## Case Study - Kevin <br> MorrisArchinal

Gretchen

April 13, 2015

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## Student Profile

## Background

Kevin is a thirteen year old male of Africa-American decent. He currently lives with his mother in a rented apartment in an affluent suburb of Detroit. He qualifies for the Free or Reduced Lunch program at the school where he is in $8^{\text {th }}$ grade. Per teacher reports, hunger may also be an underlying issue. When the school offered a free breakfast program, he was an enthusiastic participant. He often ate not only his breakfast, but also his classmates left-overs.

He receives services in the resource room one school-period per day. He is enrolled in collaboratively-taught ELA and Math classes as well. At the end of the current marking period, his grades range from a $\mathrm{B}^{+}$in Intro to Woods and Metals to an E in English.

## Needs for Support and Assistance

Kevin underwent extensive testing in March of 2013. At that point in time he qualified for an IEP based on Specific Learning Disabilities that require support and accommodations across all academic areas. Academically, this year his grades are falling across the board. The only exception is in Intro. to Woods and Metals, which replaced $8^{\text {th }}$ grade science. Kevin dropped science because it was too much for him academically.

Kevin also receives social work services due his struggles with peer and adult interactions.

## Strengths

Kevin's is polite and respectful. Based on VIA Strength Survey for Children, Kevin selfreports that his top strengths are:

| Bravery and Courage | Curiosity and Interest in the World |
| :--- | :--- |
| Social Intelligence | Appreciation of Beauty and Excellence |
| Spirituality and Faith | Honesty, Authenticity and Genuineness |
| Teamwork and Group Loyalty | Kindness and Generosity |
| Humor and Playfulness | Creativity, Originality and Ingenuity |

Although he started in Intro to Woodworking and Metals midway through the quarter, it appears to be an area of strength because it encourages not only kinetic and hands-on learning but also creativity, originality and ingenuity.

## Likes/Dislikes

Kevin loves playing video game, hanging out with friends and helping others. He is also interested in sports as well.

He is reticent to try things that he perceives as more than he can handle or that he may not perform well.

## Biggest Challenges

A comprehensive evaluation in March of 2013 revealed significant weaknesses, cognitively, in the areas of Long Term Retrieval, Processing Speed and Short-Term Memory.

Besides the academic issues, Kevin seems to be struggling to maintain his desire to succeed. There are times, when he is very withdrawn and pessimistic in his world view, particularly when it relates to school and peer relationships.

## Reading

This is an area of relative strength yet Kevin's $7^{\text {th }}$ grade NWEA reading scores were in the $14^{\text {th }}$ percentile. Due to significant weaknesses in Long Term Retrieval, Short Term Memory, and Processing Speed, Kevin benefits from extra time on tests/assignments, tests read, provided and/or shortened word banks and removal of one multiple choice on questions that have 4 or more on tests/quizzes. All directions and expectations for assignments, tests and quizzes should be clarified and repeated for understanding purposes.

## Writing

Per his comprehensive evaluation in March of 2013, Kevin also has a learning disability in the area of written expression. Due to this, he may use word processing equipment on standardized tests and other general education assessments. Kevin often lacks detail and description in his writing. Graphic organizers have been useful in helping Kevin brainstorm ideas for a topic prior to beginning the writing process. Access to a word processor on lengthy writing assessments has also been a good accommodation that allows Kevin to catch convention errors and allows for his writing to be more easily read and interpreted.

## Math

This is another area in which Kevin has a disability. His general education teacher indicate that Kevin continues to struggle in math class. He has trouble comprehending the
concepts which leads to difficulty in applying his knowledge to solve problems. Weaknesses in computation suggest that use of a calculator/multiplication chart is useful, especially with concepts that require math application.

Kevin will continue to utilize SuccessMaker, for math skills remediation. He initially placed at a 4.34 grade level and has since made 0.47 year growth which puts him at a 4.81 grade level, currently. His NWEA scores are consistent with this level. Graphic organizers help him remember the multiple steps necessary for solving some equations.

## Work Habits

Kevin takes a very passive role in his classes, often waiting for someone to show him how/what to do rather than attempting what he can and asking for help when he gets stuck. Even when help is provided, he will often randomly guess at answers rather than put thought into what is being asked. When the material is difficult for him, he becomes overwhelmed very quickly and shuts down.

Kevin is inconsistent in his work completion which often is a cause for him not getting the practice he needs to reinforce the concepts, being studied across subject areas. Tests, quizzes and assignments may need modification or accommodation, depending on certain skills assessed and Kevin's level of competency within certain skill sets. He will often ask for a reward but then not complete the task necessary for earning the reward.

## Social

Kevin continues to progress with adult and peer interactions. He presents as a very quiet student. He has difficulty advocating for himself and at times resorts to avoidance behaviors (sadness, not talking or sulking). When interacting with peers and adults Kevin often mumbles, speaks very quietly and is very hard to understand or hear. At times his intonation presents as flat with little expression. He sometimes keeps his head down and can give limited eye contact. These struggles often hinder success in academics as well as his peer relationships.

It takes a while to get beyond his protective shell. Once Kevin is comfortable with a teacher, he is more engaged, expressive and willing to share. He does report some bullying, but after investigating this, it may be the result of misinterpreted interactions between peers.

## Interpretation/Hypothesis

## What is going on

Prior to this year, Kevin was in a direct taught math class and making progress. This year, the school district discontinued direct taught math classes to provide students with a least restrictive environment for learning. Kevin is now in a collaboratively-taught, eight-grade math class. Given that this is one of his areas of disability, Kevin is truly struggling to keep up with the standard 8th grade pre-algebra curriculum of solving two-step equations, slope-intercept form and other pre-algebraic activities. This is compounded by his shutting down when frustrated and overwhelmed. Hunger may also play a part in his educational progress. Multiple teachers report that Kevin appears to be hungry especially in the morning.

## Concerns

The main concern is that Kevin is falling further and further behind in Math. He is quite aware that he does not grasp the material and this in turn affects his behavior and desire to work at school. As his self-esteem goes down, the more he pushes away help and withdraws not only in math but in other classes as well. This can be seen in the general decline of his grades from first quarter to third quarter.


