTHER LOCATIONS	Low communication between stakeholders.
Visitors' enthusiasm towards Level Up		Other location's funding problems.
		Other location's teachers need to accept pedagogy that comes along with Level Up
		Learning a new technology to implement in classroom

<b>DRIVING FORCE ►</b>	<b>CHANGE OBJECTIVE</b>	<b>◀ RESTRAINING FORCE</b>
------------------------	-------------------------	----------------------------

Level Up focuses material on mastery aligning with Common Core and IB in Language Arts and Social Studies subjects	LEVEL UP AS A TOOL THAT HELPS CREATE A SUCCESSFUL STUDENT	District goals do not always line up with Level Up's schedule
8 <sup>th</sup> grade students are generally more determined to get good grades		Parent lack of awareness of Level Up
Being able to retake tests		

Figure 3 - Force Field Analysis

## EVALUATION APPROACH

### Anthropology and Evaluation

Evaluations judge or measure effectiveness (Camino 2008:41), build evidence relative to programs from the perspective of stakeholders, in other words, general goodness of fit of the program driven by the needs of the client (Butler 2005:20), and to inform action with recommendations (Camino 2008:51). Anthropology typically describes and analyzes socio-cultural systems from a holistic perspective and anthropological evaluation can help to understand a complex system and use this knowledge to improve the program and facilitate change (Butler 2005:17; Patton 1990:63). Jacqueline Copeland-Carson (2005:8-9) describes evaluation as "... the systematic study of a cultural system to tell the story of its development, efficacy, and impact and translate this story for various audiences." Therefore, evaluation in conjuncture with anthropology is a way to translate culture into a story that can motivate programmatic change or improvement.

Each program is created within an already standing community and may form its own culture. It is then the job of an evaluator to understand how this new program may fit into the community and to judge its appropriateness. Anthropologists who participate as evaluators allow themselves to take their research a step beyond description and into the applied anthropology arena. An evaluation report, with informed recommendations, also allows the anthropologist to compile the data for the client rather than relying on the client to make the connections for themselves (Camino 2008:51). Anthropological evaluators must take their research and apply it towards benefiting the client in their decision-making.

Anthropologists have long been concerned with how individuals learn and evaluation is deeply imbedded in education in understanding whether a new educational program is successful and helps create a good learning environment and teach learning tools for the student. Greenman (2005:263) reminds us that "educational anthropologists seek to understand education within its embedded cultural contexts." The state may dictate the academic standards students are to achieve, but the teachers and the programs they use are a big factor on what knowledge and skills the students actually learn. Part of my project is to better understand what is considered important to learn within the community and what factors make up a successful student.

### Formative Process Evaluation

Since Level Up was early in the implementation stage when I started my research, a formative evaluation allowed me to look at the beginnings of the program and identify improvement and understand the variety of ways this program affects its stakeholders. For those reasons, I decided against a summative evaluation. A summative evaluation is only concerned with end results when it is too late for the program to improve or where the evaluation is only concerned with if the program worked and the end result (Patton 1990).

As far as process goes, "Process evaluations are aimed at elucidating and understanding the internal dynamics of how a program, organization, or relationship operates" (Patton 1990:95). Since this program was new to the school and the clients were concerned about its exportability, I wanted to fully explore Level Up's functions and activities and how participants experienced the program for themselves.

### Goodness of Fit

When a program is being inserted into a community, a concern over goodness of fit may arise. In the same way businesses cannot expect a website to go global by merely translating the text, programs need to fit within the context or community in which they are being implemented. This is why goodness of fit is such an important facet of interest and appropriate tool for researchers performing evaluations.

For goodness of fit, the researcher should not be concerned about a program being "good" or "bad" in a general way. Researchers must ask themselves, does this program fit within the population, and does this program reach the criteria that people within the community may have set out for it? Mary Odell Butler (2005:20) explains that program designers should understand the "...fit of organizations to people's needs, all within a framework of culture." In this way, this analysis can take a holistic approach in understanding whether a program may fit within the culture or community and how. By taking multiple perspectives an anthropologist can understand the values of stakeholders and how this may affect whether the program is seen as "good" or "bad," as well as how it is accepted. What makes for effective education is not defined with a static description, but is shaped through the culture and context in which the education is being presented (Greenman 2005).

In this project, I decided to focus on the goodness of fit concerning Level Up within the community where it was being implemented. Since the program was not under any particular constraints or criteria, I wanted to use this research as a way to better understand the various perspectives on how an educational program should function within the school system and with the educators' own goals. Goodness of fit was especially appropriate because school programs are often dependent on the teachers who will use them, the administration that will support it, the

students who decide if and what they learn, and the parents who control student home life and have a voice in school matters.

### Organizational Learning

Due to the fact that Level Up was still in its early stages and I was conducting formative research on the program, I also wanted to keep in mind the organizational learning capacity of Level Up and the educators involved with it. Whenever a program is in the early stages of implementation there can be a time when implementers realize something not working and so it is changed. The speed at which these changes can be made and accepted is partially determined by organizational learning. Organizational learning can be described as an organization's ability to assess problems, change strategies, and refocus goals (Finnigan & Daly 2012:43). In order to develop this capacity there must be a willingness to change or adjust and trust must be built up between members. Organizational learning is important in any project to encourage an evolving program that does not stagnate. Having a high organizational learning capacity increases the ability to better find problems and address them, keeping the organization at a high level of functionality. Due to the limitations of my study, I can only judge the organizational learning capacity in what I have seen and a full evaluation on this subject would be more complete if done at the end of the school year/beginning of the next school year to assess how the program achieved its objectives and whether any goals were changed.

There are two types of organizational learning considered here: single-loop and double-loop. Single-loop can be described as understanding how to best achieve existing goals and objectives and double-loop is described as being able to examine underlying assumptions and values and set new priorities (Finnigan & Daly 2012:44). For a new program, it would be

difficult to have preexisting norms to examine, but generally, from what I saw in my research, Level Up's goals stayed the same: to produce a learning system that promoted mastery and motivation. In this organization, Double-loop organizational learning would be more likely to occur at the end of the school year where the educators would have more time to readjust goals and lesson plans.

### User Experience Research

User experience research is a common practice within organizations in which a product or program is understood through the user and how the users' needs are being satisfied. Programs and products that do not pay careful attention to the users' needs or ability are generally unsuccessful. User experience, as described by Mike Kuniavsky (2003:3), is "...the process of understanding the impact of design on an audience," especially in understanding if a program is useful, usable, and successful. Since user experience determines the successfulness or usefulness of a program, user experience can easily be used within evaluation.

I found user experience methods most applicable in my research during participant observation. Much akin to how participant observation is already conducted, user experience focuses on defining the audience and their goal, and understanding, what the user finds interesting, where mistakes were consistently being made, and how the user knows where to go or how to make it work. User experience research also understands that usability and success mean different things to different people. Organizations will conduct user experience research when worried about the interests of the organization, the advertiser, and the end user. User experience can create a shared vision of the program. Understanding the usability of Level Up,

the Level Up website, and Level Up's success factors from different perspectives is at the core of my research project and why user experience research methods are so relevant.

### The Digital Divide

Throughout the evaluation, administrators and educators spoke about the digital divide or the opportunity/achievement gap. The educators spoke of access and how the students do not have access to computers or the internet and how that was leaving students behind. One of the administrators I interviewed had mixed feelings about how to define the digital divide.

Reflecting on Khan Academy, a program for which the school had bought approximately 30 iPads for, the administrator was disappointed by the test results. He told me, "Last year, the scores didn't reflect it at all. It was kind of sad to see because we thought we were going to have different results." This experience may have helped reinforce the idea that the digital divide is not purely based on access.

There has been an extensive debate over the definition of the digital divide, this is a quick overview of some of the literature concerning the digital divide. The digital divide has many meanings, and since the emergence of Information and Communications Technology (ICT), has garnered much concern, especially within the education sector. Traditionally and politically, the digital divide was seen as a problem of access, that students were not able to use technology and therefore were victims of the digital divide (Epstein et al. 2011). The digital divide as a problem of access leads way to an easy solution and is therefore a favorite among politicians and organizations (Vidyasagar 2006). Many authors now see the digital divide as multilayered, with access and skill as part of the problem, adding a layer of how students are taught to use technology and what students learn specifically concerning technology (Cullen 2001; McCollum

2011; Mutula 2005; Naidoo and Rju 2012). Rizhaupt et al. (2013) explains the digital divide as having three levels: 1. access to hardware, software, and the Internet, 2. how frequently students and teachers use technology in the classroom and why, and 3. whether students know how to use ICT for their own empowerment. In order to best understand how to bridge the digital divide and create a plan of action, educators and administrators should first define the digital divide for themselves.

## SUMMARY OF FINDINGS

Since this is an evaluation, I want to pay special attention to Level Up's goal of creating a successful student with the use of the program as a motivational tool with the future goal of exporting the program into the market. Due to this focus on Level Up's goals, the summary of findings will be centered on (1) Level Up as a motivation tool, (2) Level Up's Exportability, and (3) successful students.

### (1) Level Up as a Motivational Tool

When discussing motivation, we are usually dealing with intrinsic and extrinsic motivation (Autio et al. 2011; Shillingford and Karlin 2013). Intrinsic motivation can be described psychologically with some level of autonomy and is satisfied mainly with the task and its completion. Extrinsic motivation is counter to intrinsic in that the person is motivated by an outside reward, such as a physical item or privilege.

Students are increasingly expected to complete complex and innovative tasks - Common Core State Standards exemplify one of the ways in which learning is moving to the more complex. In order to build motivation, Daniel Pink explains that "if we want higher-level work... the better way to motivation is to build more autonomy" and create a motivation structure that is intrinsic within the student rather than based on a "carrot-and-stick" extrinsic motivation reward system (Truby 2010:27). Palmer (2007) also suggests that motivation can be enhanced by facilitating choice (autonomy), variety, collaboration, and teacher enthusiasm. To better prepare students for a job market that increasingly requires technological competence or "21st Century Skills" and tasks requiring conceptual thought, intrinsic motivation is required (Annetta 2008; Truby 2010).

"You need to give yourself motivation to do it, rather than saying you can't or it's impossible or I don't know how and stuff like that and instead of using those kinds of words, motivate yourself to do it and think about it as learning something new and just doing better." - Jennifer (8th grade)

Jennifer is an example of a student who already tries to keep herself intrinsically motivated. She enjoys going to school, and tells herself every day that she wants to go to school and that she wants to do her work. Jennifer uses self-motivation to keep excited about school. During the interview, she told me: "If you tell yourself 'I really want to be here, I really want to do good on this test, or I want to finish my homework,' and then use the effort in your head to want to do it." Jennifer is the type of student Level Up wants to create - a student that is intrinsically motivated.

Level Up was created to be a motivational tool, because educators were "concerned over the lack of motivation of our students. We have some students that are... they don't even want to pick up pens and pencils when they walk into the classroom" (Epling 2013). A Washington administrator acknowledges that students need to be motivated to learn, they sit in a classroom for 58 minutes at the teacher's disposal, "It's all about song and dance." When people are "motivated during the learning process, communication flows, anxiety decreases, and creativity and learning are more apparent" (Wlodkowski 1985). A common perspective among the educators and administrators seems to be that the aim of teaching is to entertain students long enough to get them to learn. This is where the idea of "edutainment" comes from. Edutainment is seen as a way to motivate students to continue their learning.

