The Effectiveness of the Compass Learning Odyssey Program at R. Roger Rowe Elementary

School

M. Stephen Rivière

San Diego State University

Prepared by M. Stephen Rivière In fulfillment of EDL 795 A/B Dr. Alicia Butters and Dr. Douglas Fisher Department of Educational Leadership Spring 2017



Leadership Starts Here

Abstract

This program evaluation is being conducted to determine the effectiveness of the Compass Learning Odyssey Program at R. Roger Rowe Elementary School. Specifically under consideration is whether the program helps in the effort of having students reach their growth targets, as set by the interrelated Measures of Academic Progress® (MAP®) assessments. The goal is to discover if the program is being used as directed (students completing one hour weekly of Compass Learning exercises), and to examine methods to achieve that end. Quantitative data was gathered through teacher and parent surveys and Northwest Evaluation Association (NWEA) summary reports; qualitative data was gathered through student focus groups and teacher interviews. While Compass Learning has become part of instructional programs, students have not been held accountable for the amount of time spent working on lessons. Additionally, teachers do not feel confident navigating the program. Suggestions include professional development to develop program familiarity, and team collaboration time to sharpen best practices.

Introduction

R. Roger Rowe Elementary and Middle Schools make up the excess-taxes, Rancho Santa Fe School District. This public school which has 450 students at the elementary, K-5 level, and 225 at the middle school 6-8 level, is well situated with an endowment fund and separate parent foundation fund, enjoying the leadership of two principals and a new superintendent. The 79% white student body is supported by households with median incomes exceeding \$200,000 and home values routinely above \$2,000,000. The school board is aggressively responsive to parent criticisms, and demands that the school Smarter Balanced Assessment Consortium (SBAC), test scores lead the 40 school districts in San Diego County.

The district mission is to have 90% of the student body meet or exceed state standards. To facilitate that goal, LCAP monies support the management, maintenance of, and access to Compass Learning and NWEA MAP testing. "NWEA partners with Compass Learning to provide a complete solution for your instructional needs. In order to tie assessment closely to instruction, Measures of Academic Progress® (MAP®) assessments communicate student performance information directly to the Compass Learning management system. The system, in turn, automatically develops targeted, individualized learning paths to help students master critical content" (NWEA, 2016).

The intention of the evaluation is to determine the degree to which using Compass Learning impacts MAPS scores in grades 3 - 5. In that NWEA assigns Compass Learning lessons dependent on performance on MAPS testing results; that teachers are expected to have students use Compass Learning for about one hour weekly; and, that Compass Learning records participation, including success rates, the school will be able to examine these data and Fall and

Spring MAPS scores to answer the overarching evaluation question: Is there a correlation between MAPS and Compass Learning Odyssey, as measured by assigned RIT growth targets? Teacher and parent surveys, along with student focus groups will provide additional data regarding attitudes and opinions about the program(s).

Program Background

Compass Learning is an online learning program partnering with NWEA. Students access their account through the homepage of Rowe School, being presented with a portfolio button, listing their progress to date by week, month, or date range. More importantly, the introductory page allows them to choose between folders of activities (interactive teaching modules followed by quizzes), that are organized by subject (English language arts, mathematics, and science). Additional folders, custom-designed by the teacher, may also "lie in wait" if so desired.

Each folder holds lessons of a particular and differentiated level of difficulty determined by a given student's performance on MAP testing. Owned and managed by NWEA, the MAP test is adaptive, in that the answer of the prior question affects the difficulty of the present one. In so doing, a RIT range of competency is derived and communicated to Compass Learning. At Rowe School, within a few days of the MAP testing window closing, scores populate, automatically resulting in folders of lessons that are tailored to students' abilities.

It is assumed, and expected, that using Compass Learning with fidelity will fill holes in, and extend, student understanding, leading to higher MAP testing scores. Statistical tables and reports have been provided by NWEA demonstrating reliable correlations between MAP and SBAC scores. It is on this basis that Rowe School has recommitted itself to Compass Learning, with fresh Professional Development for teachers along with an expectation that students spend about an hour a week taking Compass Learning lessons. The degree to which the programs correlate using Rowe School's specific data will inform the district's future use, formative and/or summative applications, as well as financial commitments.

Evaluation Questions

The goal of this evaluation is to determine if Compass Learning has an impact on Rowe School students' growth, as measured by MAP scores over time. We know that this growth, if it exists, is dependent on fidelity of implementation of the Compass Learning program. It must be used by students in such a way as to enjoy benefits of the program as designed. The evaluation questions are structured to determine how the program is being used. They are as follows:

- Do students complete Compass Learning exercises in order to improve their MAP scores?
- 2. Do students who use Compass Learning for one hour a week score better on MAPS testing as measured by their growth RIT score, relative to past students?
- 3. To what extent are teachers motivated to develop "learning pathways" on Compass Learning, informed by MAP testing data, as measured by constructs of value for, and confidence in doing, the task?
- 4. To what extent do parents look to Compass Learning for support in encouraging practice and extension of school curriculum?

Literature Review

With the notion of preparing students to function successfully in the 21st century, the profound development of the Apple iPhone in 2007, and 1:1 student to device implementations in school districts, came computer assisted learning (CAL). Whereas "the purpose of education is to engage students with their passions and growing sense of purpose, teach them critical skills needed for career and citizenship, and inspire them to do their very best to make their world better," (Wagner & Dintersmith, 2015) one cannot today try to do so responsibly without using and teaching computer skills. It should be noted that computer proficiency is not the sole objective; technology should serve the greater purpose of producing well-directed, independent, and capable young people. To that end, the literature indicates that while it should not replace, but rather add to teacher instruction, there is a positive correlation between time spent in CAL environments and growth. Where growth is not evident, engagement is allowing teachers the opportunity to reinforce learning while attending to small group or individual reteaching. "In our experience, students are excited about computer-based exercises and, by maintaining their attention longer than traditional formats computer-based instruction can be an effective learning tool." (Sinclair, Renshaw, & Taylor, 2003, p.180)

Screen time is a real part of our students' lives; using computers as an aid to learning is a way of communicating in a form of media in which they comfortably and willingly exist. Teachers choose to use computers as centers to facilitate small group instruction, or to remediate and reinforce skills for students working hard to keep or catch up. "Computer-assisted instruction can be used to improve the learning experience and the performance of children with reading and writing difficulties. We know that [they] are motivated by certain uses of computer

technology, and this fact must be exploited to ensure the greatest benefit to struggling readers." (Ecalle et al. 2009, p.559). What has proven beneficial is a mix of both instruction with paper and computer text. In an Internet Guided Reading program, students researched topics first with print expository text and then complemented the findings with online resources. Anecdotal data showed the students to become "skillful and strategic readers." (Salyer, 2015, p.36).