## Areas of help

Kevin receives more individualized and small group direct instruction in the resource room in addition to more concentrated assistance in during math. Graphic organizers are incorporated to help organize his thought process and provide away to systematically solve not only equations but also to compose written assignments. Kevin also works with the Social Worker to address the emotional components of his disability.

## Strategies/Curricular Decisions

## Strategies Used

The initial strategy that was used provided Kevin with more individual, direct
instruction. I worked with Kevin most mornings during first hour for a couple of weeks. During this time, we primarily worked on his math homework that he had not completed the night before. At his request, we utilized food as a reward.

While individual instruction would appear to be the best course of action, Kevin pushed back with this tactic. Per his comments, the direct one-to-one instruction made him feel stupid. No amount of persuasion could convince him that this was an opportunity for him to get individualized support and instruction.

There was less resistance on Kevin's part when a small group format was introduced.
Kevin and Jessie, another 8th grade student in the resource room, have been working together on math and provide each other with peer learning opportunities as well.

## Lesson Plans Developed

Kevin is a kinetic learner so the more I can get him to move while doing math the better. I developed two different lesson plans that explore aspects of math in a more kinetic way. One lesson incorporated laying out a grid on the floor and graphing pairs of coordinates and later linear equations. The second lesson involves using shoes to demonstrate the Pythagorean Theorem. Both lessons integrated a lot of technology as well as being very learner-centered. In addition, I also designed and taught Kevin how to use a graphic organizer to use while solving multi-step equations.

## Assessment Tools Used

Several diagnostic tools were used including Kevin's MET report as well as his NWEA and SuccessMaker scores. Math homework was used to assess his independent work with grade level math. A review of his student assignment scores also proved to be insightful to seeing the overall decline in participation, homework completion and classroom assessments.

He also self-reported scores using the VIA Strength Survey for Children and Multiple Intelligences for Adult Literacy and Education Assessment. These two assessments allowed me to see how Kevin preferred to learn as well as other areas of strength on which to build.

I also utilized the Wayne State Case Study Framework to provide a structure for my work with Kevin. By using the Wayne State Framework, I recorded my observations and developed my initial hypotheses: with 1:1 help, Kevin would show improvements in his math grade.

## Results

After reviewing the results and listening to Kevin, it became obvious that Kevin did not like working in a one to one situation. In his words, it made him feel even more stupid. With that knowledge in hand, I went back to my Wayne State Case Study Framework and developed a new hypothesis: allowing Kevin more control over the work and its environment will make him feel more comfortable and more willing to accept help. At this point, his classmate Jessie joined us in a small group setting.

The small group setting turned out to be ideal and allowed Kevin to feel more comfortable with accepting help. Jessie and Kevin make a good team. While Jessie has no
problem remembering multiple steps, he struggles with computation. Kevin, comparatively, is good at the computation, but struggles to retain the knowledge of the process necessary to solve the equation.

Along with this environmental change, I also used a gradual release model of doing tasks. I modeled it, we did some together and then he did some by himself. This model works well and allows for more student autonomy while allowing for Kevin to become comfortable with the new task. All of which makes Kevin happier and more willing to try.

## Reflection

I wish I could say that Kevin's math ability soared with getting the extra help.
Unfortunately, this is not the case. What did happen is that Kevin learned a bit more about math and me. I learned a lot about Kevin and myself. During our time together Kevin found, among other things, that he could use graphic organizers to correctly structure the solving of math equations. In addition, he discovered that he could confide in an adult his concerns about his peer relationships. As Kevin and I took our time getting comfortable with each other and developing a relationship, I learned that I cannot assume all students like 1:1 attention. For some, this makes them feel more vulnerable and they push back even with someone that they are starting to trust.

I also learned that the gradual release method works well for a lot of different students - young and old. I realized that I too like a model from which to work and a little hand-holding at the beginning. Then I like the freedom of doing it on my own and in my own way. I found
that I enjoyed working with the Case Study Format as it gave me structure to my observations and a way to record and formulate my thoughts and ideas.

I have some real concerns about dropping direct-taught instruction in a resource room setting. For a student like Kevin, who is not only high risk because of social-economic factors, but also struggling with academic and peer issues putting him in a math class that he is ill equipped to handle may sink him. He knows he can't do the work and this knowledge is killing his spirit.

I can't help but spectacle about what would happen if he had a chance to stay in a direct-taught class until he was working closer to grade level. I know that the long-term desire is for the students to graduate from high school and they are required to reach a certain level of math in order to obtain their diploma. But to ask a student to make a 2 to 3 year jump in curriculum all at once is unfair and setting them up for failure. In the long-run, does the policy achieve the goal of getting more students to graduate with a diploma? It makes me wonder.

## Recommendations for Adaptions and Support

1. Direct instruction should be considered for math instruction in the future.
2. Lesson accommodations need to continue. This may include: chunking assignments into smaller pieces; use of manipulatives and calculators in math; additional time; and reading and scribing assignments as needed.
3. Vocational or other hands-on classes should be explored as electives to play on Kevin's kinetic learning style preferences.
4. Kevin needs to continue to work with the social worker on the first IEP goals.

## Appendix




## Report to Teachers



This information is designed to help you teach way who receives special education programs and services. I will be meeting with you to discuss further information, strategies, and ideas to help hachieve success in your class.

Special Education Programs and Services:
LRC, School Social Work Services
How the disability impacts on learning:
Eeyartis an 8 th grade student who is eligble for special education services under specific learning disabilty for math calculation, math reasoning and written expression. A comprehensive evaluation in March of 2013 revealed significant weaknesses, cognitively, in the areas of Long Term Retrieval, Processing Speed and Short-Term Memory.

Due to significant weaknesses in Long Term Retrieval (SS: 70), Short Term Memory (SS: 48) and Processing Speed (SS: 67), byanefits from extended time on tests/assignments, tests read, provided and/or shortened word banks and removal of one multiple choice on questions that have 4 or more on tests/quizzes. All directions and expectations for assignments, tests and quizzes should be clarified and repeated for understanding purposes.