The word "fun" appeared many times throughout the student interviews. They would proclaim that something was fun and that was why they would continue it, or an academic subject was their favorite because it was fun. The repetition of the word fun, helped solidify how

important entertainment is to students when deciding how to participate in the classroom. Francis (2012) argues "that fun is a successful method to connect students with content." Being entertained and having something be "fun" encourages a student to engage and make more of an effort to continue a lesson, activity, or participate in class (Mathers 2008). To encourage this idea of edutainment, Level Up allows students to play games to study for tests or play word games to improve grammar.

Another aspect to entertainment in education is the variety that Level Up poses. Several students, during interviews, made comments similar to Jennifer's statement: "and it's cool because everybody gets a piece of everything in a limited amount of time... everybody is learning the same things but different things at the same time." The appreciation of variety might be due to the novelty of the system. Palmer (2007) has noted variety and novelty as motivational enhancers. In many classes, students normally sit in one place and all students in the class learn the same thing at the same time. But in general, students seemed to enjoy moving to different stations and engaging in something they perceived of as fun.

There are two major ways I have observed Level Up's attempts at promoting intrinsic motivation in students; competence (or mastery of skill) and autonomy. Shillingford and Karlin (2013:93) note that there is a basic psychological need for competence and feelings of competence may enhance intrinsic motivation when accompanied with a sense of autonomy. Students receive grades and are recognized based on their work. In Level Up, students gain 'levels' based on achievement in tests (80 percent or better). In Mrs. Eppling's model of Level Up, students would gain levels from apprentice, to journeyman, and finally to master and receive different rewards that corresponded with the level. Generally, if a student is doing well and has a

good understanding of the material, they would receive good grades and praise from the teacher. This is true in most classes and is true within Level Up.

Level Up attempts to promote student autonomy in a couple of ways. On Level Up there is a list of links that go to different practices and assignments, such as to noredink.com or Zondle.com. Students, when in the computer station at class or at home, are free to do these assignments in whatever order they chose and decide on which game to practice with. Students feel that these games and practices are "fun" and "easier" because they are on the computer. During interviewing, students remarked on how much easier it was to do the practices or even just look at the assignments online at home rather than feeling pressured to remember everything during class.

### *Avatars*

Avatars are representations of self through (most commonly) digital media and/or drawings or other physical representations. Avatars are visual representations that allow users to maintain a consistent identity and/or create a new self-identity (Gilbert et al. 2013) or even to conform to a group identity (Martey and Consalvo 2011). The educators hoped that avatars would serve as the initial extrinsic motivational tool for Level Up. This aspect of Level Up was what gained the most enthusiasm from the educators. The hope was that these avatars would be relevant to students today and would motivate them to continue with their lessons to earn more points to acquire better items for their avatar. This extrinsic motivator would serve as the year-long reward system for students who did well in class.

"They have their avatar, they'll get points or something for their avatar to go to shop. They can change its appearance, or they could buy a scroll or they could buy things. And that's their reward that they get, that they can change their avatar. Because trust me, the

kids are going to be looking at each other's avatar. So that's a built in rewards system for them and a motivational tool. So that's where the Level-Up explorations comes from." – (Jones 2013)

During the time of this research, digital avatars were not implemented into Level Up. Throughout the research, the educators lamented the fact that the avatars did not end up being part of Level Up and acting as an extrinsic motivator. When asked what they would change or what did Level Up need to work its best, both educators responded that digital avatars (automated avatars) would be ideal, but not possible due to budget constraints. The educators thought that students would be more motivated to care about digital avatars, instead of paper avatars.

As a way to work around this, the educators still inserted the element of avatars into Level Up, but in many ways, they felt, it lost its extrinsic motivational appeal. The students created their own avatars on paper, either of their own design or using a gingerbread man outline. These avatars were displayed on the walls of the classroom but the students, as a class, did not do anything with the avatars once they had been displayed. Some students were very proud of their avatars and would show me which one was theirs and what ideas they used to create their avatar. Some students were not happy with their avatars and either complained that they did not know how to draw or that they could not think of anything to draw. Jones acted as a motivator for her students, convincing them that "It doesn't matter what you draw" and that they should just draw something and not give up.

The website Moodle, in January 2014, entered a system of badges into their program. Level Up creator, Mrs. Jones has mentioned using the badge system as a replacement for avatars to create a rewards system that she hoped would motivate students.

## (2) Level Up's Exportability

Beyond ensuring student motivation, the creator educators of Level Up are concerned with the exportability of the program. One of the educators' early stated goals was to have Level Up exportable enough to be implemented in other school locations and to receive payment for it. The educators were hoping to establish the program and then be able to market Level Up to other school locations, districts, or businesses themselves. As Level Up continues to evolve and become more stable, moving the program to other schools will become a better prospect.

When implementing a new program into the classroom, especially with technology, special care needs to be taken into understanding the teacher's buy-in, classroom culture, and pedagogy (Armstrong 2014; Kinchin 2012; Lasry et al. 2012). As earlier acknowledged, Lasry et al. (2012) state that a new system of technology needs to be implemented with the pedagogy that fits within it. So Level Up may not succeed if it is forced upon an educator or if Level Up is just used as a website, ignoring classroom management, the reflective passports, or the necessary role of the educator. Jones and Garcia have said that when technology is brought into the classroom, it is not an excuse for the computer to become the new teacher for the student. Jones stressed how important of a component teachers still are in the classroom, regardless of technology, and stated that she could still do Level Up without technology, but that it would just use more paper and time. Within Jones' classroom, computers are only part of two of the five stations. Jones uses this time in her classroom to establish one-on-one or small group time with her students to check for understanding. "Level Up is a philosophy and a classroom management tool" (Jones 2013). Educators who wish to use Level Up in their classroom cannot forget everything that comes with it, including, items covered in background information, such as, the stations (the physical separation of students to complete various activities), reflection passports (seen in

Appendix 2, an assignment that requires students to reflect on the activity of each station), and educator and student acceptance of technology.

### (3) Successful Students

The idea of success is a value laden and varied concept – every stakeholder has an idea of success, but no one person has a solid description of what it means to obtain success.

#### *Success as Good Grades and College*

Getting good grades to get scholarships or into a good college is another pressure on students to do well in school. During interviews, students reported that they are more willing to try harder in school when the prospect of getting scholarships and going to college looms closer. Eighth grader Luke, for example, decided to play the viola because of an assumption that it would get him closer to a college scholarship. Unfortunately, more than 80 percent of students at Washington Middle School are socioeconomically disadvantaged and many of the students need scholarships to be able to attend college.

The end goal of a successful student, from the parent and student perspective, is to go to college and get a good job. This explanation of future success did not always come with an explanation of what college, what job, or why getting those things led to success. Jessica, an 8th grade student, stated that she “...want(s) to go to San Jose State. I don’t know why.” In middle school, especially at Washington, students are bombarded with information on how much college can help them become successful (with college days, posters, events etc.) but parents and students feel lost as to how to get to college. “College? Um well, I was thinking of - 'cause my mom says San Jose - San Jose State University ... but yeah, it's whatever is good for me.” - Isabelle (8th grade student). Due to this constant pressure, college was a constant reoccurrence in

what leads to a good job and success. When asked what could help her get a good job, Jessica replied “Graduating and that’s it.” Karen, a parent, commented on how her daughter can reach the goal of becoming a nurse, “How can she reach these goals? By graduating, by going to college.”

Jennifer faces a slight dilemma when seeking help in establishing her future educational path. Due to Jennifer's father's absence while he was in the military, Jennifer has always been close to her mother, seeking her advice and telling her about her day. Although Jennifer goes to her mother for advice on how to go to college, during the interview, her mother, Sally, explained that she didn't feel fully educated on "... just what her steps would be to get in, and not only that but how she could apply for scholarships, grants, whatever she needs." Even though Jennifer’s father has gone to college, Jennifer still seeks her mother’s advice on matters. Even though her father is now present in her life, whom Jennifer seeks for advice is based more on comfort level than "expertise."

Generally, students have developed this understanding that good grades and scholarships will get them to college and a good job. Students stated that in ten years, success meant having a good job and not living at home anymore. Students were not exactly sure how to get there, but they knew that getting good grades and doing well in school would put them on the correct path for success. “I think I need to get a lot of good grades and try to get a lot of scholarships, to get to these schools (college) to be really successful and really smart“ – Isabelle. “Because of my mom, she tells me to get good grades so I can get a good job” - Edgar. Jennifer wants to go to Monterrey Bay or Santa Cruz to pursue a career in marine biology, she wants to stay local to the Bay Area; this is her vision of a successful life.

Fitting this model of success from the student and parent perspective, Level Up would need to help students get good grades and connect students and parents to scholarships and college. But college is just one way to look at the end goal of success.

### *Success as Life Skills*

"This is what I tell the kids, everything that we do is an opportunity for them to Level Up, to improve, to show growth in so many ways, not just academically." (Jones 2013)

The Level Up educators and administrators were more concerned with students obtaining the skills (such as the 21st Century Skills) they will need to be successful in their future jobs. The educators wanted to teach students skills that could be implemented in their careers and college. Many of these skills proved to be skills that are difficult to measure and difficult to explicitly teach, but skills that can be encouraged in the classroom. As far as creating a successful student through these life skills, parents and students seemed to be in general agreement with educators and administrators. Communication, collaboration, perseverance, self-motivation, respectful, problem solve, critical thinking, and caring proved to be the most common attributes of a successful student mentioned by participants.

The reasons given for choosing these skills seemed to be based in personal experience. For example, the educators would explain how important collaboration was to the real world outside of school, how their students would eventually be expected to work in teams to get projects done. Due to this view of collaboration and as way to promote this skill, sections and stations were implemented as an important component within Jones' classroom as a part of Level Up. Jones hoped that by creating groups within her classroom with group leaders, the students would develop problem solving, leadership, and collaboration to help them with the business world and future careers.

"I think that also, the students working together positively, you know, which was the goal of how to succeed in the business world, learning how to collaborate." (Jones 2013)

When I focused my questioning on how students learned these skills, students would explain that these skills, such as perseverance, were gained by going out into the world and just doing it - by doing something over and over again. Parents expected their children to learn these skills from the teacher or from school. When Sally (Jennifer's mother) was asked how students learned these soft skills, she responded "that I don't know, I always left it for the teachers to decide." Educators and administrators integrated these skills the best they could into the school environment and lesson plans, but also relied on the parents to create a positive home environment where students may learn success building life skills. Jones gave an example of the dinner table, she explained how students do not often get to go home and eat with their families to build that positive home environment.

"But a lot of our kids never eat with a family, I don't even think there's a proper room for them to sit down. So that's part of the issue too and mom and dad are working so they don't have (time to) look at the kids." (Jones 2013)

In the end, every group of stakeholders seemed to rely on each other and themselves to build a successful student.

Jones and Epling created Level Up to support the skills that they thought lead to a successful student. By encouraging Jones and Epling to view other perspectives of success, together they can think of ways to amalgamate these other skills into Level Up. As a closure to my project, not only did I present a list of recommendations, I held a workshop with the educators to continue exploring what it means to be a successful student and how they might integrate these ideas into Level Up.

*Success as Technical Skills*

Technology has become ever present in universities and businesses, creating a greater need for students to have "21st Century Skills" (Annetta 2008). Goode (2000) and Simard et al. (2008) explain how women, low-income students, and students of color might find it difficult to navigate the technological ecosystem they are now being forced into - this creates a digital divide. Jones and Epling wanted to create Level Up with technology in a prominent role in order to better prepare their students for future access to the technological business ecosystem (Iansiti and Richards 2006). By giving students access and reframing their thinking about computers and technology, Jones and Epling are hoping to better prepare their students to be able to acquire jobs with upward mobility and chances for higher success.