Gains in the ability for computers to read handwriting and pictures (natural language processing) are allowing for quick and reliable feedback, freeing up teachers to work with needy students. "Immediate, personalized, computer-generated guidance can motivate students to deepen their understanding of complex materials." (Linn et al., 2014, p. 155). It might be slightly unnerving in a time where automation and artificially equipped robots are marching toward replacing workers, however, teachers can rest reassured because, "no matter how advanced artificial intelligence becomes, some jobs are always likely to be better done by humans, notably those involving empathy or social interaction." (Economist, 2016). That being said, in a high-school classroom, "automated guidance was highly accurate and as effective as teacher-provided guidance for stimulating understanding of chemical reactions." (Linn et al., 2014, p. 156). In another study, using pre/post tests of high-school biology students, although gains were different for regular and honors classes, they were "consistently large indicating" practically significant results." (Eastwood & Sadler, 2013, p. 23). Despite the fact that the method of computer instruction was through gaming technology, "with support through materials, professional development, and timely technical assistance, teachers were able to manage concerns about using games cited as obstacles in previous studies." This demonstrates that a variety of computer media can be used effectively to help students hit growth targets.

In a study where traditional formative assessments (TFA) online were paired with social network awareness (SNA) where students collaborated with other learners according to "knowledge context" (depth and scope of peer understanding) and "social context" (how connected and willing peer was to engage and help), it was found that "peer interaction and collaboration can motivate student learning, provide individual assistances, and reduce student frustration (Shute, 2008). Student(s) can receive substantive feedback through a socially interactive process..." (Lin & Lai, 2013, p. 41). Being that "self efficacy" as explained by Bandura, refers to the perception one holds as to their ability to reach a goal," and (1977) has claimed that physiological and emotional states have an important impact on self-efficacy, it's not surprising that another study of older students demonstrated that "interactive educational software is efficient in increasing student's knowledge in the subject of electricity and it is efficient in changing students' cognitive and affective skills towards the subject in a positive way." (Tatar et al., 2014, p. 777).

The term "constructivism" is used to refer to the knowledge that arises from interacting in "personally meaningful environments." Compass Learning, examined in this work, happens to use simulated environments "yielding possibilities for enhancing elementary children's mathematical education, especially for children with problems learning how to solve mathematical problems." This bodes well for Rowe students using Compass, since " incorporating interactive objects in simulated environments appears to increase elementary children's academic achievement." (Garcia & Pacheco, 2013, p. 37).

The literature also revealed, that teacher motivation as measured by their commitment to the program, affects program performance shown in student growth. Familiarity with the

program and belief in its efficacy shapes how program is implemented. "The learned helplessness model assumes that the stressed teacher was initially motivated for success but was exposed to successive, uncontrollable failures." (Jesus & Lens, 2005, p.122). Conditions deemed beyond the teacher's control, logically lead to reduced effort and refocus on other areas of need or previously reliable tools. Vroom's Expectancy theory implies that teachers will be motivated to implement a program with fidelity if they feel confident in their ability to use the program effectively, and find reasonable value in using it. One could argue that an external incentive like financial bonuses, or days off may answer the question, "What's in it for me?" Or a more desireable, intrinsic motivation (Pink, 2012) proposed by Daniel Pink, where motivation is related to a desire for autonomy, the satisfaction of mastery, and a connection to a larger purpose. Clearly, Vroom and Pink's theories are not mutually exclusive; both imply that the teacher will best use the program if given the time, support, and supplies needed to put the plan into action, and has a clear picture of the expected outcomes: substantial student growth, coupled with personal and professional satisfaction, the latter reflecting individual values. "Both expectancy of control of results as well as efficacy will influence success expectancy. In fact, success expectancy synthesises the effects of efficacy and control of results. In addition, efficacy expectations are the basis for teachers' intrinsic motivation since innate motives are directly linked to the perception of personal competence." (Jesus & Lens, 2005, p.125). Students' opinions of the quality of the teaching they received is strongly linked to the level of motivation teachers felt. (Rai, 2013). One feeds the other.

Should CAL be expected to occur for homework, then an important character is the parent. The literature indicates that parental attitude toward homework affects the degree to, and

the success which the work gets done. "For all students, attitudes toward homework were positively associated with parent attitudes." (Cooper, Lindsay, & Nye, 2000, p.484).

Of course, parenting styles differ, especially as it pertains to the level of involvement. Clearly, it is paramount that parents understand what an appropriate role is in the successful completion of homework. Is their role to simply ask the question, "How's homework going?" to let the student know they care? Or should they take a more active part beyond encouragement, reminding, and redirection? "The involvement of a parent in a child's education has long been shown to be important to student success, although research suggests that intrusive parents -especially in adolescence -- can negatively affect developmental outcomes." (Strauss, 2011, B01). "Hovercraft" parents, therefore, are not as helpful as they intend -- while a short-term objective may be met, an indirect and destructive lesson of dependence may be ingrained. Parental autonomy support with elementary aged students leads to more completion as well as independence toward critical thinking and problem solving. Any parent surprised by a strong emotional response to their over-involvement in their child's homework, isn't paying attention, and isn't being constructive. Providing a work-friendly environment, modeling time management skills, and encouraging solid study habits, is the way to go. "The findings of the current study highlight the important role of parents' own psychological characteristics, most particularly their autonomous motivation for involvement in helping with their children's homework, in supporting their children's psychological needs, and in the quality of their children's motivation to homework." (Katz et al., 2011, p.383).

Lastly, the school district needs to develop an attitude toward homework that is consistent with their values and vision statement, which hopefully pays particular attention to aligning school situations with life preparation. (Dintersmith, 2015). Communicating that clearly and repeatedly to staff, parents, and students will allow all stakeholders to be on the same mission. "The conflict over what, or how much, to assign stems partly from the fact that educators can't seem to agree on the purpose of homework...The lack of homework standards is striking in an era when school systems are designing rigid guidelines for curriculum content and the performance of teachers and principals." (Strauss, 2008, p.A11).

Evaluation Methodology

Participants

Teachers and students from grades three through five participated in the evaluation as this is the key SBAC testing group at the elementary level. The confidence the students feel along with the competency they exhibit regarding curricular and testing material (e.g. academic vocabulary and familiarity with test tools) have a direct impact on middle school performance. Teachers have a vested interest in seeing that all students learn, and seek to demonstrate effectiveness through multiple measures, one of which is higher SBAC testing scores. The established positive correlation between MAP testing and SBAC warrants giving Compass Learning attention. Being that Compass Learning lessons were also assigned as homework, feedback from parents were measured regarding their particular approach to homework completion, and student reactions to the computer assisted learning program. Research shows that building autonomy support is much more effective than wrestling over, or doing the work with the student.

Data Sources

Data collection instruments used include "Teacher Survey of Compass Learning Implementation" data (created with Qualtrics), to be collected following the spring administration of MAP testing, marking the end of the time period this evaluation will measure. The survey is comprised of 23 questions, three of which are open-ended written response; the balance of the items have Likert answer options, but two, which have choices ranked. Questions are grouped according to focus: value, confidence, use, and impression. The initial draft was piloted by two qualifying teachers; feedback resulted in some change: a question was omitted,

and an additional free response added. Time for completion in the pilot was about five minutes, which was well received by piloting teachers.