Teacher reports indicate that continues to struggle in math class. He has trouble comprehending the concepts which leads to difficulty in applying his knowledge to solve problems. Weaknesses in computation suggest that use of a calculator/multiplication chart is useful, especially with concepts that require math application.
teyanill continue to utilize SuccessMaker, for math skills remediation. He initially placed at a 4.34 and has since made 0.47 growth which puts him at a 4.81 level, currently.
akes a very passive role in his classes, often waiting for someone to show him how/what to do rather than attempting what he can and asking for help when he gets stuck. Even when help is provided, he will often randomly guess at answers rather than put thought into what is being asked. While the material is difficult for him, he becomes overwhelmed very quickly and shuts down. devamjs inconsistent in his work completion which often is a cause for him not getting the practice he needs to reinforce the concepts, being studied across subject areas. Tests, quizzes and assignments may need modification or accommodation, depending on certain skills assessed and level of competency within certain skill sets.

In the area of written expression, often lacks detail and description in his writing. Graphic organizers have been useful in helping rainstorm ideas for a topic prior to beginning the writing process. Access to a word processor on lengthy writing assessments has also been a good accommodation that allows to catch convention errors and allows for his writing to be more easily read and interpreted.
continues to progress with adult and peer interactions. He presents as a very quiet student. He has difficulty advocating for self and at times resorts to avoidance behaviors (sadness, not talking or sulking). When interacting with peers and adults enften mumbles, speaks very quietly and is very hard to understand or hear. At times his intonation presents as flat with little expression. He sometimes keeps his head down and can give limited eye contact. These struggles often hinder success in academics as well as his peer relationships.
Required Supplementary Aids and Services from the IEPT Report:

| Modification/Accomodation/Support |  | Applicable Conditions | Applicable Subject Areas |
| :--- | :--- | :--- | :--- |
| Extended time of up to 2 school days | tests/quizzes/assignments | All academic subjects |  |
| Tests taken and read aloud in the LRC | tests/quizzes | All academic subjects |  |
| Clarification and repetition of directions | tests/quizzes/assignments | All academic subjects |  |
| Audiobooks/Books and textbooks on CD | Assigned Novels and textbooks as <br> appropriate | All academic subjects |  |


| Calculator and/or multiplication chart | tests and assignments | any subjects which require <br> computation |
| :--- | :--- | :--- |
| Provision of or reduced words banks | tests/quizzes | All academic subjects |
| Removal of one multiple choice option (4 <br> or more) | tests/quizzes | All academic subjects |
| Shortened assignments | All assignments (odds or evens) | Math |
| Accommodations and/or modifications as <br> determined | tests/quizzes/assignments | All academic subjects |
| Access to word processor | Length of written responses | All academic subjects |
| Ext. time, small group, word processor | District wide Assessments | GPWA |
| repeat/clarify instruction | District wide Assessments | GPWA |
| Provision of graphic organizers | lengthy writing assignments | All academic subjects |
| Frequency is on a daily/as the conditions occur unless otherwise indicated in the Applicable Conditions column. Location pertains to both general <br> education and special education unless otherwise indicated. |  |  |
| $\square$ Supplementary aids and services are not needed at this time. |  |  |

Additional Comments/Information

|  |  |  |
| :--- | :--- | :--- | :--- |
| Current assessment information: | (Results are expressed as broad grade scores) |  |
| Reading: | Math: | Written Language: $\quad$ Comprehension: |


|  |  |  | Student Profile |  |
| :--- | :--- | :--- | :--- | :--- |
| Strengths and Interests |  |  |  |  |
| $\square$ Auditory learner | $\square$ Reading decoding | $\square$ Written expression | $\square$ Self-directed | $\square$ Eager to do well |
| $\square$ Visual learner | $\square$ Reading comprehension | $\square$ Oral expression | $\square$ Motivated | $\square$ Helpful parent(s) |
| $\square$ Hands-on | $\square$ Math calculations | $\square$ Listening comprehension | $\square$ Hard worker | $\square$ Personable |
| $\square$ Organized | $\square$ Math reasoning | $\square$ Other | $\square$ Asks for help | $\square$ Good potential |

Comments:

Weaknesses

| $\square$ Excessive absences | $\square$ Disorganized | $\square$ Math calculation | $\square$ Will not ask for help |
| :--- | :--- | :--- | :--- |
| $\square$ Incomplete assignments | $\square$ Listening skills | $\square$ Math reasoning | $\square$ Quick to anger |
| $\square$ Missing assignments | $\square$ Tardy | $\square$ Written expression | $\square$ Quiet/withdrawn |
| $\square$ Inattentive | $\square$ Reading decoding | $\square$ Listening comprehension | $\square$ Cooperative group behavior |
| $\square$ Easily distracted | $\square$ Reading comprehension | $\square$ Oral expression | $\square$ Socializes too much |

Comments:

Thank you for being our partner in helping this student be successful in your class!

## IEP Goals and Objectives

Annual Goal: By March 2016, the student will develop/increase composition skills.
Objective: By March 2016, the student will sequence ideas and write a paragraph using transitions where appropriate.
Objective: By March 2016, the student will independently proofread writing and make necessary corrections utilizing various writing checklists related to conventions, adding description, etc.

Annual Goal: By March 2016, the student will accurately solve equations that contain integers and rational numbers.
Objective: By March 2016, the student will accurately solve equations that contain integers. Objective: By March 2016, the student will accurately solve equations that contain rational numbers.

Annual Goal: By March 2016, the student will accurately recall and solve problems that contain formulas presented in the 8th and 9th grade curriculum.
Objective: By March 2016, the student will accurately recall common formulas presented in the 8th and 9th grade curriculum.
Objective: By March 2016, the student will use formulas presented in the 8th and 9th grade curriculum to solve problems.

Annual Goal: By March 2016, student will improve eye contact, active listening, and in addition he will respond to others so that he improves his active engaged of conversation.
Objective: Use appropriate volume, pitch, intonation, so that peers and adults can properly hear.
Objective: Use eye contact when speaking to another as well as when listening to another person speaking.
Objective: Student will respond to others so that they know he is listening and engaged in the conversation.