During my observations, I noticed that both of the educators had a focus of reframing student perspectives on technology – changing the computer from “toy to tool.” In November 2013, Jones assigned her students to write an essay based on whether they thought the computers were a toy or a tool, a majority of students wrote on how the computer is both. The following statement is indicative of student views of computers and their functions:

“I believe computers Internet, laptops... should be used as a toy because people should have fun and go to fun websites like Facebook, Twitter, Instagram... I also think it should be used as a tool because people should learn in fun ways such as Level Up, Zondle, and NoRedInk.” (Jose – 8<sup>th</sup> grade student)

Every student interviewed admitted to having the ability to access technology. Students use technology for texting, messaging, or browsing the internet. Level Up did not need to introduce technology as a toy to them. A few students felt lucky to be able to use technology at all and one student felt that computers should only be used as a tool (and that people were lazy if computers were used otherwise). What Level Up allowed students to do, is to use the computer as a tool for school and getting them used to navigating websites for assignments or reading materials.

From observations and interviews, making a firm judgment on whether Level Up introduced the idea of computer as a tool would be difficult. Students see technology as a way to make work fun and as a way to communicate with people.

Even the Common Core State Standards are focused on encouraging students to use technology to learn, but as Jones suggests, the standards can dictate a requirement, but there needs to be a way, such as with Level Up, to implement that requirement. Jones worries about her students: "Technology, Technology, Technology. Common Core is assessed with technology. We don't have it. Our kids are behind." Jones is using Level Up as another way to encourage students to become proficient in using technology so that by the time students are forced to navigate technology for work or school, they will not be at a disadvantage.

#### (4) Recommendations

Using the information gathered through this project, these recommendations are meant to help Level Up improve through self-evaluation, communication and involvement, and exportability.

##### 1. Self-Evaluation – Level Up Progress Report

In order to promote organizational learning, clients should consider creating a form or chart where they can document Level Up's changes, risk mitigation, future plans, successes, and failures. After every semester, the educators should consider getting together to complete these forms and conduct their own self-evaluation.

This self-evaluation should document the current status of Level Up, problems facing the program, and a list of tasks that have been completed as well as those yet to be completed. As

part of any evaluation, risk management should be conducted in order to find what risks Level Up faces and what problems have occurred. Finally, the evaluation should conclude by stating how these risks should be resolved and any recommendations that the educators/creators of Level Up can make based on their own self-evaluation. In this way, they can continue to develop Level Up and enhance communication between stakeholders. By quarterly engaging in the evaluation process to assess what is and is not working, the educators can better learn how to mitigate these risks and continually improve Level Up.

A blank copy of a recommended self-evaluation sheet has been emailed to clients and can be found as Appendix 5.

## 2. Increase Communication with Parents

The parents within this community are generally not involved with school but would like to see their child succeed. Language and time are both barriers that prevent parent involvement within the school system. To encourage parent involvement with Level Up, educators should send newsletters home to parents explaining Level Up, how to log into the website, and how Level Up and parent participation can help their child succeed. I would also recommend that in order to help lessen the language barrier, that so often prevents parent participation, newsletters should be translated to suit the parent language needs.

These newsletters can be sent out at the beginning of the school year or as often as the educator feels the need to invite parents to participate with Level Up. Both educators involved with Level Up have mentioned how they would love to have parent involvement with the program and how that can help students with their assignments and grades. In fact, Jones has made “Show Level Up to your parents” a homework assignment. The parents I spoke with

admitted that the only way they get information about the school is through the Washington Bulletin sent home every week with their student. I believe that a newsletter sent home about Level Up can increase parent participation and communication.

Another way to promote parent participation is to create a PowerPoint presentation to be shown at Back-to-School<sup>1</sup> night. This presentation can give parents the opportunity to see Level Up and ask questions of the educator. The only reason this was not already done at the beginning of the 2013-14 school year is because Level Up was not properly implemented until October 2013.

### 3. Increase Level Up's Exportability

#### *Provide Mock Lesson Plans*

To encourage other schools to adopt Level Up, a mock lesson plan should be created to give other schools a better idea of how Level Up is implemented in the classroom. Creating distinct lesson plans can also show how Level Up can be used by multiple teachers and in different ways with different subjects. In this way, potential educators can see Level Up and how it may fulfill the promises made on their website as well as how it might fit into their classroom setting.

These sample lesson plans can then be posted to their website (<http://levelupexplorations.com>) to give users better access to view the multiple ways in which Level Up can be used.

#### *Attend Business Conventions and the Silicon Valley Innovation Challenge*

If a goal of Level Up is to reach the market, the creators may want to consider integrating their program more into the business world and become aware of what other programs are available that are similar. For example the Silicon Valley Innovation Challenge (<http://www.sjsu.edu/svic/>) encourages creativity and entrepreneurship. Attendance to these types of events can give Level Up exposure the program may not see otherwise. Level Up creators already go to educational connections to give talks about Level Up and giving digital access to students. It is recommended that the creators try to open Level Up to the business world as well as the educational.

### *Quantify Success*

In order for other schools or businesses to take interest in Level Up, the educators will need to provide quantifiable data to prove that the program works. Thinking long term, educators will need to compare student grades and test scores to understand whether Level Up made an impact on students academically. The math department, at Washington Middle School, and their use of Khan Academy is already being loosely evaluated by the administration based on student test scores. The way in which the math department is evaluated proves the need for more quantifiable data about student achievement. To better gather data concerning motivation, educators may consider documenting frequency in which students participate in classroom discussions, how often homework is turned in, or number of visits to Level Up's website.

#### 4. Promote more student autonomy

Autonomy has been linked to building intrinsic motivation within students. Allowing students to take control of their own education helps create a student-centered classroom. Level Up has already shown a number of examples of student autonomy but there are other ways in

which to enhance student decisions. For example, when completing projects for a lesson, students can be given a list of possible projects and activities. This allows the students to learn the subject but in a way that is more adjusted to the student's way of learning. Students are then able to complete tasks from a multitude of ways and they are encouraged to experiment and accept failure as a possibility on the way to success (Simões et al. 2013).

Level Up had one instance where students were allowed to choose their own project. Students were given a BINGO sheet and were allowed to pick projects from the sheet as long as they made a BINGO. In an effort to build intrinsic motivation and student autonomy, educators of Level Up should consider incorporating more project lists, such as the BINGO sheet, into their classroom curriculum.

#### 5. Continue discussion of gamifying education

From the educators' perspective, gamification is a prominent feature of Level Up and is what helps to drive the program as a motivational tool. If the creators are seeking to emphasize video games, there are various ways to persist in gamifying Level Up. The effectiveness of gamification of the classroom is still being discussed (Cohen 2011; Dominguez et al. 2012; Weinstein 2012). The intent of this recommendation is not to state that the educators should gamify their classroom. Instead, educators should further the discussion amongst themselves as far as to how they would like to gamify and establish what results they are expecting from the classroom and their students. The following recommendations are given as a way to begin the conversation of how the educators can integrate more video game aspects into the classroom.

In an effort to continue using gaming language, grades can be translated into experience points or levels. Instead of assignments functioning off of a letter grade, make all assignments

represent experience points. Students start off with 0 experience and can then gain points working their way to reaching a higher level, that can then be easily transferrable to a letter grade. In this way, students gain a more reinforced view of progressing rather than the perspective of starting with an A and only having the ability to lose. Having how many experience points equal what level posted in the classroom also gives the students a visual of an end of the year attainable goal. The current level system is based on tests and quizzes that students take. When a student gets 80% or more correct on a test, the student goes up one level. Although Level Up already has a leveling system, this is a recommendation that could involve the level system on a more concrete level. Lee Sheldon, who has written extensively about gamification and incorporated the concept into his high school classrooms, used a similar system of grading in his high school classrooms (Sheldon 2012:233).

Another possibility to gamify the classroom involves improving collaboration through the use of classroom achievements. By giving the class an achievement to work towards (such as everyone getting 80 percent on a test, or everyone completing a project), students may be better able to see each other as team members working towards a common goal. A physical reward can be attached to the classroom achievement, but the main goal of a classroom wide success should be collaboration building and the promotion of intrinsic motivation.

Although Level Up does not currently have access to digital avatars, educators can still use avatars as aspirational avatars. Aspirational avatars allow students to play with their own identity as students. Allow students to create their own avatar based on the student they want to be. In every interview, students had some idea of what it meant to be a successful student. Students can then create these avatars and role play as a successful student within the classroom.

Giving the students roles to play may add the element of fun to the classroom and allow Level Up to continue gamifying the classroom.

## 6. Climbing the Tech Ladder

In connection with the educators' perspective on success as technical skills and the school's 21st Century Skills, the educators specifically requested (during the closure workshop) help with improving students' chances of getting into the business world and overcoming the digital divide. To do this, they may want to integrate more business and technology based language and structures into Level Up. An example of a way to do this involves NOVA Workforce Development's TechLadder project (currently in development) centered on ICT pathways to success. For this project, an Information Technology Competency Model (Appendix 6) was used. Although this model is centered on ICT workers, many of the skills are easily transferrable to future careers. In order to give students a head start on their career paths, Level Up can focus on many of the skills presented in the model and the TechLadder project, giving students a technical and business edge.

Educators should take a deeper look into what skills will be imbedded into their lesson plans, how can students create a successful career, and how these skills may improve students' employment options. The skills required to successfully form a career are always changing. Educators must be willing to be aware of what works for students and what does not and to tailor their lesson plans accordingly. An important aspect to keeping with Level Up's model of building a successful student is to constantly update the program, to keep with the changing environment of the work force.

## Endnotes

<sup>i</sup> Back-to-School night is an event hosted by the school. This event normally happens within the first month of school and is a chance for parents to visit each of their student's classrooms and meet the educator and listening to how the educator plans to run the classroom.

## LESSONS LEARNED

### Lessons Learned: Level Up

#### *Communication*

Throughout my research project, I found that communication was a missing feature between stakeholders concerning Level Up. When gaining contact with parents, I was the first person to mention Level Up to them. The mention of Level Up would bring a sense of confusion, the parents I interviewed did not know what this program was or that it was being implemented in their student's classroom. When interviewing students, many of them admitted to not talking to their parents about Level Up. When Ana (8th grade student) was asked whether she talks to her family about Level Up, she responded "Um, not really. Doesn't really come to mind, it's just - I don't know. I don't normally talk about it." A few students have explained Level Up to their parents but had difficulty doing so due to language barriers. Other students, such as Edgar, only did so because of an assignment that required students to show their parents Level Up on Moodle.

The cover letter I sent home, in October, with all of the students was many of the parents' first introduction to Level Up. I would commonly spend the first ten minutes of the interview giving a quick introduction to Level Up as a program. This surprised me, I had assumed that parents would have heard about Level Up from their students or back to school night. This lack of communication between Level Up's educators and parents could have been a major facet in the lack of parent participation within the program.

Administrators and educators also had weak communication ties. Both administrators I interviewed admitted to knowing little about Level Up - but still asked for a summary regardless. Epling attests to how important administrator support is to a growing program in education.

After data collection was complete, Jones relayed to me that administrators were now beginning to pay attention to Level Up and were recommending the program to other teachers. With better communication between administrators and Level Up educators, the program has a higher chance of being exported to other locations.

### *Hidden Work of Technology*

Working with technology is not always smooth sailing. During participant observation, Jones and her students would sometimes have to move to "Plan B" if the technology was not being accommodating. On occasion, servers would be down, old laptops would make work difficult, and a common problem would be password trouble - students could not always log into Level Up due to lost passwords. A common assumption might be how technology has made life so much easier, with an ignorance of the possible hidden work involved. When evaluating technology use, I tried to keep in mind the hidden work of technology and whether the benefits outweighed the extra work.