Data collection instruments used include "Parent Survey of Compass Learning at Home" (created on Google Forms), to collected prior to the spring administration of MAP testing, marking the end of the time period this evaluation will measure. The survey is comprised of seven questions, of which one is open-ended written response; the balance of the items have Likert answer options, save one, which asks for applicable boxes to be checked. Time for completion is expected to be about five minutes.

Data sources used included those accessed through the program data bases. The MAP Student Progress Report and the Student Growth Summary Report, shows expected growth targets as well as outcomes. The Compass Learning Student Progress Report shows success rates on activities and time spent on lessons. Students are currently being asked to complete lessons on Compass Learning in and out of class, to total about one hour weekly.

Procedure

In October the "Teacher Survey of Compass Learning Implementation" was pilot tested and revised, consolidating a couple questions, and making it more streamlined; expected time to complete is under five minutes. The questions which have been grouped in order to assess program value, confidence in use, practice, and overall impression will be administered online (in late March), to third, fourth, and fifth grade teachers at a staff meeting to maximize participation. Follow-up interviews with select teachers provided further clarification after the MAP testing window closed. Student focus groups were held in late April and May with small groups of third, fourth, and fifth grade students. It was expected that at such a young age, this more informal method of data collection would yield more valuable and revealing information than a survey.

A six-question parent survey had been co-created with the district superintendent, designed for delivery to parents of third through fifth grade students. Its main purpose was to determine the extent to which parents look to Compass Learning for support in encouraging practice and extension of school curriculum. It was distributed through researcher Google Forms channels in order to increase the likelihood of completion.

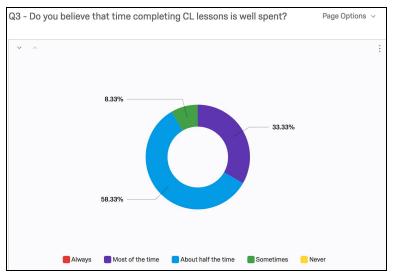
Measures of Academic Progress (MAP) testing administration was scheduled to begin April 24. Following the closing of the two week window, and after the data had populated with Northwest Evaluation Association (NWEA), the Student Progress Report was used to determine the relative success of students achieving their growth targets as set by MAP data. Spring 2017 data was played against spring 2016 data to inform the larger question: Does an hour a week of Compass Learning significantly improve student growth?

Teachers have received a refresher professional development session on the structure of, improvements to, and pertinence of the program to reignite use of Compass Learning; future sessions are organized around teacher familiarity with creating Learning Pathways and reading and using reports to guide instruction.

Results

Data Analysis

Teacher surveys. (Appendix A). Vroom's Expectancy theory shows that the level of motivation to complete a task or acquire a skill is dependent on the confidence held in being able to do the thing, plus the extent to which the individual perceives value in that task or skill -- "What's in it for me?" they may ask. The first section of the survey (five questions), is devoted to assessing the how much teachers valued using Compass Learning in their classrooms. It was split down the middle regarding whether or not they judged Compass an important part of their overall academic program, even though 83% of respondents could envision a school-wide



commitment. This is poor news being that the survey was administered in May leaving no time to recover or shift how the program was being used. Only a third of the teachers believed that the time students spent on Compass lessons was mostly worthwhile,

making it less likely that teachers would allocate valuable class time to the program. Teachers

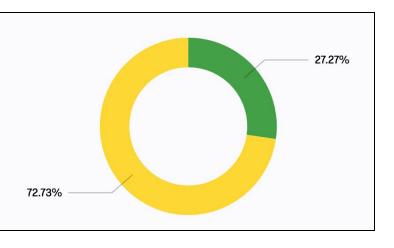
fell heavily into the ineffective category when navigating the program, leaving them unprepared



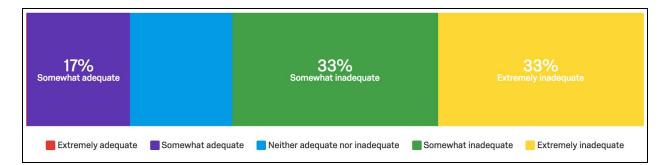
to finetune Compass to student needs. As a result, two-thirds of them considered themselves to

be somewhat to extremely incompetent when it came to using Compass reports. The chart below

shows that almost three in four teachers did not use the highly motivational Student Goal Setting Report. This is an opportunity missed to sit down with the student, look plainly at their performance so far, and co-create a plan of attack.



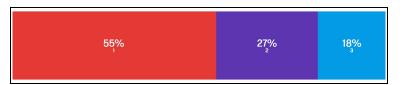
The effect of this report is doubly effective if the student's action plan is then shared with a parent and commitments made all around. With only one in six teachers feeling that time



collaborating as a team is somewhat adequate and all others begging for more, it comes as some surprise that half the respondents believed they would only slightly benefit from additional professional development (PD). This may reflect on how ineffective they believe PD would be, because only half of the teachers considered themselves to be somewhat competent in being able to answer a parent question on the program.

All teachers report student use being at least a half hour, with 50% expecting about an

hour of use, the latter matching the amount of time doing CL



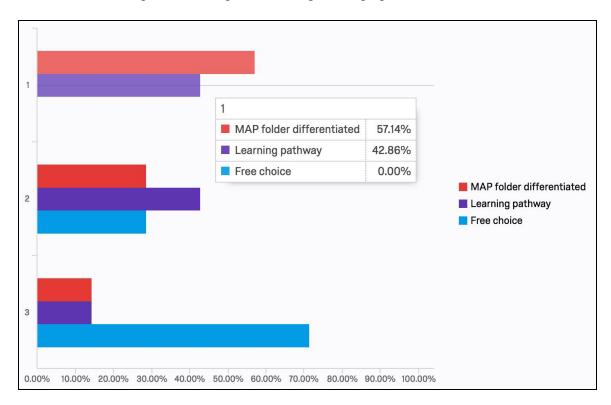
lessons requested by the principal. Ranked in order of usage, and according to the following visual, CL as "assigned homework" was the 1st, 2nd, or 3rd choice by all of the teachers. Second



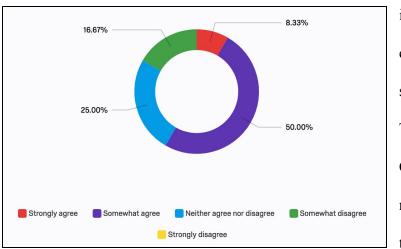
most popular use (81%), was as "center rotations" allowing teachers to work with small groups while others completed CL lessons. "Whole-class simultaneous" instruction, as well as "filler tasks" rounded out the ways in which CL

was used in the classroom.

After taking MAP testing, NWEA automatically assigns students lessons according to their established areas of need and strength -- this differentiation is a prime rationalization for Rowe School's subscription to Compass Learning. This graphic shows indeed 57% of the



respondents use this method of delivery most frequently. Creating a learning pathway is the second most popular, leaving 70% of the teachers using free choice as the third method. Three of four teachers do not use Compass information to inform student attended parent conferences.