## Progress Report



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| Required classroom observation by a team member OTHER than the general education teacher for EI and LD evaluations only. <br> Date <br> Observed by |
| :--- |
| $02 / 25 / 2013$ |

## III. SUMMARY OF ASSESSMENT DATA:

Provide a narrative summary of the assessment results which will be used as a basis for the development of the student's present level of academic achievement and functional performance statement. Include the impact the assessment results will have on the development of the Individualized Education Program (IEP).
nom is a sixth grade student who had a comprehensive evaluation in March of 2012 to determine special education eligibility under specific learning disability (SLD) or speech and language impaired (SLI). Results of his cognitive testing revealed relative strengths in the areas on the WJ-III cognitive battery in Comprehension-Knowledge, Visual-Spatial Thinking and Auditory Processing. Significant weaknesses were demonstrated in the areas of Long Term Retrieval, Processing Speed and Short-Term Memory. Whatewas also administered academic subtests to assess his skills in reading, math, and writing. An area of relative strength formem is his basic reading skills and reading comprehension. Weaknesses were seen in the areas of math calculation, math reasoning and written expression.

Results from the speech pathologist indicate average to low average language skills. Weaknesses were noted in following multi-step directions and understanding spoken paragraphs.

Teachers report that struggles with most subjects. He has difficulty with directions. He was not proficient in any area on state/district tests this year thus far.
/4y in increasingly displaying withdrawn behaviors and episodes of being overwhelmed with the work expectations. He is struggling socially in school and has sought out help from the counselor and social worker due to his concerns about not understanding the school work and not having any friends in school.



If ineligible, designate impairment(s) evaluated:
$\qquad$

The MET believes the impairment is not solely determined by lack of instruction in the essential components of reading, lack of instruction in math or by limited English proficiency.
V. MET Members: (Signature, with title)

|  | $\square$ Agree $\square$ Disagree |  | $\square$ Agree $\square$ Disagree |
| :---: | :---: | :---: | :---: |
| - | Psychologist | matestim | Special Ed. Teacher |
|  | $\square$ Agree $\square$ Disagree |  | $\square$ Agree $\square$ Disagree |
| mindehatan | School Social Worker | dam-Daskes | General Ed. Teacher |
|  | $\square$ Agree $\square$ Disagree |  | $\square$ Agree $\square$ Disagree |
| - | SLP-CCC |  | $\square$ |

VI. MET Representative to IEPT: Judy Ignagni

## Student Test History

2n:

Student Test History

| Name Parentinformation |  |  |
| :--- | :--- | :--- |
| Student ID | Grade 08 | ELLDesig/Class |
| School 3031 | Instr. Set | 11 |
| Birthdate | GATE |  |

Gender M


## Grade 05

| 01/31/12 | $33993$ | NWEA Language-Winter (NPR) | ELA | Trombinfiomontay | Unknown | 18/995 | Level 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01/31/12 | 34000 | NWEA Language-Winter (RIT) | ELA | Eamemen mity | Unknown | 199/400 5 | Level 5 |
| 05/15/12 | 34792 | Come Writing (02-08) | ELA | Cmotyenmery | Unknown | $2 / 71$ | Not Competent |
| 10/04/11 | 34056 | NWEA Math-Fall (NPR) | Math | anomery | Unknown | 1/995 | Level 5 |
| 10/04/11 | 34068 | NWEA Math-Fall (RIT) | Math | Cmombigetiomenty | Unknown | 178/400 5 | Level 5 |
| 10/15/11 | 13976 | MEAP Math-Overall_ | Math | - | Unknown | 479/671 4 | Not Proficient |
| 01/31/12 | 34010 | NWEA Math-Winter (NPR) | Math |  | Unknown | 1/99 5 | Level 5 |
| 01/31/12 | 34021 | NWEA Math-Winter (RIT) | Math | mang | Unknown | 175/400 5 | Level 5 |
| 05/15/12 | 34304 | NWEA Math-Spring (NPR) | Math | abing | Unknown | 2/99 5 | Level 5 |
| 05/15/12 | 34316 | NWEA Math-Spring (RIT) | Math | petmentey | Unknown | 189/400 5 | Level 5 |
| 10/04/11 | 34097 | NWEA Reading-Fall (NPR) | Reading | Oromery | Unknown | 18/995 | Level 5 |
| 10/04/11 | 34088 | NWEA Reading-Fall (RIT) | Reading | Thentigetmeneatay | Unknown | 194/400 5 | Level 5 |
| 10/15/11 | 13982 | MEAP Reading-Overall_ | Reading | Trimetrinementay | Unknown | $488 / 6314$ | Not Proficient |
| 01/31/12 | 34032 | NWEA Reading-Winter (NPR) | Reading | Temery enomemary | Unknown | 9/99 5 | Level 5 |
| 01/31/12 | 34038 | NWEA Reading-Winter (RIT) | Reading | - | Unknown | 191/400 5 | Level 5 |
| 05/15/12 |  | NWEA Reading-Spring (NPR) | Reading | deplinmentag | Unknown | 2/99 5 | Level 5 |
| 05/15/12 | 34334 | NWEA Reading-Spring (RIT) | Reading | Etimatay | Unknown | 182/400 5 | Level 5 |
| 10/15/11 | 13986 | MEAP Science-Overall_ | Science | Tremengeomemery | Unknown | 470/661 4 | Not Proficient |
| Grade 06 |  |  |  |  |  |  |  |
| 10/29/12 | $36193$ | encA 06 Lifeskills- Q2 Tools and Kitchen Math POST TEST | Career Tech. Ed. |  | Sollentarise | 9/35 4 | Not Proficient |
| 10/09/12 | 36209 | emCA 06 ELA - Q2 | ELA | tutume ermed | ngingen | $2 / 104$ | Not Proficient |
| 10/10/12 | 36203 | OCA 06 ELA - Q1 | ELA | Rimentidile | Begunaper | 6/20 4 | Not Proficient |

X = Multiple Measures (MM) Test
Roster: 4/16/2015 8:19:32 AM (Current)