### *Possible Teacher Bias*

Throughout my research project, I had to be aware of the effect educators have on their students. Jones thought Level Up was a great program for students, there was a possibility that her opinion would affect the students. Controlling for this bias is not to say that the bias was purposeful. Some of the ways I attempted to keep a possible bias in mind was if students used the same language as Jones to describe Level Up or to say why they may like Level Up. An important facet of interviewing, is that much of the information I was asking for did not always have to do with Level Up, so in that way, students may have had a difficult time parroting back to me what their educator may have said. Yet as described earlier in this report, when doing a

quick class poll on the benefits of working in textbooks or on projects, students may have been affected by teacher bias in stating their preference for projects and Level Up.

### *Parents*

Throughout the research project, parents were difficult to gain contact with. Although parents' names are listed in the school records, these records are kept hidden and safe, students often forget to relay information or paperwork to their parents, and, at least for this research project's parent population, more than half of the parents did not speak English and/or fell under the category of being "too busy." For instance out of the class I observed, 14 out of 25 parents did not speak English. On a number of occasions I would call parents to explain my research and possibly set up an interview, but after I was finished explaining my research I would receive excuses of being too busy or receive unfulfilled promises to call me back. My impression, without doing a parent survey, was that many of the parents had multiple children for whom to care for, had full time jobs, or attended school themselves. To accommodate the parents the best I could, I offered phone interviews that did not require them to physically meet me at the school. Of the four parents I interviewed, they were all conducted on the phone during various times of day.

For some parents, scheduling became even more difficult due to the fact that I required a Spanish interpreter for the interview - due to this, I then had to coordinate three different people's schedules. In the end, I conducted two English phone interviews myself and two Spanish phone interviews with an interpreter. So that I could remain an active participant during the interview, the Spanish interpreter and I would be on one end of the phone conversation where the Spanish interpreter would ask all of the questions and then type out the parent's answer into a word

document I could read in real time. If at any point in the interview I had probing questions, I would write them down on the interview instrument I had given the interpreter ahead of time and the interpreter would relay the question to the interviewee.

When using a language interpreter, the researcher always runs the risk of miscommunication and there is a chance for missed data. For instance when I would ask probing questions, the interpreter would have to pause, read my question and then ask, this broke up the flow of the interview and rapport may have taken longer to build. Another problem I faced with these interviews involved receiving paraphrased answers. It would be impossible for me to expect a direct translation of what the interviewee was saying. The Spanish translator did her best to relay the information the interviewee was trying to convey, but there was still a high possibility of loss of data.

Many of the parents were also not very involved in the school or school activities. This minimal involvement does not denote a lack of interest in their student's education, but points more to the difficulties the parents have in taking advantage of the school's resources. Many of the school meetings are conducted in English, since many of the parents do not speak English, they feel disinclined to attend or be involved. Students also experience difficulties in explaining school matters to their parents translating from English to Spanish. To help combat this, I translated my forms and a cover letter into Spanish, but it seems students still had to explain to their parents what Level Up and my research was. For example, Jackie, a student in Mrs. Jones' class, tried explaining Level Up to her mother. The biggest problem was translating the information into Spanish for her mother. Since Jackie had such a problem explaining it, the best Jackie could tell her mother was that the program was good and that it helps her with her grades. So in the interview with Jackie's mother, she told us that she knows that the program will help

Jackie with her grades. Even if a parent is fluent in English, there are other factors that keep parent involvement to a minimum. For example, Jennifer's mother works, goes to a community college, and has two children, she finds the meetings difficult to incorporate into her schedule. Jennifer's mother also expressed difficulties in joining the "parent portal." At the time of our interview, in November, Jennifer's mother mentioned not gaining access to the parent portal until just recently. The parent portal is a school resource that provides parents with access to information from the school. Ideally, parents are able to check student progress and grades, attendance, assignments, and be able to email teachers. The parent portal is a useful resource that I had not heard about over my 2 year tenure at Washington Middle School.

#### Lessons Learned: Applied Anthropology

##### *Personal Bias*

In hindsight, my employment with the school location acted as a double-edged sword. The rapport and confidence I had already built with participants allowed them to speak more freely with me, or in some cases, speak to me at all. On the other hand, my research became more susceptible to bias due to my positive relationship with the educators. For the evaluation purposes I should have been more critical of the program and the use of technology in the classroom, gamification, and edutainment. Due to this, I compiled the educators' perspective to create a snapshot of their view and assumptions on educational goals and their students.

Another bias to take note of is my personal observations while working in a middle school environment. From my experience, behavior is the largest issue facing educators in Washington Middle School. When the Washington administrator explains the need to entertain students long enough to get them to learn, this is not an unusual opinion amongst other

educators. Regardless of the use of technology, various educators have tried to make learning fun, make students care, and almost bribe, with entertainment or technology, students to learn or at least behave enough to allow others to learn. Through these observations, that were outside the scope of my research, I became intrigued by Level Up, a program trying to integrate fun into the classroom. I wanted to give recommendations to improve Level Up and increase the program's chance of succeeding. There are two sides to the concept of edutainment, as discussed earlier in this report, there are those who believe that entertainment enhances education, and those that believe that learning is not meant to be fun and that entertainment lowers the quality of student learning. I believe that much of this debate rests on the context of the situation, why, how often, and in what ways entertainment is being inserted into learning. Some of the literature critiquing edutainment gives the impression that educators are trying to make everything fun with no concept that textbooks are just as useful as websites or games. From personal experience and my literature review, my bias was towards education being fun, at least some of the time, for students at the middle school level.

### *Time*

In a corporate setting, researchers need to limit the time that can be used on ethnography to produce beneficial data to help businesses understand consumer needs, and to give direction to evolving business practices (Isaacs 2012). To help with this restriction on time, ethnographers have taken advantage of the Rapid Assessment Process (RAP). The purpose of RAP is to quickly gather information and develop an analysis of general themes and domains of the community (Beebe 2001). RAP is most useful when a topic needs to be further explored, when there are critical elements in a situation that need to be defined, or there is a need for general information (Beebe 2001). Since this project was also limited on time, RAP was a positive influence for this

evaluation. RAP is normally done with a group of experts on a topic (Beebe 2001; Garrett 2002; Isaacs 2012), since I lacked this, the influences of RAP may not have greatly strengthened my overall project structure but will still affect how I may approach other low on time projects.

### *Integration of methods from Business to Applied Anthropology*

Throughout this project, I tried to integrate business methods into applied anthropology. For example, the force field analysis, a common method in change management and in Human Resources, became a large part of my overall analysis. The purpose in this was to create a product with methods familiar in anthropology and business. The combination of different methods can allow the researcher to see data from multiple perspectives.

Yet, I could have taken this methodology mixture further and added more business methods into this project. For instance, to help with my earlier stated time issue, the creation of Gantt charts would have been beneficial to creating a time line. A risk management assessment would have allowed me to better view the risks or potential problems that could have or did arise from this project -for example the language barrier, which was resolved with an interpreter. There are a number of ways to intertwine methodology. In the future, I plan on using methods from multiple fields to better understand my research subject.

### **DELIVERABLES / PROJECT CLOSEOUT**

On February 28, 2014, I presented my findings and recommendations to the creator/educators of Level Up. The information provided to them included my findings and recommendations for the program. The meeting became a workshop in which the creators and I worked out features to add to Level Up. This meeting also allowed the educators to see what I had written up for the report and make requests based on the needs they saw in Level Up. Some

of their suggestions included focusing on integrating business language into Level Up and the gamification of Level Up. To reflect these requests, recommendations 5 and 6 were added to aid the educators in improving Level Up. As a final closeout and deliverable for the research project a formative evaluation report on Level Up was given to the clients (see Appendix 7).

Moving forward, the creators plan to continue building and improving Level Up. Throughout the year, both educators have focused their efforts on changing Level Up to suit their students' needs. For instance, Jones has required students to write their reflections at the beginning of the station instead of at the end. In this way, students are given more time to reflect on how they did and where they might need more help.

During the workshop, the educators discussed ways in which to increase communication between the groups of stakeholders. Both educators are planning a Technology Bootcamp or Moodle Mini Days where parents, students, and administrators are invited to come into the classroom to learn about the program and how it can be used. Yet even without these days, Jones has reported more administrative interest in Level Up. The principal of Washington Middle has led a number of tours through Jones' classroom and has encouraged other educators to take an interest in Level Up. Due to the tours going through her classroom, Jones noticed that it took away time she could be spending with students who needed extra help. As a solution to this, Jones is planning on establishing a revolving set of students as a docent or greeter. This guide would greet any person who came into the classroom and give a quick explanation of the classroom structure. Jones' hope for this would be that the docent would improve their own communication skills and allow her to continue helping other students.

## CONCLUSION

The aim of this project was to evaluate Level Up by analyzing Level Up's functionality as a motivational tool, determining what factors may or may not contribute to a successful implementation or the exportability of Level Up, and understanding the perceptions of a successful student held by the stakeholders (including parents, students, teachers, and administration). Once this was completed, recommendations for Level Up were created to help the program's creators improve the program.

When conducting an evaluation, researchers should leave clients with the ability to continue on with self-assessment, and the reflective work necessary to reach their stated goals. By evaluating themselves, the educators can keep track of the progress made, the problems that arose, and increase their organizational learning capacity. Completing a program self evaluation allows the educators to continually improve the program. This recommendation was largely influenced by empowerment evaluation. Empowerment evaluation largely focuses on community participation where the aim is to understand the program or problem from the participant's perspective accurately and honestly, and then to improve it with meaningful goals and documentation (Fetterman 2001: 4). The hope is that the educators will use the self evaluation to honestly report what they have accomplished and what they would like to achieve in order to improve Level Up. This self-evaluation process allows the educators to document the program's status at the time, set up their own solutions and goals in a reflective manner. The recommendation was also made as a way to promote "life long learning" in sharing successes and failures and through goal setting, such as in empowerment evaluation (Fetterman 2001). Both educators were highly receptive to the self-evaluation recommendation and decided to meet

every 6 weeks for that express purpose. In this way, through all of the changes, Level Up can continue to evolve and grow.

Within the school system and in connection with student achievement, families are a major influence (Henderson and Mapp 2002). Much like how technology cannot replace the teacher in the classroom, technology cannot replace the parent in a student's education. Students with involved parents are more likely to earn higher grades, pass their classes, attend school regularly, have better social skills and graduate (Henderson and Mapp 2002). The recommendation to increase communication with parents is to give parents more opportunity to become even more involved with their student's education. The educators had mentioned wanting to create a parent portal to encourage parents to log onto Level Up themselves and help their student with homework. The parent portal was created based on the educators' perception of the level of parent involvement. Educators saw parents as being low on time and therefore not very involved with their student's education. The Level Up parent portal, that was never enacted, was intended to serve as an easy access to what the Level Up class was doing and learning (in case the parents had to learn the subject information themselves). McKenna and Millen (2013) warn of the dangers involved when educators making assumptions about parents and therefore encourage an actual understanding of parent involvement. Hence with newsletters and presentations to parents, parents will better understand what happens in the classroom and educators will better understand the home life of their students. With an increase in parent communication, educators and parents can work together in a partnership that leads to student success.

Exportability was a difficult topic to measure in Level Up throughout the evaluation. Many of the recommendations made in this evaluation are actions for the educators to consider

or to take in order to be proactive in their want to export Level Up to other businesses or school locations. As the program continues, the educators need to record and document the long term effects of the program on the students. Whether this program academically effects students positively or negatively needs to be documented and reported to interested parties. A method I did not have the forethought for on this evaluation was to measure student ICT ability with a Likert scale questionnaire taken at two different times of the year. This would give the educators another way in which to measure Level Up's influence on students.