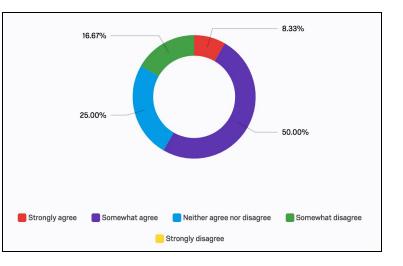
is fair to say that CL is

The final part of the teacher survey addressed their overall impressions of the program. It

is fair to say that CL is comfortably accepted as a supplement to instruction. Teachers very firmly believe that CL cannot be used effectively to replace skills-based curriculum, as the graphic below demonstrates.

Interesting, in that when first introduced, Compass was billed as able to do exactly that, within

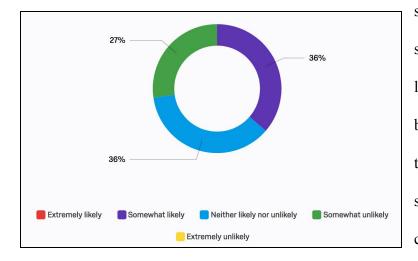
limits. For example, teaching adages can arguable be achieved to a high degree of competency with this computer assisted learning program. The bar graph below reveals the level of dissatisfaction of the program's effectiveness as





currently being used: 75% believe that modifications are appropriate, which is better only than replacing

CL altogether. In fact ³/₄ of respondents think that if used with fidelity, CL could have a positive effect on MAP test scores. The circle graph shows that teachers are unsure as to whether



students connect with the idea that successfully completing Compass lessons could help them score better on MAP testing. Regardless, teachers report that while no student is fully compliant in completing CL assignments, no one

is fully delinquent either.

Student focus groups. The reader is welcome to refer to *Appendix D* for a loose transcript of the focus group questions listed in *Appendix C*. Third graders feel the lessons aren't important to them if the concept doesn't show up on the test. They feel that they are really busy and then have to go to bed early, or miss out on family stuff because they have computer Compass lessons to do. They feel really forced, since they are already in school for so long, and would like Compass as an option. They also either think the lessons are very silly, or filled with too much talking, which makes them tiresome and less interesting. They're not very tolerant of software glitches that may prevent them from moving on to the next lesson.

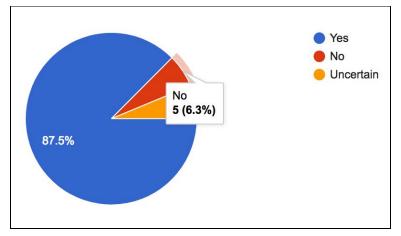
Fifth grade students would like more flexibility to choose lessons out of order, to skip topics they've already been taught, or go back to those lessons covering topics in which they are

still unclear. They wish that the program offered them an alternative lesson for reteaching, if they've failed a quiz. They find the same lesson really annoying, especially if they had gotten most of the questions correct.

Fifth graders seem tired of the format since they've used the program since Kindergarten. They also want the lessons to be more advanced and would like to have more choice on which part of Compass Learning they use, like Brain Busters, instead of lessons from the progression folders. Students are more motivated to complete lessons in areas where they already have a passion and talent; they are happy to extend their learning, but not shore it up. They're all really pleased to be finished with the lessons, because then they can go on to other things. Sometimes the fact that Compass teaches a lesson using a strategy different from the one their teacher used, can lead to confusion. "Sometimes your teacher shows you one way, and Compass shows you another way, it can be so confusing. Like it is a whole different system than Common Core."

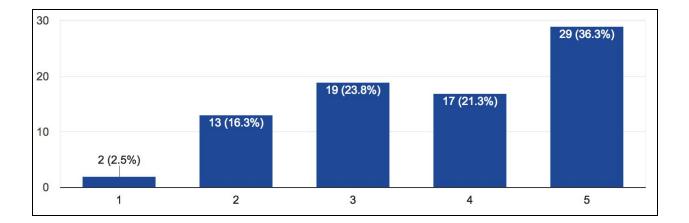
Parent surveys. The main objective in administering the parent survey, (Appendix B), was to help gather information to answer the relevant evaluation question: *To what extent do parents look to Compass Learning for support in encouraging practice and extension of school curriculum?* Our principal asked at a year-opening professional development training to "revitalize" Compass Learning, that teachers have students "use Compass for an hour in English and Mathematics," explaining that the time be made up in a combination of class time and homework. In that light, it was important to determine how supportive our parent body was going to be, or rather had been through the school year, in reinforcing the Compass-as-homework philosophy.

Of the eighty parents who responded to the six question survey, about 88% were aware that Compass lessons and activities were assigned as homework. Our Elementary report card

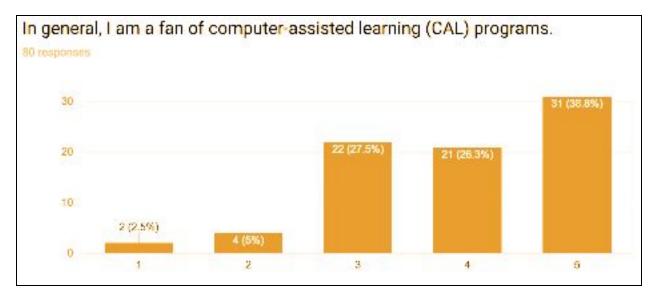


does not register a grade for homework, since some parents "help" more than others. In that light, the material being wrestled with at home should not be reason for emotional episodes between parent and child. Compass lessons

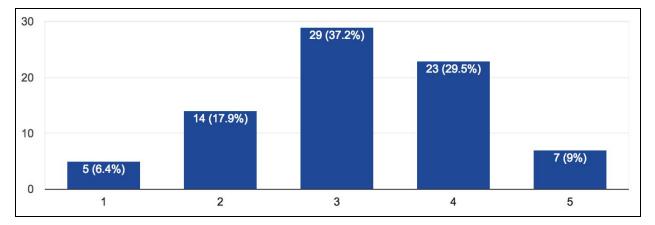
are delivered with an instructional element first, and a quiz to follow. Parents should not be needed to facilitate Compass homework success, to any unreasonable degree, other than of a supportive nature. The intent of the Compass homework was given in the next question, that CL lessons should be completed to extend school curriculum, and answered on a 1 - 5 scale. A very strong 58% of the parent respondents agreed with the school's intention to use Compass in this way. Another way to look at this, however, is that just less than half the parent body could do



without the Computer Assisted Learning (CAL) product, and relayed as much in the following graphic:



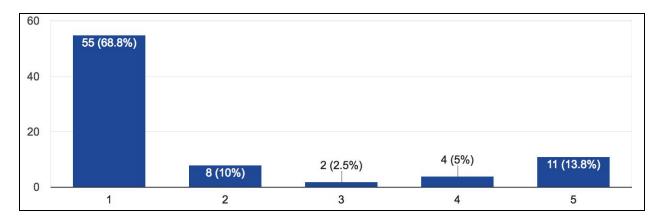
The motive behind asking if their child "finds Compass lessons engaging" was to get at the truth of the students' opinion of the program, to the extent that they would become emotional or resistant to doing the work if they didn't enjoy or value the Compass experience. As it stands, it was basically a bell-curve distribution, almost split down the middle with a generally mediocre



attitude about completing the work reliably and without complaint.