## Whelter Nexand



## Grade 07

| 03/15/14 | $38219$ | EXPLORE Composite - <br> Grade 08 |  | Ripmen Midtlemornol | 11/25 1 | Score Range 0-12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 03/15/14 | 38221 | EXPLORE English - Grade 08 | ELA | W Tavlorrarand3 | 9/25 1 | Score Range 0-12 |
| 03/15/14 | 38223 | EXPLORE English College <br> Readiness - Grade 08 | ELA | Prerce iviraie Schoot Tayermbrenda | 9/25 1 | CR Benchmark Not Met |
| 01/31/14 | 38045 | NWEA Math-Winter (NPR) | Math | Unknown | 3/995 | Level 5 |
| 01/31/14 | 38056 | NWEA Math-Winter (RIT) | Math | ldenehagl Unknown | 195/400 5 | Level 5 |
| 03/15/14 | 38226 | EXPLORE Math - Grade 08 | Math | a Unknown | 11/25 1 | $\begin{aligned} & \text { Score Range } \\ & 0-12 \end{aligned}$ |
| 03/15/14 | 38228 | EXPLORE Math College Readiness - Grade 08 | Math |  | 11/25 1 | CR Benchmark Not Met |
| 01/31/14 | 38068 | NWEA Reading-Winter (NPR) | Reading |  | 14/995 | Level 5 |
| 01/31/14 | 38087 | NWEA Reading-Winter (RIT) | Reading | manda | 203/400 5 | Level 5 |
| 03/15/14 | 38230 | EXPLORE Reading - Grade 08 | Reading |  | 8/25 1 | Score Range $0-12$ |
| 03/15/14 | 38232 | EXPLORE Reading College Readiness - Grade 08 | Reading | Taylen Brend | 8/25 1 | CR Benchmark Not Met |
| 03/15/14 | 38236 | EXPLORE Science - Grade 08 | Science |  | 14/25 2 | Score Range $13-15$ |
| 03/15/14 | 38238 | EXPLORE Science College <br> Readiness - Grade 08 | Science | Pioroc Midallamernont Pertiteralook | $14 / 251$ | CR Benchmark Not Met |

X $=$ Multiple Measures (MM) Test
Roster: 4/16/2015 8:19:32 AM (Current)

## Student Assignment Reports



GRADE CODES/ABBREVIATONS:
$\mathrm{X}=$ excused assignment $\quad \mathrm{Z}=$ missing assignment (not turned in)

Student Assignment Scores


## GRADE CODES/ABBREVIATONS:

$\mathrm{X}=$ excused assignment $\quad \mathrm{Z}=$ missing assignment (not turned in)

## Student Assignment Scores

| 4-17-2015 | Student: WALKER, KEYAN Continued... |  |  |  | Page 3 of 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Current Grade: | 84.00\% | B |
| Teacher: 3rd Quarter <br> Quarter:  |  |  | Class: Hour: | INTRO-WDS/MTLS $2$ |  |  |
| Assignment Title | Due Date | Category |  | Points / Max | Grade |  |
| 1. Tool/Machine Identification Test | 01/30/2015 |  |  |  |  | X |
| 2. Safety Contract | 02/02/2015 |  |  | 7/10 | 70.0\% | C- |
| 3. Safety Quiz | 02/02/2015 |  |  | 25/25 | 100.0\% | A+ |
| 4. Wooden Napkin Holder | 04/01/2015 |  |  |  |  | X |
| 5. Wooden Plant Holder | 04/01/2015 |  |  |  |  | x |
| 6. Metal Plant Holder | 04/01/2015 |  |  |  |  | X |
| 7. Metal Toolbox | 04/01/2015 |  |  | 87/100 | 87.0\% | B+ |
|  |  |  | Current Grade: |  | 88.00\% B | B+ |

## GRADE CODES/ABBREVIATONS:

$\mathrm{X}=$ excused assignment $\quad \mathrm{z}=$ missing assignment (not turned in)

Student Assignment Scores


## GRADE CODES/ABBREVIATONS

$X=$ excused assignment $\quad Z=$ missing assignment (not turned in)


## GRADE CODES/ABBREVIATONS:

$\mathrm{X}=$ excused assignment $\quad \mathrm{Z}=$ missing assignment (not turned in)

Student Assignment Scores



## GRADE CODES/ABBREVIATONS:

$\mathrm{X}=$ excused assignment $\quad \mathrm{Z}=$ missing assignment (not turned in)

Student Assignment Scores


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## SuccessMaker Report

BIRT Report Viewer
Page 1 of 1
Cumulative Performance
Reading
Report All assigned start dates
Dates:
Report Run: 04/16/15-08:26 AM

| School: | Special Ed. |
| :--- | :--- |
| Teacher: | Nambestie |
| Grade: | NA |
| Group: | NA |



Notes: Instructional Performance data does not include Initial Placement performance after the student has placed (data resets) When run by date range, Initial Placement results are included if they fall within the date range.

## Cumulative Performance



BIRT Report Viewer

## Areas of Difficulty


*Options: No additional grouping
Sort by Strand
Show all dates at risk
Demographic filters not used No Grades selected
No Groups selected



## 

3/31/2015
Multiple Intelligences -- Assessment

# Your top three intelligences: 

Intelligence | Score (5.0 is |
| :---: |
| highest) |$\quad$ Description


highest)

MOVEMENT
(Kinesthetic)

Body Movement: You like to move, dance, wiggle, walk, and swim. You are likely good at sports, and you have good fine motor skills. You may enjoy taking things apart and putting them back together. Incorporating body movement into your learning will help you process and retain information better. Here are some ideas.

- Trace letters and words on each other's back.
- Use magnetic letters, letter blocks, or letters on index cards to spell words.
- Take a walk while discussing a story or gathering ideas for a story.
- Make pipe cleaner letters. Form letters out of bread dough. After you shape your letters, bake them and eat them!
- Use your whole arm (extend without bending your elbow) to write letters and words in the air.
- Change the place where you write and use different kinds of tools to write, ie., typewriter, computer, blackboard, or large pieces of paper.
- Write on a mirror with lipstick or soap.
- Take a walk and read all the words you find during the walk.
- Handle a Koosh ball or a worry stone during a study session.
- Take a break and do a crosslateral walk.