In conjunction with all recommendations already listed in the deliverable, educators may want to consider how to partition out pieces of Level Up to export, or if the entire program needs to be released and how it will be released. In some instances, selling modules of Level Up may prove to be more successful than trying to move the entire program to a new business or location. Something else to consider with exportability is the undocumented or tacit tasks involved with conducting Level Up. For instance, acceptance of technology and persistence in working out bugs with students or the technology are large factors in Level Up's successful implementation into a classroom. During participant observation, Jones and her students would sometimes have to move to "Plan B" if the technology was not being accommodating. On occasion, servers would be down, old laptops would make work difficult, and a common problem would be password trouble - students could not always log into Level Up due to lost passwords. A common assumption might be how technology has made life so much easier, with an ignorance of the possible hidden work involved. Without knowledge of these factors, new educators of Level Up may not see the same results as the original teachers did. Exporting Level Up becomes a myriad of different questions for the educators when deciding what actions to take.

Student autonomy became an important recommendation to Level Up based on my observations and the literature that supports autonomy as a facet of creating intrinsically motivated students who can build their own learning (Palmer 2007; Patall et al. 2013). Researchers have found that students are more likely to succeed and engage within the classroom in environments that allow for structured autonomy where they can apply their knowledge (Hafen et al. 2012). Classroom environments and instructional strategies have a profound effect on student motivation and autonomy (Patall et al. 2013). Thus this recommendation was made in the hopes that if Level Up promotes student autonomy as part of the program, students will be more likely to become engaged with the learning material and be intrinsically motivated.

In conclusion, this project has reinforced the importance of objectivity, methods, and timing in data collection. This evaluation was an experience that taught me how to become a better researcher and to view my research from a different point of view. In the end, what this project did was help establish life long learning lessons that I will carry onto every future research project.

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**APPENDIX 1 - Washington Middle School Wide Reported Demographic**

	<u>Number of Students Included in 2011 API</u>	<u>Numerically Significant</u>	<b>Percent (%)</b>
School wide	848		
Black or African American	12	No	1.42%
American Indian or Alaska Native	6	No	0.7%
Asian	7	No	0.82%
Filipino	25	No	2.95%
Hispanic or Latino	698	Yes	82%
Native Hawaiian or Pacific Islander	0	No	0%
White	44	No	5.19%
Two or More Races	4	No	0.48%
Socioeconomically Disadvantaged	740	Yes	87.26%
English Learners	490	Yes	57.78%
Students with Disabilities	83	No	9.78%

\*California Department of Education APR 2011-12

## APPENDIX 2 - Student Passport

### APPENDIX 2 - Student Passport

First & Last Name: \_\_\_\_\_



Date: \_\_\_\_\_

Period: \_\_\_\_\_

### Level-Up Explorations Passport Daily Mission

Complete each quest, and acquire an initialed stamp from your guide at each of the zones/stations. Your mission is to effectively complete each quest. (It does not matter in what order.) Your goal is to **Level-Up** and to improve your knowledge with each quest. Explore the possibilities!

Zone One Target/Focus	Zone Two Explorations/SS	Zone Three Author/Writing	Zone Four Reading/Audio	Zone Five 5 C's	Zone Six Tech Time	Level-Up Travel Log
						Level-Up Mission (Summarize Quest w/one sentence/picture.)
						Challenge (Zone to revisit & why. HELP!)
						Score
						Quest Stamp (Guide Initials)

First & Last Name: \_\_\_\_\_



Date: \_\_\_\_\_

Period: \_\_\_\_\_

### Weekly Level-Up Explorations Travel Tracker

Once the daily mission is completed, confirm that all quests are completed, and that you have an initialed stamp from each station from your guide. Write the score/points from each completed quest. Total your score for the day by tracking your progress. At the end of the week, track your progress and present it to your esteemed leader/teacher. Remember that your mission is to **Level-Up**. Explore the possibilities!

Date	Zone One Target/Focus	Zone Two Explorations/SS	Zone Three Author/Writing	Zone Four Reading/Audio	Zone Five 5 C's	Zone Six Tech Time	Level-Up Travel Tracker
(Example: Mon/10/20) ↓							Daily Total Points/Score
Zone/Mission Weekly Score →							

**Reflection:** (How did it go? What did you like? What were your challenges? Suggestions? Recommendations? Did you Level-Up? Sum up your mission.)

APPENDIX 3 - Master Educator Passport

APPENDIX 3  
MASTER  
PASSPORT

 <b>Level-Up Explorations Daily Passport</b> <i>Explore the Possibilities!</i> 															
Zone One Target/Focus	Zone Two Explorations/SS	Zone Three Author/Writing	Zone Four Reading/Audio	Zone Five 5 C's	Zone Six Tech Time										
															
	1. Check Ch. 5 Review, p. 152, Questions (1-10). Quiz each other for test.		1. Read Ch.10 lol...OMG	<b>No Red Ink</b> 1. Complete assignment: Colons, Quotes 2. Take Quiz	<b>Zondle</b> Practice Ch. 8 Articles of Confederation & Constitution										
<b>Zone Seven All Classes:</b> <b>Home Zone</b>															
1. SS - Ch. 8, Read p. 238-239, <i>The Federalist</i> "Number 51" and "Objections to the Constitution". 2. Answer questions 1-2 on p. 239. 3. Make a Venn diagram comparing and contrasting the Articles of Confederation and the Constitution with at least 3 to 4 key points for both documents. 4. Complete the following graphic organizer found on p. 240, Critical Thinking, #1 and answer the questions 1a and 1b:															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Problem</th> <th style="width: 30%;">Solution</th> </tr> </thead> <tbody> <tr> <td>Western lands</td> <td></td> </tr> <tr> <td>Postwar depression</td> <td></td> </tr> <tr> <td>Representation in the new government</td> <td></td> </tr> <tr> <td>Slavery</td> <td></td> </tr> </tbody> </table>						Problem	Solution	Western lands		Postwar depression		Representation in the new government		Slavery	
Problem	Solution														
Western lands															
Postwar depression															
Representation in the new government															
Slavery															
5. Make a Venn diagram highlighting 3-4 key components of the Federalists vs. the Antifederalists. (Hint: A comparison chart is on p. 235 in the textbook, but you need to make a Venn diagram, not a T-chart.)															
2. L.A. - Read 30 minutes daily.															

## APPENDIX 4 - Jones and Epling Interview Summary Sheet

### **Jones Interview (8-27-13)**

Before the interview we ate lunch and spoke generally. The related notes are in the field notebook. I also restated that she can choose to answer whatever question she wants and is not forced to answer every question. Due to the fact that I've known her for about a year, I mentioned that there are going to be questions in the interview that I already know the answer to but need her to answer anyways.

Setting: The interview took place in Jones's classroom (a room she also refers to as "the penthouse." It was early afternoon and the room was well lit, quiet, and there were no interruptions. We sat across from each other at the middle table in her room (where students sit).

Key Ideas:

- Students can go back to the internet to check or relearn a certain aspect of class. This requires self motivation and self paced learning.
- Jones has commonly had to live in poverty - so she feels she understands the kids a little bit more because of their economic disadvantage. This also arcs into another perspective of Jones's that these kids don't have as many changes to get into the working world.

### **General Information:**

- Jones has been working within the field of education for 35 years
- She has been working at Washington for five years
- She joined the field of education because she wanted to make a difference
- (2) "I could tell immediately who was struggling, and who was understanding it or who didn't pay attention during class. So I showed them a website. They can go online and practice it themselves."
- (2) "Now that I know how to use it, but this is one strategy I'm teaching the kids to use to take notes."
- (2) "And they liked it, 'cause the kids are competitive and they like games. I like games, so it's all about the gaming."
- (2) Which I think is critical. because we're a global society, and then we're sending these kids out totally unprepared.
- (7) " So that's the worst, the worst is all the BS that goes along with education too. I hate that crap and I don't mind saying that. All the paperwork, the redundancy, the same thing, the

important people who come down from the mountain top to tell me how to teach. 'get the hell out of my classroom and let me teach.'

- Shows that she would rather be a self sufficient in teaching and does not like being told what to do - as far as teaching goes.

### **Perceptions of Success**

- (3) " So then the expectation is 'you will have your work.' 'cause the class motto is 'expect the best.' Expect the best of your teachers, expect the best of your school, when you teach kids to expect the best and not settle. But I also expect the best from them."

- (8) " I think a successful student has confidence in their ability, they don't have to know all the answers but they have confidence in their ability. They're able to think critically. They're able to solve problems. They're able to adapt, advocate for themselves. And to ask for help as well. That's what a successful student is. They don't have to know all the answers, they need to know how to find it." (25:10)

- (9) " She had given up on herself, on school, on life. And I felt so bad for her, but no matter what I did, I could not motivate her. I could not get her to care. I tried and tried but that's an unsuccessful student. That's what (being) unsuccessful is."

- (9) "It's not that they're intentionally disrespectful, but they're lacking some etiquette, basic social norms, um, they're smart, they're eager to learn. Maybe not necessarily what I'm trying to teach them, but it all goes in the approach."

- (9) "I want them to remember how to think, how to problem solve, how to find solutions, how to find answers, How to not give up when things are tough. Um, I want them to think about going to college, about having more than just a job in their life. I want them to think about the global world in which we live."

- (12) "I don't think a little competitiveness is a bad thing, the world in which we live is competitive. And the sooner the kids learn that, the better."

- (12) "Because I always tell them , you were here to make a difference. period. That's it. that's what's important to me, that's a goal for my kids. I don't care about test scores, as far as that's my number one criteria, because that's why I teach."

- (15) " Well, I want the kids to be successful, I want them to be confident. I want them to learn how to access the tools, utilize the tools and to increase their overall knowledge and ability. I want them to learn how to collaborate on line. These are all the skills kids don't have and I want them to acquire those, so that when they do go to high school, they're successful and in life, not just high school. So when they go to college, they know how to do this, it's nothing new. Because right now, we're hindered by not having the resources."

## **IB**

- (13) " Well I really believe in the IB NYP philosophy. I do, at first it was 'I B crazy' it just seemed like more work. And in some ways it is. It is more work because you're writing units and everything else. But they correlate with what we're doing anywhere and it should. And it's a way of thinking, of being engaged with the kids. Thinking, ok how do you approach learning? How do you impact the world? How do you interact with your environment? That's just being a good citizen. And if it helps everyone in the world get along better, make it a more peaceful place. I'm all for that. So, for the most part, I'm the NYP IB person for the dean. I do it. That's it gets done."

- (13) " So using the IB and NYP, I think it's just a natural fit. So it provides those opportunities and kids, they start to realize 'Gee, I'm a - if I look at my learner profile, I'm a caring person, or I'm more of an inquirer.' and so they say 'that's the way I learn so let me think about how - how I can best address that or meet my needs. I think it creates an overall connection to the rest of the world. Because you know people all over the world are teaching this way too. I learned a lot this summer when I went to the training."

## **Technology Use**

- (9) " ...a typical student today is very connected to technology."

- (13) " Technology, Technology, Technology. Common core is assessed with technology. We don't have it. Our kids are behind, our kids do not have this at home."

- (13) " when they're talking about the information highway, they're not even on it. So they are derailed before it even starts. So they're not zooming down the highway, they're stuck. So that's the number one resource. As far as anything else I really need, if I don't have it, I'll either write a grant and get it, or I'll buy it myself."

- (14) " But you still need the teacher. Nothing can replace the teacher. Technology is just one more tool or resource. It's a great place to go look for information, to show movies, to do ppt for kids to be engaged and for them to look up information. It's a great resource tool. But nothing can replace the teacher as far as direct instruction and making that direct connection with kids. I firmly believe that. Otherwise we would have plugged kids in when they had a new job."