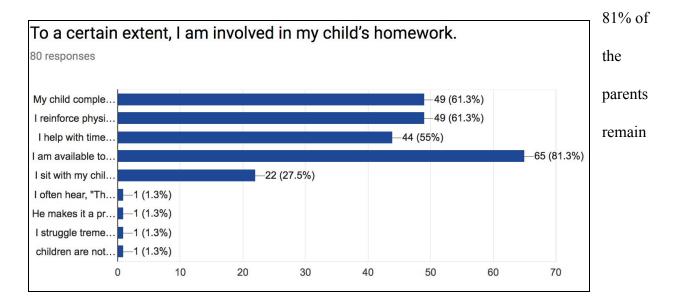
Although Rancho Santa Fe is a wealthy district, Rowe School is public, and it would not be appropriate to assume that everyone is set up, or able to entertain dependable internet

connections, especially since some terrain can be hilly and canyoned making wifi and cell reception untenable. Additionally, and easily ignored, 2% of the student population is socioeconomically disadvantaged, and deserves consideration. In the visual below, a family



choosing 1, of which there were almost three in four, meant they had access to the internet consistently, with a 5 meaning never. Startlingly, almost 1 in 7 households are without internet!

Peer-reviewed research has shown that parenting behaviors that support autonomy is the most effective way to react to a child with homework. Helping them acquire the habits of organization, consistency, and follow through leads to an independent, successful learner. Doing the homework for, or with them, reinforces negative behavior, and draws out the time it takes to have the child become independent. The final question attacked that end:



"available to answer questions on content as needed." Two in three help them organize workspaces; less so, 55%, with time management. Although 61% enjoy children who "complete homework independently," an agonizing 27% sit and "sometimes reteach concepts" to which one parent reported hearing often, "That's not the way my teacher does it!"

My child completes homework independently;
I reinforce physical supports like a clear, quiet space to work;
I help with time management and organizational skills;
I am available to answer questions on content as needed;
I sit with my child and sometimes reteach concepts;
Other...

MAP data. Measures of Academic Progress® (MAP®) assessments are administered twice yearly at Rowe School, once in the fall to set a benchmark, and again in the spring. The latter set of scores allows the school to anticipate performance on Smarter Balanced Assessment Consortium (SBAC) as expected by the California Assessment of Student Performance and Progress (CAASP) -- MAP scores are strongly correlated to SBAC scores. Developed by Georg Rasch, a RIT score suggests the student's zone of proximal development, informing the topics the student is ready to learn (User, 2017). The fall MAP scores provide a RIT target growth range based on nationally normed data. The extent to which the students meet their expected RIT growth speaks to the school's success. The table below compares the school's success in meeting growth targets in the subjects of Mathematics, Reading, and Language.

Student Growth Summary Report Fall to Spring 2015-16 \$ 2016-17									
Grade Spring 17	Growth Count	Met Math	Percent Met	Growth Count	Met Reading	Percent Met	Growth Count	Met Language	Percent Met
3	68	45	66%	67	40	60%	66	48	73%
4	73	43	59%	72	40	56%	72	39	54%
5	82	59	72%	82	39	48%	83	51	61%
Grade Spring 16	Growth Count	Met Math	Percent Met	Growth Count	Met Reading	Percent Met	Growth Count	Met Language	Percent Met
2	66	48	73%	63	46	73%	63	43	68%
3	76	59	78%	76	45	59%	76	44	58%
4	81	59	73%	82	53	65%	79	46	58%
5	76	56	74%	75	48	64%	73	47	64%

The top block of data reflects fall to spring scores collected during the 2016-2017 school year, and the bottom block the 2015-2016 year. The rows highlighted of like color attempt to follow what is, in general, the same cadre of students. For example, 2nd graders in Spring 2016,

highlighted in red, are similarly highlighted red, however shown as 3rd graders in the 2016-2017

school year. One can examine year to year data from two perspectives: group performance; or subject outcomes. On the math portion of MAP, students' scores decreased across the groups, with the area of highest interest in the present fourth graders, which showed a 19% drop in success hitting

Math Performance		
Grade Spring 17	% Change	
3	-7%	
4	-19%	
5	-1%	

growth targets. The fifth grade was practically unchanged, dropping 1%. MAP performance in

Reading didn't yield much more inspiring data. This time Spring 2017 5th graders were 17% less successful in hitting their expected RIT scores. Third graders decreased 13%, with 4th grade producing a relatively celebratory decline of 4%. The Language assessment entails correct use of grammar, sentence

Reading Performance		
Grade Spring 17	% Change	
3	-13%	
4	-4%	
5	-17%	

Language Performance		
Grade Spring 17	% Change	
3	4%	
4	-4%	
5	3%	

structure, word choice, punctuation, and editing skills. Obviously, command of these skills relates directly with the degree to which one can effectively communicate. However, one can argue that the subject about which you are

communicating is more heavily weighted in importance -- those ideas are likely to come from math and reading, making it more significant or cause for urgency that Language was the area of highest success in hitting RIT growth targets. Using relative percentage changes as a measure, 2017 fifth graders faltered the least, discounting the fact that reading competency is of supreme importance and arguably the most pervasive of the subjects.

The next question that arose is, *How much time each student spent completing Compass lessons*? The chart following was developed using a NWEA provided "Duration Report" that showed data on each of the 217 students in third through fifth grade. **The average amount of**

Duration Summary Report				
Total Number of Students	217			
Total Number of Weeks	30			
Total Amount of Time	3521:20:58			
Avg. Weekly Time per Student	0:32:27			

time that third through fifth grades spent in a week completing Compass Learning

exercises was 32 ½ **minutes, half as much as the principal requested.** The premise on which an essential evaluation question of this program review was based was not met. As to why, students did so much less, recommendations are made in a later section of this paper. It is not fair to say that half the goal time **caused** the drop in percentages of students meeting their growth targets, but it does suggest that the program was not used with fidelity. Of the students who completed an hour or more of CL weekly, just over half of them were in Advanced Math classes. These students are highly motivated to complete CL lessons because they are assigned as homework, and MAP scores are used to determine if they remain in the class or are mainstreamed. Some students averaged as little as ten minutes on CL in a week, suggesting they were either defiant to achieve that level of delinquency, or they were not held accountable for the time.

Limitations

The major limitations the researcher faced was a lack of student accountability for the amount of time spent on Compass. Students had been expected to average about an hour, and instead gave an effort that produced 32 minutes weekly. Teachers displayed a lack of confidence in and motivation to generate summary student progress reports used to gauge and encourage successfully completed lessons. Wifi access and hardware glitches had to be overcome, causing some teachers to use Compass less consistently. Finally, it is difficult to compare changing growth scores by group with students leaving and new students arriving from 2015-2016 to 2016-2017 school year.