Nature: You are sensitive to nature and environment. You probably know the names of rocks, flowers, birds, and

3/31/2015


NATURE (Naturalist)

Multiple Intelligences -- Assessment
trees. You love to be outdoors. Here are some ways to use your nature intelligence in your learning:

- Work in the garden.
- Read about plants and/or animals.
- Study habits of fish or birds.
- Read nature magazines.
- Go hiking. Take photographs of what you find on your hike. Write a story describing the photographs.


SELF Intrapersonal)

Self: You have a very good sense of self. You like to spend time by yourself and think things over. You will often take in information from another person, mull it over by yourself, and come back to that person later to discuss it. You like working on projects on your own. You often prefer to learn by trial and error. Effective techniques to enhance your learning include keeping a journal and giving yourself time to reflect on new ideas and information. More ideas:

- Go on "guided imagery" tours.
- Set aside time to reflect on new ideas and information.
- Encourage journal writing.
- Work on the computer.
- Practice breathing for relaxation.
- Use brainstorming methods before reading.
- Listen to and read "how to" tapes and books.
- Read cookbooks.

The scores for your other five intelligences:


Just because these five are not in your top three doesn't mean you're not

## VIA Strength Survey for Children

Max－

Log out
Log out

VIA Strength Survey for Childrent



## Your Top Strangth

Bravery and Courage

Your secand strength
Social Inlefligence
 rou kuliz what to do to put nthers at extie

## Strength 共3

## 5 pirituality and Faith

 Strangth \＃／4

Joamwork and Graup Loypalty
 Hord in．success of the crenp．
Strength wis
｜lumar anal Playfulness


## Strengih fín

## Curiasity and Interest in tha World


Strangth $\% 7$

## Appraciatlon of Eeaucy und Excelienco

 Strength 安目

## Honasty，huthenticity，and 大anhineness

 Strength \＃s

Mathosex and taenerasity


## Strength \＃10

treativity，Oripinality，and Ingenuazy


## Strength \＃11

## Camkion，Carefulmess，and blampalion

 Strangth \＃ユ2

Indugtty And Perseuranca


You work hard to finish what you start. No matter the project, you "get it out the door" in timely fashion. You do not get distracted when you work, and you take satisfaction in completing tasks.

## Strength \#13

## Perspective and Wisdom

Although you may not think of yourself as wise, your friends hold this view of you. They value your perspective on matters and turn to you for advice. You have a way of looking at the world that makes sense to others and to yourself.

## Strength \#14

## Enthusiasm and Zest

Regardless of what you do, you approach it with excitement and energy. You never do anything halfway or halfheartedly.
For you, life is an adventure.

## Strength \#15

Critical Thinking and Objective Judgment
You think things through and examine them from all sides. You do not jump to conclusions, and you rely only on good evidence to make decisions. You are open-minded.

Strength \#16

## Capacity to Love and be Loved

You value close relations with others, in particular those in which sharing and caring are reciprocated. The people to whom you feel most close are the same people who feel most close to you.

## Strength \#17

Fairness and Justice
You treat all people fairly and equally and do not let personal feelings bias your decisions about others. You give everyone a chance.

## Strength \#18

## Gratitude.

You are aware of the good things that happen to you, and you never take them for granted. Your friends and family
members know that you are a grateful person because you always take the time to express your thanks

## Strength \#19

## Leadership.

You excel at the tasks of leadership: encouraging a group to get things dene and preserving harmony within the group by making everyone feel included. You do a good job organizing activities and seeing that they happen

Strength \#20

## Self-control and Self-regulation

You self-consciously regulate what you feel and what you do. You are a disciplined person. You are in control of your
appetites and your emotions, not vice versa.

## Strength \#21

## Modesty and Humility

You are modest and humble. You never brag or act special. You never call attention to yourself.
Strength \#22

## Love of Learning

You love learning new things, whether in a class or on your own. You have always loved school, or reading, or museums-anywhere there is an opportúnity to learn.

## Strength \#23

## Hope and Optimism

You expect the best in the future, and you work to achieve it. You believe that the future is something that you can control.

## Strength \#24

## Forgiveness and Mercy

You forgive those who have done you wrong. You always give people a second chance. Your guiding principle is mercy and not revenge.
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## Lesson Plan 1

## Demographics:

Name: Gretchen Morris-Archinal Date: February 7, 2015 Subject: $8^{\text {th }}$ Grade Math School: Pierce Middle School Setting: Secondary Resource Room (SRC) School District: Grosse Pointe Public Schools Lesson Plan Title: Walk the Line - Slope Review

## Rationale:

## Functions:

CCSS.MATH.CONTENT.8.F.A. 3
Interpret the equation $y=m x+b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A=s 2$ giving the area of a square as a function of its side length is not linear because its graph contains the points $(1,1),(2,4)$ and $(3,9)$, which are not on a straight line.
CCSS.MATH.CONTENT.8.F.B. 4
Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two ( $\mathrm{x}, \mathrm{y}$ ) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

## Range of Writing:

CCSS.ELA-LITERACY.W.8.10
Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

The general education $8^{\text {th }}$ grade math class is currently studying functions; linear equations; and slope intercept form and will have a written assessment at end of the section. This lesson is a mechanism that allows special education students an opportunity to review and write about their study of functions. It incorporates kinetic, oral and visual learning opportunities to reach a range of learning styles.

## Outcomes (objectives/performance indicators):

$80 \%$ of the students will correctly write the equation of a line given its graph or its slope and $y$ intercept. The students will also learn the effects of changing the slope and y-intercept on the graph and the equation of the line as measured by a worksheet assessment (summative assessment in part 7) and by the written Tweet It Back response cards.