- (14) " Kids use it for fun. They see it as a toy. In the classroom, it's a tool. So my goal this year, is for the kids to make that shift from a toy to a tool. So it's not just for fun."

- (14) " They'll have 24 hour access. Where education doesn't start at the school, and end during the school day. It goes on whenever the kids need it."

- (15) ". The kids can just go online and see it. It's all like one stop shopping. It's like if they didn't get it, or they want to revisit it, or study, they can go back and look at the material we used. So that's the good part about Level Up. "

- (16) "Kids can't get on the internet, kids can't access the website, kids don't have the time or the resources to go in there. They don't have the opportunity to retake a test. They don't, they can't go back and learn if they miss stuff. I also think - what else was I going to say? can't remember. Technology is important"

### **Level Up**

- (15) " So I like games, I play games and I love education. So I was thinking, how would I do edutainment? And really engage the kids? Level Up - the kids are they have transparent, it's transparent, easily accessible, 24/7 for kids to learn at their own level, at the own speed. And it reiterates what we do in the classroom and it's fun and it's engaging and everything the kids use help with the technology skills they need."

- (16) ", Access to technology, and the teacher and the kids, a motivated teacher and engaged kids," (On what would allow Level Up to succeed)

### **Other Themes**

#### **Motivation**

- (11) "Kids who are happier, they're happy with what they're doing. They're more likely to do it. It's not all fun and games, But it's not all fun and games. I tell them 'sometimes, you all want to eat, but sometimes you have to wash the dishes.' Washing dishes is boring but if you want to continue to eat, you have to wash the dishes. Sometimes we do boring, that's the real world."

- (12) "I don't like a lot of bitching. I don't want to hear that. I don't want to hear the negativity. In general, a lot of places will suck, let's face it. There's so much crap that we have to do. But bitching about it, doesn't help anybody."

- (15) " So I was thinking, how would I do edutainment? And really engage the kids? Level Up - the kids are they have transparent, it's transparent, easily accessible, 24/7 for kids to learn at their own level, at the own speed. And it reiterates what we do in the classroom and it's fun and it's engaging and everything the kids use help with the technology skills they need."

- (16) " So that's the whole point. And I want the kids to have pride in themselves and I think they can do that with the avatars."

- (16) ". I need to do something different in my classroom. And make it fun for the kids, to motivate them. I try to think, what do I like, if I were a kid, what would I like?"

### **Self Paced Learning**

- (2)"I could tell immediately who was struggling, and who was understanding it or who didn't pay attention during class. So I showed them a website. They can go online and practice it themselves."

- (12) "- I definitely want them to Level Up. I want them to learn how to do things themselves, to have that sense of pride, that sense of accomplishment."

### **Mastery**

- (14) " No one is a master of a subject. People spend their entire profession - college professors spend their entire careers on one aspect of the civil war. No one really is a subject master. Teachers don't either. Let's face it. But in NYP I like how we use rubrics, we're not all about multiple choice. We want kids to problem solve. Exactly what I've been saying, critical thinking- everything I've been saying."

### **Common Core**

- (3) (About Common Core) " because I found out with common core, a lot of the things I've been doing and using all along that are successful, just correlate with common core. It's just good teaching."

- (12) " Just this year, they want to see the assessments that we haven't written. We haven't taught this before so they want to see all that."

- (13) " Technology, Technology, Technology. Common core is assessed with technology. We don't have it. Our kids are behind, our kids do not have this at home."

### **Responsibility**

- "We gradually release responsibility"

### **Eppling Interview (9-14-13)**

Setting: This interview took place in my own classroom (G1-A) on a Saturday, so there was no school. The room was quiet but there was the distant sounds of children playing basketball in the nearby courts. Later that day Eppling and Jones were planning on having a meeting, so Eppling and I met an hour before that. (I did not end up attending the meeting like originally planned, Jones was more than an hour late to the meeting and I had other things to attend to).

We sat across each other during the interview. For the first 20 minutes, I conducted a sort of unstructured interview where Eppling showed me everything she was working on.

### **General Information**

- She wanted to work as a teacher because of the mistreatment she saw in how her son (with special needs) was being taught). He was commonly told to sit by himself and the children often made fun of him. (About Chandler (her son) " But it was an eye opening experience, having someone that doesn't fit or conform.") (2) " And I just kind of realized, I need to learn a lot more in teaching myself that the world can't do it for me."

- She has been in the field of education for 8.5 years and worked at Washington in 2011)

- (3) " I love when my students come back and say 'you really made a difference.'" Both Epling and Jones felt the same way - they want to make a difference.

- She uses Classroom Dojo as a way to control behavior because (2) "Behavior correction isn't teaching. It's -it's being a parent."

### **Role of Administrators**

- (9) "- I think principals are indifferent. Think about it, in the time that you've been teaching and I've been teaching. I have heard the next new thing to come across and until they can see it in action, they see it working, they can't build up an enthusiasm for it."

- (9) " So yeah, an indifferent principal would make it an indifferent implementation. You would have to have someone highly self motivated to continue going on."

- (11) " you have to have willing administrators and you have to have willing teachers." (About what would allow Level Up to succeed)

### **Perceptions of Success**

- (4) " We should be saying that failure is on the way to success."

- (5) " You're going to learn more from your failures than you do from your successes. And we should push for resiliency and perseverance."

- (5) "Obstacles are meant to be overcome. Perseverance achieves goals, um, motivation can take place of grades."

- (5) " And that tells you, you've created a successful classroom because they're interested in learning. And they were very upset when the person wasn't following with whatever the plan was. And you've built a very strong community and your students are communicating what they like and what they don't like to you."

- (6) "Being able to communicate effectively is the goal for my students"

- (11) "...have it working and seeing students successful and maybe talking their language lingo and making sure that they're successful."

## **Technology Use**

- (7) "We are in a computerized society, how can we teach them adept at using it when for seven and a half hours a day they're not allowed to use the technology? How do you teach them to use it instead of a toy but as a tool they can use on a daily basis. That's where our problem lies."

- (7) " On Mondays, noredink works in allowing them to practice over and over, conventions like commonly confused words, or subject verb agreement, and punctuation. It gives me feedback on how they all did. And instead of me having to torture every student with the same subject, the same time and going over and over it then me spending more hours grading it, the computer can do all that."

- (7) "And it also give immediate feedback. Unlike in the classroom when you have 33 students and one teacher. You have a minute and a half, maybe, for each student? And it's very hard to give you feedback where in the middle of it, you're giving lecture, or a mini lesson. You're helping another child read or write and you can't give the time when needed. So technology will be able to lift that up. and if you flip your class, conversely, I won't spend all my time having to lecture in my classroom, they can watch it from home and they can come and we can work on it and practice the skills in class. Where my expertise can come in and help them"

- (14) " The technology exists and we should use that and pull that in and let it be part of the motivation. Doing it on the computer, kids prefer taking the test on the computer than taking a test by hand."

- (14) "'? I want to take my test online.' For some reason, they feel that's easier. \*laughs\* It's not. But their concept, because computer is a toy, they feel like it's easier. it's no different than writing it out by hand."

- (14) " What we didn't have the technology for it really. We want the kids to be able to design their own avatars. But we wanted them to design it online. But we couldn't really get that to work for us."

## **Level-Up**

- (9) "To teach it? Um, consistency, how consistent you have to be in the classroom. I think the implementation is the hard part. Not learn it, but implementing it and to remember to implement it. A lot of teachers are inconsistent because they're not real organized." (On will there be any difficulty teaching Level-Up)

- (10) " so we need to be able to speak their language by using the terms that they're using, it's all about gaming and these are the first kind of kids that want to play games. So, we have it with the language we can start pulling them that way and we can pull them in a little bit further with giving them the feedback and the 'atta girls and atta boys"

- (11) " They can write you an email, they can tell you about your learning, they can tell you whether or not they have truly mastered it. Look at how they scored on these tests? They're really mastering areas where they had scored very low. And look at their outlook, they're motivated to go on to the next level. So those are kind of things that are really important." (About what she wants students to be able to do)

- (12) " Being in the classroom and sitting there with 15 students totally unwilling to so much as pick up a pencil and then seeing them you know, I'll say something like 'if this were a game, what would be your next step? How would you be able to get to the next level?' and then they could tell me all about what they have to do to get to the next level in their game. and I'm like 'well why don't you do that in the classroom?' And they're like 'there's no game in the classroom, there is no reward for going up to the next step.' It's grades that my parents get. It's - I'm not interested in that grade. That grade means nothing to me, there's no reward in a grade."

## **Other Themes**

### **Motivation**

- (4) " It's not grades. It is really a child who is motivated to learn and I don't care what level that starts at. It's if they have huge holes in their learning. Like they have real big swiss cheese learning. If they have the motivation to fill the holes, that's a successful student." (In describing a successful student)

- (4) " Lack of motivation. Um, totally uninterested in their own learning process. Um, because that's also an indication how they're going to do in life. It really is. Those who are motivated to learn for the whole - usually do well at any job. I don't care if it's custodian. But those who lack the motivation to seek further knowledge and experience, their lack of risk taking is an indication that they're not going to try or challenge themselves." (About unsuccessful students)

- (4) " and so when they get stopped by something, they stop. Like if they get their F, "Oh shit, I failed I'm done, just give me my F. I'm going to walk away with it."

- (5) "Obstacles are meant to be overcome. Perseverance achieves goals, um, motivation can take place of grades."

- (9) " Level Up is a motivational tool. And basically it's trying to take extrinsic motivation and making it internalized. Making it more intrinsic within yourself. When you feel like you've finally mastered something, you're getting recognition for it, but you realize that it's the work and the process that goes into it."

- (9) ". That's where motivation comes from. That's when teachers don't give praise in the classroom. It's very nice to get the 'atta girls and atta boys' when you're doing just what someone expects you to do. You're willing to do it more. It's when you don't get any feedback - good or negative - even negative feedback feels good because it's some kind of feedback."

- (9) "And that's where we get the motivation in Level Up with our students. It is intrinsically motivating vs. extrinsically motivating."

- (10) " Yeah, Level Up is a motivational tool. And basically it's trying to take extrinsic motivation and making it internalized. Making it more intrinsic within yourself. When you feel like you've finally mastered something, you're getting recognition for it, but you realize that it's the work and the process that goes into it."

- (10) " I say 'yeah but how do you feel about leveling up right now?' and they go 'I feel really great!' and I said 'would you need the certificate to know that you leveled up?' and he goes 'No, I know what the rules are. I know that I've leveled up.' So I've internalize that to a greater degree. They still want that external, but they can live with that internal until they can get the external."

- (10) " Jones and I kind of came up with this idea, we were really concerned over the lack of motivation of our students. We have some students that are - they don't even want to pick up pens and pencils when they walk into the classroom."

- (13) " So there is no reward system at home, we need to create a reward system in the classroom. Getting a grade doesn't mean anything to most of these students. What means something to the students is the 'atta boys and atta girls.'"

- (13) " A lot of times they want seat cushions in the classrooms so I will allow them to bring in their favorite seat cushion once they've leveled up to the next level. So you can see those that made journeymen level."

### **Self-Paced Learning**

- (7) " And instead of me having to torture every student with the same subject, the same time and going over and over it then me spending more hours grading it, the computer can do all that"

### **Mastery**

- (10) " When you feel like you've finally mastered something, you're getting recognition for it, but you realize that it's the work and the process that goes into it."

- In Level Up, students are we required to make an 80 percent or better on a skills checks and progress.