Overall Program Analysis

It's tough to *effect change* if you don't *use the program*. Rowe School third, fourth, and fifth graders met their one-hour-weekly Compass commitment by about half. In that light, the researcher cannot attest to the use of the program being causal in the rate at which student groups were able to hit their target RIT growth goals. Additionally, as shown in the Student Growth Summary Report Fall to Spring 2015-16 & 2016-17, the grades observed in this evaluation had a lower percentage of students hitting their target growth goals. Although for the previous year, 2015-16, the average time spent on Compass was not available to this report, use of the program was certainly less of a focus than the current year. Teachers felt that students were doing the work as assigned, but their lack of confidence in using reports, and the somewhat sporadic or inconsistent student time spent on CL (shown in the data informing the *Duration Summary Report*), leads the researcher to conclude that instructors lacked the resources needed to monitor student progress and more ably hold them accountable for assignments competently completed.

Older students associate Compass Learning with performing better on MAP testing, however, given the freedom to do so, will choose to meet the homework requirement, as pushed by teachers and parents alike, by completing lessons in the subject in which they are most proficient. They begrudgingly look to the NWEA constructed learning-path folders to fulfill the expectation, however kids are covering concepts already taught in class, or ones they feel they mastered from previous years. Since these lessons are MAP testing assigned, it means that they got at least one question wrong on the test to justify the lesson showing up in their folder. It may be that they are not taking the test seriously, and having guessed a wrong answer, now have to suffer through a lesson on something which they already know, or feel they know. Either way it

leaves them disinterested, reluctant to continue, and work only to be compliant with teachers and parents. Rare is the student working on CL lessons for personal growth and discovery. One point of significance is the fact that the teaching strategies being used to explain concepts do not mirror those of the teaching staff, and as such may not be Common Core friendly. This has led to some confusion as students encounter concepts that are important and difficult.

By and large, parents prove to be quite supportive of computer assisted learning in general, and certainly in the school's use of Compass to differentiate student learning either to reinforce older concepts or extend new ones. They are willing to provide access to the internet and provide the expectation for completing the assignments in support of teachers' requests.

Teachers understand the connection between Compass Learning and MAP, in particular that fall MAP testing results are used in determining which lessons students are assigned in their folders, however, have almost exclusively relied on this learning path to assign work. This exposes the student to doing lessons on known concepts unnecessarily -- they may have been taught them in class, or made a careless error on the test and been MAP-assigned. Teachers would appreciate a higher degree of competency in navigating the reports available on Compass Learning, and team collaboration time to develop strategies to better use the program in the classroom. In particular, they need to take a more aggressive role in determining which lessons the students complete. Compass Learning, already an integral part of instructional programs and school culture, can be more strategically used.

Recommendations

- I. Set students up for success *before taking fall MAP testing* \rightarrow "Students taking the test seriously are less likely to assign themselves lessons on concepts in which they are already reasonably proficient."
- II. Following the fall MAP administration, use the Student Goal Setting Worksheet to discuss areas of strength and need to set actions plans for improvement. Refer to these action plans at fall student-led parent conferences.
- III. On at least a bi-weekly basis, meet with student to review *Student Progress Reports*, with the intention to motivate the student sincerely, as opposed to punitively, if at all.
- IV. Team collaboration time earmarked: 1) to create shared learning path folders on concepts that are important and difficult; and 2) to share best practices for CL use in class and on strategies to hold students accountable.
- V. *Mid-year professional development* refresher and check-in to answer questions, and celebrate successes.
- VI. Access and assign activities in secondary CAL programs (teachers currently use ST Math, Waggle, BrainPop), strategically at best, and not to the detriment of work on Compass. The younger students, with lower stamina, must be taken into consideration.
- VII. Assign CL time, not number of lesson requirements, as completing two lessons may be over in ten minutes, and not enough to support the goal of an-hour-a-week. Refer to AM students.
- VIII. Review Student Goal Setting Worksheet before taking Spring MAP testing.

References

- Automation and anxiety. (2016, June 25). Retrieved February 23, 2017, from <u>http://www.economist.com/news/special-report/21700758-will-smarter-machines-cause-m</u> <u>ass-unemployment-automation-and-anxiety</u>
- Berkowitz, T., Schaeffer, M., Rozek, C., Maloney, E., Levine, S., et al. (2016). Response to comment on "math at home adds up to achievement in school". Science, 351(6278), 1161.
- Cooper, H., Lindsay, J. J., & Nye, B. (2000, 10). Homework in the Home: How Student, Family, and Parenting-Style Differences Relate to the Homework Process. *Contemporary Educational Psychology*, 25(4), 464-487. doi:10.1006/ceps.1999.1036
- Eastwood, J., & Sadler, T. (2013). Teachers' implementation of a game-based biotechnology curriculum. Computers & Education, 66, 11-24.
- Ecalle, J., Magnan, A., & Calmus, C. (2009). Lasting effects on literacy skills with a computer-assisted learning using syllabic units in low-progress readers. Computers & Education, 52(3), 554-561.
- Garcia, I., & Pacheco, C. (2013). A constructivist computational platform to support mathematics education in elementary school. Computers & Education, 66, 25-39.
- Johnson, E., Perry, J., & Shamir, H. (2010). Variability in reading ability gains as a function of computer-assisted instruction method of presentation. Computers & Education, 55(1), 209-217.
- Katz, I., Kaplan, A., & Buzukashvily, T. (2011). The role of parents' motivation in students' autonomous motivation for doing homework. Learning and Individual Differences, 21(4), 376-386.

- Neves De Jesus, S., & Lens, W. (2005). An integrated model for the study of teacher motivation. Applied Psychology, 54(1), 119-134.
- Lin, J., & Lai, Y. (2013). Online formative assessments with social network awareness. Computers & Education, 66, 40-53.
- Linn, M., Gerard, L., Ryoo, K., McElhaney, K., Liu, O., et al. (2014). Education technology. computer-guided inquiry to improve science learning. Science (New York, N.Y.), 344(6180), 155.
- Madjar, N., Shklar, N., & Moshe, L. (2016). The role of parental attitudes in children's motivation toward homework assignments. Psychology in the Schools, 53(2), 173-188.
- Pink, D. H. (2012). *Drive: The surprising truth about what motivates us*. New York: Riverhead Books.
- Prepare Our Kids for Life, Not Standardized Tests | Ted Dintersmith | TEDxFargo. (2015, August 25). Retrieved February 23, 2017, from <u>https://t.co/11pDCknwxL</u>
- Rai, A., & Srivastava, M. (2013). Exploring dependent relationship of teacher's motivation on quality of teaching. Drishtikon : A Management Journal, 4(2), 45-61.
- Salyer, D. (2015). Reading the web: Internet guided reading with young children., 69(1), 35.
- Shute, V., & Rahimi, S. (2017, 01). Review of computer-based assessment for learning in elementary and secondary education. *Journal of Computer Assisted Learning*, 33(1), 1-19. doi:10.1111/jcal.12172
- Sinclair, K. J., Renshaw, C. E., & Taylor, H. A. (2004, 02). Improving computer-assisted instruction in teaching higher-order skills. *Computers & Education*, 42(2), 169-180. doi:10.1016/s0360-1315(03)00070-8