## Materials needed:

- Large floor space - optimal $20^{\prime} \times 20^{\prime}$
- Wide masking tape - different colors - for axis' as well as lines
- Sharpie or magic marker
- Graphing calculator or iPad app attached to smart board Desmos app on iPad or iPhone - students may utilize their personal equipment
- Handout with activity directions and equations
- Handout with writing prompt Pencils for students


## Teacher Procedure/Development:

Introduction: After students are seated ask them what they know about slopes, linear functions and the slope intercept form. Discuss and record what they know on the smart board. Explain that they will be a human graphing calculator and drawing lines on the floor. Have them help push back the furniture so that there is a large open space in the room.

## Methods/Procedures:

1. The teacher will select 2 students to place a 15-20 ft strip of masking tape (or laminated adding machine tape) on the floor. Then the teacher will select 2 students to place another 15-20 ft strip of tape on the floor perpendicular to the first strip. Use the tiles on the floor as graph paper. - Cooperative groups Next the teacher will ask students, one at a time, to take the magic marker and write on the tape the following: - direct instruction if necessary
a. $x$-axis
b. $y$-axis
c. 0 at the origin
d. scale the positive $x$-axis
e. scale the negative $x$-axis
f. scale the positive $y$-axis
g. scale the negative $y$-axis
2. The teacher will divide the class into 2 groups of 2 or 3 . (Group sizes and number of groups can be modified based on size of class) While one group is on the graph, the other group will be figuring out the function on the smart board. Calculators may be used to solve the equations - cooperative groups
3. Group $A$ will solve for $x$ and $y$ using $x$ values of 2,0 and -2 for equation $y=x+3$. Once the table is solved, Group B will illustrate by standing on the coordinates and laying a piece of tape on the ground through the coordinates. Group A will then solve $y=x-3$ and Group $B$ will plot the different points and tape the ground. Teacher will ask what differences and similarities the groups see in the lines as well as the slope and the $y$-intercept.
4. Next the groups will switch places and Group B will solve the problems while Group A will plot the graph. The following equations will be solved: $y=2 x$ and $y=-2 x$. Again the teacher will follow up with similarities and differences as well as the slope and the $y$ intercept.
5. Formative Assessment - monitor for progress.
a. Reteach and continue practicing as necessary using additional equations and continue to alternate groups. Equations will include: $y=3 x+5, y=3 x-5, y=-3 x-5$, $y=-3 x+5 y=2 x+3, y=-2 x+3, y=2 x-3, y=-2 x-3$
b. If time allows continue with steps 6-7 and the closure.
c. If there is not enough time go to the closure and do steps 6-7 the next day.
6. The teacher will demonstrate using the Desmos app on the iPad and projected on the smart board. Students will input on their devices along with the teacher - Direct instruction. Write the equations of the lines in slope-intercept form. Then draw the graph of the lines, labeling each line with its equation. Answer the questions that follow:
7. slope $=1, y$-intercept $=3$
8. slope $=1, y$-intercept $=-3$
9. slope $=1, y$-intercept $=0$
10. slope $=1, y$-intercept $=-1$
i. How are these lines alike?
ii. How are these lines different?
iii. What was the effect of changing the $y$-intercept?
11. Using the Desmos app, each group will complete 1 set of problems and report their findings back to the group.- cooperative groups
a. Group A - Write the equations of the lines in slope-intercept form. Then draw the graph of the lines, labeling each line with its equation. Answer the questions that follow. (Summative assessment for Group A)
12. slope $=1 / 2, y$-intercept $=0$
13. slope $=1, y$-intercept $=0$
14. slope $=3 / 2, y$-intercept $=0$
15. slope $=2, y$-intercept $=0$
i. How are these lines alike?
ii. How are these lines different?
iii. What was the effect of changing the slope?
b. Group B - Write the equations of the lines in slope-intercept form. Then draw the graph of the lines, labeling each line with its equation. Answer the questions that follow: (Summative assessment for Group B)
16. slope $=2, y$-intercept $=3$
17. slope $=-2, y$-intercept $=3$
18. slope $=1 / 2, y$-intercept $=3$
19. slope $=-1 / 2, y$-intercept $=3$
i. How are these lines alike?
ii. How are these lines different?
iii. What was the effect of changing the slope?

Closure: After the groups have reported back, the teacher will pass out the Tweet it Back forms. Students will write up a short synopsis in tweet format that synthesis what they learned today about functions; linear equations; and the slope intercept form. This could be done on Twitter if
appropriate. The room returned to its original state. The tape will be removed from the floor after the unit is finished. It will stay as visual cue for the students.

Technology Use: The smart board, iPad/iPhone and apps are used during this lesson. Students will record their tables and graphs for the human graphing calculator portion on the smart board. IPads and/or iPhones are used for the second part and their answers are projected on the smart board. The Desmos Graphing Calculator app allows the students to graph the linear functions. While the students will not actually tweet their responses, this format will be utilized as a reflective synthesis of what they have learned. While it is low-tech, the graph on the floor is also considered technology.

## Accommodations/adaptations:

- The only safety concerns would be downloading an appropriate app for the graphing calculator. I found one that doesn't cost anything and doesn't have any advertising.
- Instruction was differentiated to allow for different learning styles - kinetic, visual, and verbal.
- There are also a variety of teaching styles from direct instruction to cooperative groups constructing knowledge within the groups to accommodate cultural leaning preferences.
- Because this lesson is to be used in a resource room setting, individual learners IEP goals have also been taken into consideration and any individual accommodations, such as the use of calculators, oral and written directions and additional time have been incorporated.
- This lesson incorporates students form two different resource rooms in a cooperative exchange between the two rooms.

Assessment/Evaluation: The teacher will make systematic observations during and after the group activities to form formative assessments. The Tweet it Back response acts as a summative assessment of the knowledge students have about functions, linear equations and the slope intercept form; what they do not know; and where they still have questions .

## Teacher Reflection:

## References

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"Walk the Line"
Name: $\qquad$
Group A

| $y=x+3$ |  |
| :---: | :---: |
| $x$ | $Y$ |
| 2 |  |
| 0 |  |
| -2 |  |

Slope:
Y intercept: $\qquad$


Slope:
Y intercept: $\qquad$
Group B
$y=2 x$

| $x$ | $Y$ |
| :---: | :---: |
| 2 |  |
| 0 |  |
| -2 |  |

Slope:
Y intercept:
$y=-2 x$

| $X$ | $Y$ |
| :---: | :---: |
| 2 |  |
| 0 |  |
| -2 |  |

Slope:
Y intercept:

Example: Write the equations of the lines in slope-intercept form. Then draw the graph of the lines on your own graph paper, labeling each line with its equation. Answer the questions that follow.