- (11) " I'm looking to present an increase in mastery" (Due to Level Up)

## APPENDIX 5 - LEVEL UP SELF-EVALUATION REPORT

### SUMMARY

REPORT DATE

PROJECT NAME

PREPARED BY

[Select Date]

Level Up

### STATUS SUMMARY

### TASKS COMPLETED

TASK

% DONE

DUE DATE

DRIVER (LEADER)

NOTES

### PLANNED TASKS

TASKS

% DONE

PROSPECTIVE DUE  
DATE

DRIVER (LEADER)

NOTES

RISK AND ISSUE HISTORY

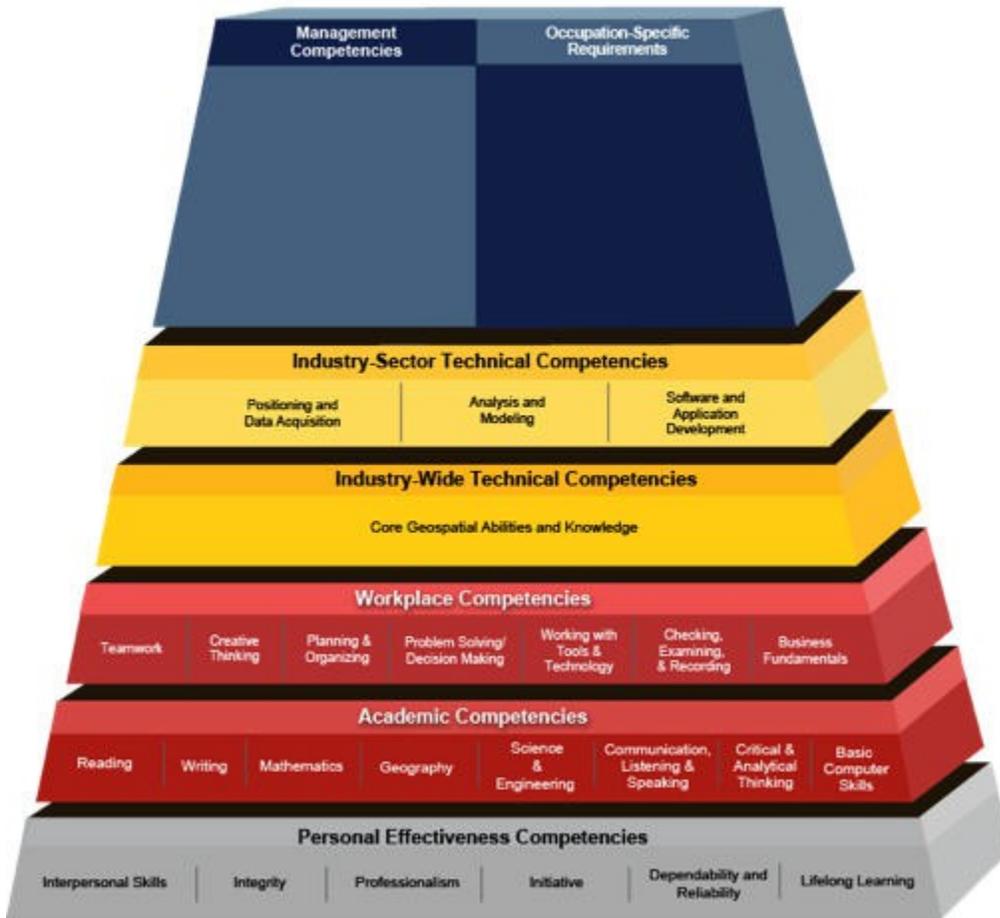
ISSUE

ASSIGNED TO

DATE

CONCLUSIONS/RECOMMENDATIONS

## APPENDIX 6 - Information Technology Competency Model



Employment and Training Administration, United States Department of Labor [www.doleta.gov](http://www.doleta.gov)

## ***Formative Evaluation Report of Level Up***

***Prepared for:  
Level Up Explorations Team***

***Prepared by:  
Anne Newman  
Applied Anthropology Graduate Program  
Anthropology Department San Jose State University  
2014***

Produced in partial fulfillment of the requirements of the Master of Arts Degree in Applied  
Anthropology at San Jose State University

Comments and questions can be sent to:  
Anne Newman  
[anne.e.newman@gmail.com](mailto:anne.e.newman@gmail.com)

EXECUTIVE SUMMARY

An important aspect to the educational system is meeting student needs and preparing them for future lives within society. As modern technologies become an increasingly large element of life in society, how are schools educating students and are these methods relevant?

Level Up was created as a learning management system for the classroom that seeks to educate students through a type of blended learning or "flipping" that integrates technology and video games into the learning process. To encourage continuous improvement, a formative evaluation on Level Up was conducted to gain a better understanding of:

1. The program's functionality as a motivational tool
2. Factors concerning the exportability of Level Up
3. The program's goodness of fit concerning how to build a successful student

### Recommendations

#### - Level Up's Self-Evaluation

To promote organizational learning, clients should consider ongoing documentation of the program's changes, risk management, future plans, successes, and failures. After every semester, educators should gather to review the program's outcomes and conduct their self-evaluation to encourage the program's growth.

#### - Increase Communication with Parents

To increase parent involvement, newsletters should be sent out and parents-centered presentations should be held during Back-to-School night. This information can give parents the opportunity to see Level Up and ask the educator questions.

#### - Create Sample Level Up Lesson Plans

To help Level Up's exportability, mock lesson plans, on a variety of subjects, should be created and posted on their website to give other schools a better idea of how the program can be implemented in the classroom.

#### - Promote More Student Autonomy

Autonomy has been linked to building intrinsic motivation within students. By supporting a system where students take more control over their learning, students can learn in a way that is more adjusted to their way of learning.

#### - Continue Discussion of Gamifying Education

Since gaming is seen as such a prominent feature of Level Up, the educators should consider other ways to continue gamify education. There are a number of ways to do so, but a discussion of how to continue gamifying the program should be present.

#### - Encourage Students to "Climb the TechLadder"

On special request, educators want to improve students' chances of getting into the business world and overcoming the digital divide. By better understanding the tools, such as the TechLadder, that are available, the educators can focus on the skills that have been deemed important by the business world, giving students a technical and business edge.

### INTRODUCTION

This report divulges the findings and recommendations from the formative evaluation based in anthropological methods on the program, Level Up. Research for this report took place in 2013 between the months of June to November. This report is informed by 565 minutes of participant observation, and 20 structured and informal interviews with educators, parents, administrators, and students.

For this evaluation, special concerns of the clients included Level Up as a motivational tool, the exportability of Level Up, the gaming aspects of the program, creating a successful student and how to allow for easier integration of students into the business world. Due to these concerns, this report is centered on the above mentioned aspects.

My part as an applied anthropologist is to produce an evaluation that can be useful to the educators in developing Level Up. With applied social science research, my project aims to be useful in collecting data that can be used for evaluative inferences about the overall quality, how the program suits its original goals, and areas for improvement.

## Level Up as a Motivational Tool

### *Concept of Fun*

Level Up was created to be a motivational tool, one that would keep students motivated to learn while expected to sit in a classroom for 58 minutes at the teacher's disposal. A common theme among the educators and administrators seems to be that the aim of teaching is to entertain students long enough to get them to learn. This is where the idea of "edutainment" comes from. Being entertained and having something be "fun" is a big motivator for why a student will enjoy and continue a lesson, activity, or participate in class.

The word "fun" appeared many times throughout the student interviews. They would proclaim that something was fun and that was why they would continue it, or an academic subject was their favorite because it was fun. The repetition of the word fun, solidifies how important entertainment is to students when deciding how to participate in the classroom.

To encourage this idea of edutainment, Level Up allows students to play games to study for tests or play word games to improve grammar. So although a subject may prove difficult, if Level Up can maintain a level of entertainment for the students, they should be more motivated to participate within Level Up.

Level Up is run by separating the classroom into stations where, every 15 minutes, students rotate the classroom to participate in different activities or projects. Through these sections, students are smoothly moved from textbook reading to projects to the computer in a cycle, freeing students from stagnating on one activity. Students seemed appreciative of this system of diversity, enough that this system kept their attention during the various types of lessons.

### *Intrinsic Motivation*

Intrinsic motivation can be described psychologically and is satisfied mainly with the task and its completion, usually paired with some level of autonomy and the need for competence.

Generally, if a student is doing well and has a good understanding (or competence) of the material, they would receive good grades and praise from the teacher. This is true in most classes and is true with Level Up. In Level Up, students gain 'levels' based on achievement on tests (80 percent or better).

The major difference in how these positive feelings of competence encourage intrinsic motivation in Level Up is the sense of autonomy students are given when using Level Up. On

**"Because people should learn in fun ways such as Level Up" - Student**

**"... it's (sections are) cool because everybody gets a piece of everything in a limited amount of time" - Student**

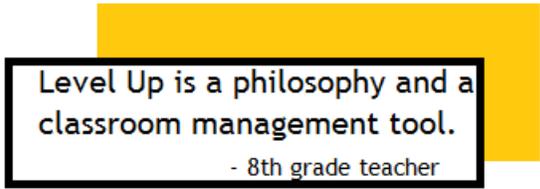
Level Up there is a list of links that go to different practices and assignments, such as to noredink.com or Zondle.com. Students, when in the computer station of class or at home, are free to do these assignments in whatever order they choose and decide on which game to practice.

Students feel that these games and practices are "fun" and "easier" because they are on the computer. During interviewing, students also remarked on how much easier it was to do the practices or even just look at the assignments online at home rather than feeling pressured to remember everything during class. By giving students the autonomy to decide when and how to finish class and homework, Level Up is encouraging students to be better able to tackle higher level learning in an environment that promotes intrinsic motivation.

### Exportability of Level Up

Beyond ensuring student motivation, the creator educators of Level Up are concerned with the exportability of the program. One of the early stated goals was to have Level Up exportable enough to be implemented in other school locations and to receive payment for it. As Level Up continues to evolve and become more stable, moving the program to other schools will become a realistic and possibly profitable prospect.

When implementing a new program into the classroom, especially with technology, special care needs to be taken into understanding the teacher's buy-in, classroom culture, and pedagogy. Without understanding Level Up's classroom philosophy, the program has the possibility of creating a non-learning environment. For instance, Level Up may not succeed if it is forced upon an educator or if it is just used as a website, ignoring classroom management, the reflective passports, or the necessary role of the educator.



When technology is brought into the classroom, it is not an excuse for the computer to become the new teacher for the student. One of the educators stressed how important of a component teachers still are in the classroom, regardless of technology, and stated that she could still do Level Up without technology, but that it would just use more paper and time.

Within her classroom, computers are only part of two of the five stations. She uses this time in her classroom to establish one-on-one or small group time with her students to check for understanding. Educators who wish to use Level Up in their classroom cannot omit everything that comes with it, including the stations, reflection passports, and educator and student buy-in.

### Building a Successful Student

This section will mainly be comprised of the different perspectives of how to build a successful student. This is meant to help the creators of Level Up better understand the community the program is working in and the expectations parents, students, administrators, and educators have of Level Up as an educational program aiming to create a successful student.

*Success as Good Grades and College*

The end goal of a successful student, from the parent and student perspective, is to go to college and get a good job. This explanation of future success did not always come with an explanation of what college, what job, or why getting those things led to success. In middle school, especially in Level Up's current location, students are bombarded with information on how much college can help them become successful (with college days, posters, events etc.) but parents and students feel lost as to how to get to college. Due to this constant pressure,

college was a constant reoccurrence in what makes/leads to a good job and success.

"I think I need to get a lot of good grades and try to get a lot of scholarships, to get to these schools (college) to be really successful and really smart"  
- 8th grade student

Students have developed this understanding that good grades and scholarships will get them to college and a good job. Fitting this model of success from the student and parent perspective, Level Up would need to help students get good grades and

connect students and parents to scholarships and college. But college is just one way to look at the end goal of success.