- Strauss, Valerie (2000). The Washington Post. Retrieved February 15, 2017, from http://www.washingtonpost.com/wp-srv/pmextra/feb00/08/A22044-2000Feb7.html
- Strauss, V. (2007). With homework, a helping hand can sometimes be a hindrance. The Washington Post, 0(0), B01.
- Sung, Yao-Ting, Chang, Kuo-En, & Liu, Tzu-Chien. (2016). The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis. *Computers & Education*, 94, 252-275.
- Tatar, N., Akpinar, E., & Feyzioglu, E. (2014). The effect of computer-assisted learning integrated with metacognitive prompts on students' affective skills. Journal of Science Education and Technology, 22(5), 764-779.
- User, C. (2017, June 06). What is the RIT scale? Retrieved July 20, 2017, from https://community.nwea.org/docs/DOC-1647
- Ward, W., Cole, R., Bolaños, D., Buchenroth-Martin, C., Svirsky, E., Vuuren, S. V., . . . Becker,
 L. (2011, 08). My science tutor. *ACM Transactions on Speech and Language Processing*,
 7(4), 1-29. doi:10.1145/1998384.1998392

Appendices

Appendix A - Teacher Survey

Compass Learning @ Rowe School

The intent of this survey is to get a better grasp as to how Compass Learning (CL) is used and perceived, in a larger effort of determining its effectiveness as it relates to helping students reach their RIT growth targets in MAP testing.

Value

Q1 CL is currently an important part of your overall academic program.

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q2 Can you envision all teachers committing to consistently using CL this year?

- Extremely likely (1)
- Somewhat likely (2)
- Neither likely nor unlikely (3)
- Somewhat unlikely (4)
- Extremely unlikely (5)

Q3 Do you believe that time completing CL lessons is well spent?

- Always (1)
- Most of the time (2)
- About half the time (3)
- Sometimes (4)
- Never (5)

Q4 Do you use the goal setting report to motivate student participation?

- Always (1)
- Most of the time (2)
- About half the time (3)
- Sometimes (4)
- Never (5)

Q5 How do you feel in navigating the program?

- Extremely effective (1)
- Very effective (2)
- Moderately effective (3)
- Slightly effective (4)
- Not effective at all (5)

Use

Q6 To what extent do you feel you are able to use CL reports?

- Extremely competent (1)
- Somewhat competent (2)
- Neither competent nor incompetent (3)
- Somewhat incompetent (4)
- Extremely incompetent (5)

Q7 How do you consider the amount of team collaboration-time working CL into your overall academic program?

- Extremely adequate (1)
- Somewhat adequate (2)
- Neither adequate nor inadequate (3)
- Somewhat inadequate (4)
- Extremely inadequate (5)

Q8 Would you benefit from additional professional development?

- Extremely useful (1)
- Very useful (2)
- Moderately useful (3)
- Slightly useful (4)

• Not at all useful (5)

Q9 Do you feel you can competently answer parent questions on the program?

- Extremely competent (1)
- Somewhat competent (2)
- Neither competent nor incompetent (3)
- Somewhat incompetent (4)
- Extremely incompetent (5)

Q10 Expected average student time use per week in total is about...

- 15 minutes (1)
- 30 minutes (2)
- 45 minutes (3)
- One hour (4)
- > one hour (5)

Q11 Rank in order of student usage:

_____ Assigned homework (1)

- _____ Center rotations (2)
- _____ Whole-class simultaneously (3)
- _____ Filler (early-finishers' work) (4)
- _____ None of the above (5)

Q12 Rank how students select CL lessons to complete:

_____ MAP folder differentiated (1)

_____ Learning pathway (2)

_____ Free choice (3)

Q13 Is CL part of your student-attended parent conferences?

- Definitely yes (1)
- Probably yes (2)
- Probably not (3)
- Definitely not (4)

Q14 How does MAP testing results guide your instruction, if at all?

Impression

Q15 Do you feel the program is a supplement to instruction?

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q16 Do you feel the program can replace instruction for skills-based curriculum?

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q17 How would you rate the program effectiveness as currently used:

- Better than expected results (1)
- Results meet expectations (2)
- Needs modifications (3)
- Unacceptable outcomes (4)

Q18 If used with fidelity, do you feel CL could positively affect MAP scores?

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q19 How do you feel students approach CL lessons?

• Extremely well (1)

- Very well (2)
- Moderately well (3)
- Slightly well (4)
- Not well at all (5)

Q20 Are students compliant in their use of the program?

- Always (1)
- Most of the time (2)
- About half the time (3)
- Sometimes (4)
- Never (5)

Q21 Students believe CL helps them meet MAP growth targets.

- Extremely likely (1)
- Somewhat likely (2)
- Neither likely nor unlikely (3)
- Somewhat unlikely (4)
- Extremely unlikely (5)

Q22 What does the time spent doing Compass Learning lessons in school replace?

Q23 How should the school use Compass Learning, if at all?

Appendix B - Parent Survey

Compass Learning Odyssey @ Rowe School

Evaluation question: To what extent do parents look to Compass Learning for support in encouraging practice and extension of school curriculum?

Your answers to the following questions about Compass Learning lessons help me review the program and satisfy my leadership degree requirements. Please answer them as best as you can.

I know that Compass Learning lessons are assigned for homework.

Yes

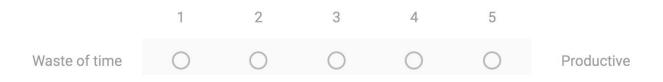
O No

Uncertain

My child finds Compass lessons engaging.



In general, I am a fan of computer-assisted learning (CAL) programs.



I have internet and computer access in the home.

	1	2	3	4	5		
Consistently	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	Never	
To a certain extent, I am involved in my child's homework.							
My child completes homework independently;							
I reinforce physical supports like a clear, quiet space to work;							
I help with time management and organizational skills;							
I am available to answer questions on content as needed;							
I sit with my child and sometimes reteach concepts;							
Other							

Appendix C - Student Focus Group Instrument

Student Focus Group Instrument				
Question & Statements	Students' Response			
Is Compass important to you?				
Do you learn anything new or relevant?				
Does Compass help my MAP score?				
Are Compass activities interesting?				
I feel forced to work on Compass.				
I work on Compass to make my parents and				

teacher happy.	
Do you feel happy with yourself when you finish?	
Compass is worth my time.	
When I focus on the lesson, I score well on the quiz.	
I am a better student because of Compass Learning activities.	

Appendix D - Student Focus Group Transcribed Responses

4th Grade Responses April, 25th, 2017

Your answers to the following questions about Compass Learning lessons help us make

decisions about the program. Please answer them as best as you can.

- 1. Is Compass important to you?
- Sort of; it won't work on an iPad
- more fun than working out problems;
- learning in a fun way
- 2. Do you learn anything new or relevant?
 - a. **sometimes**/all of the time/never
- 3. Does Compass help my MAP score?
- Teachers say it does; my mom says so; it kind of prepares you for it, because it is on a computer like the test.
- It teaches you about the test.
- 4. Are Compass activities interesting?