### *Success as Life Skills*

The Level Up educators and administrators were more concerned with students obtaining the necessary knowledge to be successful in their future jobs. The educators wanted to teach students skills that could be exported into their careers and college. Many of these skills proved to be soft skills, talents that are difficult to measure and difficult to explicitly teach, but that can be encouraged in the classroom. As far as creating a successful student through soft skills, parents and students seemed to be in general agreement with educators and administrators.

Communication, collaboration, perseverance, self-motivation, respectful, problem solving, critical thinking, and caring proved to be the most commonly mentioned attributes of a successful student by participants.

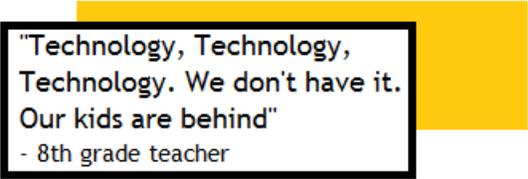
The reasons given for choosing these skills seemed to be based in personal experience. For example, the educators would explain how important collaboration was to the real world outside of school, how their students would eventually be expected to work in teams to get projects done. Due to this view of collaboration, sections and stations became an important component within Level Up.

"This is what I tell the kids, everything that we do is an opportunity for them to Level Up, to improve, to show growth in so many ways, not just academically."  
- 8th grade teacher

The educators created Level Up to support the skills that they thought would lead to a successful student. By encouraging the educators to view other perspectives of success, together they can think of ways to amalgamate these other skills into Level Up. As a closure to my project, I held a workshop with the educators to continue exploring what it means to be a successful student and how they might integrate these ideas into Level Up.

## *Success as Technical Skills*

Technology has increasingly become an ever-present facet of society, with technology integration in universities and businesses. Despite this trend, becoming technologically proficient is still difficult for women, low-income students, and students of color - thus continuing the digital divide.



"Technology, Technology, Technology. We don't have it. Our kids are behind"  
- 8th grade teacher

The creators of Level Up wanted technology in a prominent role to better prepare their students for future access to the technological business world. By giving students access and reframing their thinking about computers and technology, the educators are hoping to better prepare their students to

successfully climb the technical and business ladder.

Every student interviewed admitted to having the ability to access technology. Students use technology for texting, messaging, or browsing the internet - Level Up did not need to introduce technology as a toy to them. A few students felt lucky to be able to use technology at all and one student felt that computers should only be used as a tool (and that people were lazy if computers were used otherwise). What Level Up allowed students to do, is to use the computer as a tool for school and getting them used to navigating websites for assignments or reading materials.

From observations and interviews, making a firm judgment on whether Level Up introduced the idea of computers as a tool to students would be difficult. Students see technology as a way to make work fun and as a way to communicate with people.

## Recommendations

Using the information gathered through this project, these recommendations are meant to help Level Up improve through self-evaluation, communication and involvement, and exportability.

### *1. Self-Evaluation - Level Up Progress Report*

In order to promote organizational learning, clients should consider creating a form or chart where they can document Level Up's changes, risk mitigation, future plans, successes, and failures. After every semester, the educators should consider getting together to complete these forms and conduct their own self-evaluation.

This self-evaluation should document the current status of Level Up, problems facing Level Up, a list of tasks that have been completed and planned tasks (tasks that have not yet been completed). As part of any evaluation, risk management should be conducted in order to find what risks Level Up faces or poses and what problems have occurred. Finally, the evaluation should conclude by stating how these risks should be resolved and any recommendations that Level Up can make based on their own self-evaluation. In this way, they can continue to develop Level Up and enhance communication between stakeholders. By repeating the evaluation process on what is and is not working, the educators can better learn how to mitigate these risks and continually improve Level Up.

A blank copy of a recommended self-evaluation sheet is presented below.

#### SUMMARY

REPORT DATE

PROJECT NAME

PREPARED BY

[Select Date]

Level Up

#### STATUS SUMMARY

#### TASKS COMPLETED

TASK

% DONE

DUE DATE

DRIVER

NOTES

PLANNED TASKS

TASKS	% DONE	PROSPECTIVE DUE		NOTES
		DATE	DRIVER	

RISK AND ISSUE HISTORY

ISSUE	ASSIGNED TO	DATE

CONCLUSIONS/RECOMMENDATIONS

*2. Increase Communication with Parents*

The parents within this community are generally not involved with school but would like to see their child succeed. Language and time are both barriers that prevent parent involvement within the school system. Yet to encourage parent involvement with Level Up, educators should send newsletters home to parents explaining Level Up, how to log into the website, and how Level Up and parent participation can help their child succeed. I would also recommend that in order to help remove the language barrier, that so often prevents parent participation, newsletters should be translated to suit the parent language needs.

These newsletters can be sent out at the beginning of the school year or as often as the educator feels the need to invite parents to participate with Level Up. Both educators involved with Level Up have mentioned how they would love to have parent involvement with the program and how that can help students with their assignments and grades. In fact, one of the educators has made “Show Level Up to your parents” a homework assignment. The parents I spoke with admitted that the only way they get information about the school is through the bulletin sent home every week with their student. I believe that a newsletter sent home about Level Up can increase parent participation and communication.

Another way to promote parent participation is to create a PowerPoint presentation to be shown at Back-to-School night. This presentation can give parents the opportunity to see Level Up first hand and ask the educator questions.

### 3. Increase Level Up's Exportability

#### *Provide Mock Lesson Plans*

To encourage other schools to adopt Level Up, a mock lesson plan should be created to give other schools a better idea of how Level Up is implemented in the classroom. Creating multiple lesson plans can also show how Level Up can be used by multiple teachers and in different ways with different subjects. In this way, potential educators can see Level Up and how it may fulfill the promises made on their website.

These sample lesson plans can then be posted to their website (<http://levelupexplorations.com>) to give users better access to view the multiple ways in which Level Up can be used.

#### *Attend Business Conventions and the Silicon Valley Innovation Challenge*

If the goal of Level Up is to reach the market, the creators may want to consider integrating their program more into the business world and become aware of what other programs are available that are similar. For example the Silicon Valley Innovation Challenge (<http://www.sjsu.edu/svic/>) encourages creativity and entrepreneurship. Attendance to these types of events can give Level Up exposure the program may not see otherwise. Level Up creators already go to educational connections to give talks about Level Up and giving digital access to students. It is recommended that the creators try to open Level Up to the business world as well as the educational.

### 4. Promote more student autonomy

Autonomy has been linked to building intrinsic motivation within students. Allowing students to take control of their own education helps create a student-centered classroom. Level Up has already shown a number of examples of student autonomy but there are other ways in which to enhance student decisions. For example, when completing projects for a lesson, students can be given a list of possible projects and activities. This allows the students to learn the subject but in a way that is more adjusted to the student's way of learning. Students are then able to complete tasks from a multitude of ways, being encouraged to experiment.

Level Up had one instance where students were allowed to choose their own project. Students were given a BINGO sheet and were allowed to pick projects from the sheet as long as they made a BINGO. In an effort to build intrinsic motivation and student autonomy, educators of Level Up should consider incorporating more project lists, such as the BINGO sheet, into their classroom curriculum.

### 5. Continue Discussion of Gamifying Education

From the educators' perspective, gamification is a prominent feature of Level Up and is what helps to drive the program as a motivational tool. If the creators are seeking to emphasize video games, there are various ways to persist in gamifying Level Up. The following recommendations are given as a way to begin the conversation of how to integrate more video game aspects into the classroom.

In an effort to further use gaming language, grades can be translated into experience points or levels. Instead of assignments functioning off of a letter grade, make all assignments represent experience points. Students start off with 0 experience and can then gain points working their way to reaching a higher level, that can then be easily transferrable to a letter grade. In this way, students gain a more reinforced view of progressing rather than the perspective of starting with an A and only having the ability to lose. Having how many experience points equal what level posted in the classroom also gives the students a visual of an end of the year attainable goal. Although Level Up already has a level system (where if a student gets 80% or more correct on a test, the student goes up one level), this is a recommendation that could further the use of levels in the classroom. Lee Sheldon (author of The Multiplayer Classroom: Designing Coursework as a Game) used a similar system of grading in his high school classrooms.

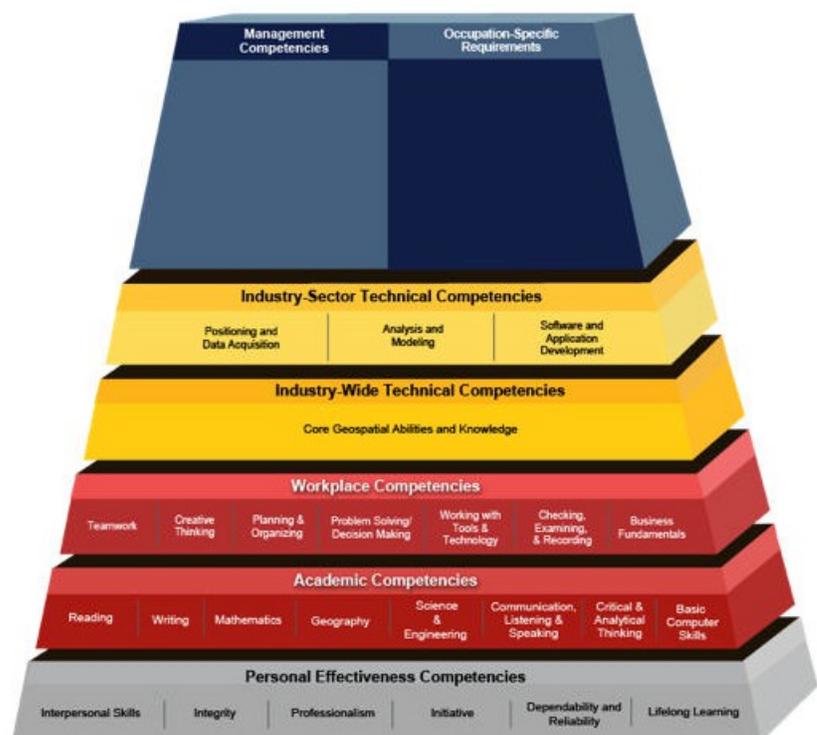
Another possibility to gamify the classroom involves improving collaboration through the use of classroom achievements. By giving the class an achievement to work towards (such as everyone getting 80 percent on a test, or everyone completing a project), students may be better able to see each other as team members working towards a common goal. A physical reward can be attached to the classroom achievement, but the main goal of a classroom wide success should be collaboration building and the further promotion of intrinsic motivation.

Although Level Up does not currently have access to digital avatars, educators can still use avatars as aspirational avatars. Aspirational avatars allow students to play with their own identity as students. Allow students to create their own avatar based on the student they want to be. In every interview, students had some idea of what it meant to be a successful student. Students can then create these avatars and role play as a successful student within the classroom. Giving the students roles to play may add the element of fun to the classroom and allow Level Up to continue gamifying the classroom.

## 6. Climbing the Tech Ladder

In connection with the educators' perspective on success as technical skills, the educators specifically requested help with improving students' chances of getting into the business world and overcoming the digital divide. To do this, they want to integrate more business and technology based language and structures into Level Up.

A good way to do this involves NOVA Workforce Development's TechLadder project (currently in development) centered on ICT pathways to success. For this project, an Information Technology Competency Model was used. Although this model is centered on ICT workers, many of the skills are easily transferrable to future careers. In order to give students a head



start on their career paths, Level Up can focus on many of the skills presented in the model and the TechLadder project, giving students a technical and business edge.