- Not very; I think it is interesting because it is games; better than writing or math problems on a worksheet, but still boring
- 5. I feel forced to work on Compass.
 - a. **absolutely**/somewhat/not at all
- Where pressure coming from? Your teacher says so, some people want to do Compass, but kind of feel forced.
- You have two choices: STmath or Compass, but teachers have contacted our parents and told them that Compass prepares us for the test, so they make us do it.
 I prefer working on STmath -- it's more fun that Compass.
- 6. I work on Compass to make my parents and teacher happy.
- To get it done!
- 7. Do you feel happy with yourself when you finish?
- Yes because it's so annoying! (Laughter)
- 8. Compass is worth my time.
 - a. absolutely/**somewhat**/not at all
- Yes & no. Kind of, it teaches you something, and it's better than nothing. It helps you get prepared for MAP test.
- My private tutor teaches me all I need to know, and with Compass if you know something already you have to do them in order, you can't skip it.
- If you get questions all correct on the lesson and then fail the quiz, you have to do the lesson all over again. I would like to have a different activity to make me

understand it more, instead of the same lesson, if you fail the quiz. Kids get mad because I'm tired of it!

- 9. When I focus on the lesson, I score well on the quiz.
 - a. always/**sometimes**/never
- 10. I am a better student because of Compass Learning activities.
 - a. absolutely/**somewhat**/not at all

5th Grade Responses April, 25th, 2017

Your answers to the following questions about Compass Learning lessons help us make decisions about the program. Please answer them as best as you can.

- 11. Is Compass important to you?
- Do we have to be honest with you?
- What do you mean by important, that we would protect it with our life?

Do you feel that Compass helps you get to your MAP learning target \rightarrow shift to question below

- a. absolutely/somewhat/not at all
- 12. Do you learn anything new or relevant?
 - a. **sometimes**/all of the time/never
- Sometimes it's new, like volume in math class, and sometimes it repeats if I've already learned stuff.
- Sometimes it perfectly aligns and sometimes it doesn't.

- 13. Does Compass help my MAP score?
 - a. absolutely/**somewhat**/not at all
- Partly, because some of the questions are a little unclear, and Compass is helpful that way. Sometimes I just guess and they say it is the right answer, but I don't know why and they just let me go on.
- I agree, sometimes I guess and it doesn't tell me why I'm correct. Also you can't go back to difficult lessons if you're still having trouble on something.
- 14. Are Compass activities interesting?
 - a. always/**sometimes**/never
- It depends on the topic. One out of fifty is interesting.
- Some of them are hands on, and that's good, but others are just reading and you click through it, and when you get the question you're like, oh no!
- If you could combine Waggle with Compass it would be better, because Waggle doesn't teach you things, it just asks you questions.
- It's good that they teach us, but I'd like them to make it a little more advanced. It hasn't changed since we've been in Kindergarten.
- 15. I feel forced to work on Compass.
 - a. **absolutely**/somewhat/not at all
- The interesting things we never use, like Brain Buzzers, and we do it in class, and then get it for homework.
- 16. I work on Compass to make my parents and teacher happy.

- a. sometimes/all of the time/never
- Most of the time
- My parents don't know what I'm doing; I just do my homework.
- Mine are the complete opposite! They don't trust me, I guess...
- I'm not motivated to do it, because every summer I go to a camp that teaches me ahead.
- The math I do for myself because I love math, but I'm not motivated to do the other subjects.
- 17. Do you feel happy with yourself when you finish?
 - a. yes/somewhat/don't really care
- I'm happy when I'm done.
- Well I'm happy when I'm finished with the 30 minutes because I can do other stuff! (laughter)
- 18. Compass is worth my time.
 - a. absolutely/**somewhat**/not at all
- The math part is, yes, but the english, not so much. I mean I love writing, but not the lessons.
- The language part is like it teaches you different things that our teacher teaches us; you guys choose it for us right?
- It is so annoying if we've already learned that stuff in class...
- Also if you learn something on Compass and then it never shows up on the test...

- Sometimes your teacher shows you one way, and Compass shows you another way, it can be so confusing. Like it is a whole different system than Common Core.
- 19. When I focus on the lesson, I score well on the quiz.*
 - a. always/sometimes/never
- 20. I am a better student because of Compass Learning activities.
 - a. absolutely/**somewhat**/not at all
- I guess, because it teaches you different vocabulary.
- You could be a better student, but it could make you worse because of using their strategy and not your teacher's and that makes it harder for you.
- I say overall it barely makes me a better student because it goes against what the teacher is teaching.

3rd Grade Responses May 4th, 2017

- 21. Is Compass important to you?*
 - a. absolutely/somewhat/not at all
- 22. Do you learn anything new or relevant?
 - a. **sometimes**/all of the time/never
- Sometimes I learn stuff that I've already learned, and sometimes it ties into my class and other times it goes ahead and I don't know what it really means.
- I think it doesn't really tie to the class that much; sometimes the stuff I learned already in second grade, like place value. It's really easy, and I just click it and I already know that stuff already.

- Sometimes the old stuff is really boring, but the new stuff is interesting. I don't think it hooks up with my MAP test.
- 23. Does Compass help my MAP score?
 - a. absolutely/**somewhat**/not at all
- Sometimes, but not really, like I got taught something on decimals that didn't even show up on the test.
- 24. Are Compass activities interesting?
 - a. always/sometimes/never
- Some of them yes, but most of them do a lot of talking and you don't do anything;
- Some of them yes because like the J-team dance and people throw fish at them (laugh)
- To me they are not that interesting because they ask me to do the same lesson multiple times, even when I pass it, it just glitches. It wouldn't let me move on.
- No, because, sometimes it just talks and is very boring, and clicks something and keeps talking.
- 25. I feel forced to work on Compass.
 - a. absolutely/somewhat/not at all
- I don't really want to do it because it gets really boring when it stays on for a long time. My teacher says we do it for homework, and we get really busy and don't do it, but she says we have to do it at some point. So she make us do it in rotations.
- I feel forced to do it because I don't like Compass at all because I already know all that stuff

- My mom says I have to do it, or if not there is a consequence, like I may lose my iPad, and what if you're busy and don't get to it, or you have to go to bed...
- 26. I work on Compass to make my parents and teacher happy.*
 - a. sometimes/all of the time/never
- 27. Do you feel happy with yourself when you finish?*
 - a. yes/somewhat/don't really care
- 28. Compass is worth my time.*
 - a. absolutely/somewhat/not at all
- 29. When I focus on the lesson, I score well on the quiz.
 - a. **always**/sometimes/never
- Yes, I get like 10/10
- Sometimes I just click through it because I already know it.
- The quizzes are too long; some of them are ten questions; it should be just five.
- 30. I am a better student because of Compass Learning activities.
 - a. absolutely/somewhat/**not at all**
- I learn from the teacher, but Compass is mostly review.
- It's only interesting when something new pops up, like the other day I got decimals and I was super excited because it was a new concept.
- It is a good way to get your parents to buy you to laptop!