1 slope $=1, y$-intercept $=3$

2 slope $=1, y$-intercept $=-3$ $\qquad$

3 slope $=1, y$-intercept $=0$ $\qquad$

4 slope $=1$, $y$-intercept $=-1$ $\qquad$

How are these lines alike? $\qquad$
How are these lines different?

What was the effect of changing the $y$-intercept? $\qquad$


Group A - Write the equations of the lines in slope-intercept form. Then draw the graph of the lines on your own graph paper, labeling each line with its equation. Answer the questions that follow.

1 slope $=1 / 2, y$-intercept $=0$ $\qquad$

2 slope $=1, y$-intercept $=0$ $\qquad$
3 slope $=3 / 2, y$-intercept $=0$ $\qquad$
4 slope $=2, y$-intercept $=0$ $\qquad$

How are these lines alike? $\qquad$
How are these lines different?
What was the effect of changing the slope?


Group B - Write the equations of the lines in slope-intercept form. Then draw the graph of the lines on your own graph paper, labeling each line with its equation. Answer the questions that follow.

1 slope $=2, y$-intercept $=3$

2 slope $=-2, y$-intercept $=3$
3 slope $=1 / 2, y$-intercept $=3$ $\qquad$
4 slope $=-1 / 2, y$-intercept $=3$ $\qquad$

How are these lines alike? $\qquad$
How are these lines different?
What was the effect of changing the slope?


TODAY'S TEACHING TWEET
@

Something I learned today... I didn't know..
Aquestion I still have is...


## Lesson Plan 2

## Demographics:

Name: Gretchen Morris-Archinal Date: April 17, 2015 Subject: $8^{\text {th }}$ Grade Math School: Pierce Middle School Setting: Secondary Resource Room (SRC) School District: Grosse Pointe Public Schools Lesson Plan Title: Pythagorean Theorem - practice and review/reteach

## Rationale:

Geometry - Understand and apply the Pythagorean Theorem.
CCSS.MATH.CONTENT.8.G.B. 7
Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in realworld and mathematical problems in two and three dimensions.

## Range of Writing:

CCSS.ELA-LITERACY.W.8.10
Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

The general education $8^{\text {th }}$ grade math class is just starting the study of the Pythagorean Theorem. This lesson is a mechanism that allows special education students an opportunity to do and/or review homework, reteach as necessary and write about their study of the theorem. It incorporates kinetic, oral and visual learning opportunities to reach a range of learning styles.

## Outcomes (objectives/performance indicators):

$75 \%$ of the students will correctly explain and apply the Pythagorean Theorem given two-sides of a right triangle as measured by an online assessment (summative assessment in part 4) and by the written Tweet It Back response cards.

## Materials needed:

- Home work
- Elmo
- Smart board
- Apple TV
- Computer with internet
- Measuring tape
- iPad/iPhones with the following apps. - These are all free apps
- Pythagoras - Boss Maths - https://itunes.apple.com/us/app/pythagorean-theorem-its-converse/id556317588?mt=8
- Pythagorean Calculator - https://itunes.apple.com/us/app/id495387401?mt=8
- Pythagorean Theorem 8.G.6-https://itunes.apple.com/us/app/pythagorean-theorem-8.g.6/id692872148?mt=8
- IXL-http://www.ixl.com/math/grade-8/pythagorean-theorem-find-the-length-of-the-hypotenuse
- Handout with writing prompt - Tweet it Out
- Pencils for students


## Teacher Procedure/Development:

Introduction: After students are seated ask them get out yesterday's math homework. State that the objective for the day is to get a better handle on the Pythagorean Theorem by going over the homework, evaluating what they know and re-teaching as necessary.

## Methods/Procedures:

8. Using the smart board and Elmo, the students will take turns solving the problems from last night's homework. All students will have an opportunity to solve a problem giving the teacher a chance to assess individual student's abilities and knowledge.
9. Students will take part in the Pythagoras Theory Shoe Activity as a hands on representation of the theorem.
a. https://www.mathsisfun.com/activity/pythagoras-theorem-shoes.html

1st: Gather up as many shoes as you can.
2nd: Since Pythagoras' Theorem only works for 90 degree triangles, line your shoes up to form the letter L, like this:


Or this:


3rd: Label one line of shoes $A$, and the other line of shoes B (you could call them "legs" of a triangle!)


4th: Measure each line of shoes with your measuring device and record them on your paper


Now we have enough information to solve the distance from the tip of one line of shoes to the tip of the other line of shoes. We call this line the hypotenuse
5th: Using Pythagoras' Theorem $A^{2}+B^{2}=C^{2}$ solve for the distance of $C$, our hypotenuse.

$$
C=V\left(A^{2}+B^{2}\right)
$$

6th: Plug in your recorded information for $A$ and $B$ and solve for $C$. Hint: make sure your using the same units like inches or cm's. Record your answer below


7th: After recording your data, use your measuring device to measure the hypotenuse (the distance from the tip of one line of shoes to the tip of the other line of shoes). Did you get the same answer?
$C($ by measurement $)=$

## Questions To Ask Yourself

Say, instead of measuring with your ruler you counted up the size of each shoe for the distance of each line of shoes. Would your answer change? Why?

If you would have mixed multiple units of measurement like cm 's and inches while working on the project, versus using the same measuring unit, how would this have affected your answer?
10. IF TIME - Using the Pythagorean Theorem 8.G.6 app on the iPad and Apple TV, show the students how the pieces work together to define the theorem.
11. Show the students how to calculate by using the calculator function on their devices or Pythagorean Calculator app again using the Apple TV.
12. Have the students practice finding the hypotenuse of the triangle by using either (a will take longer and can be shortened to just doing $a$ few, $b$ is just one problem:
a. IXL on either their phone/iPad or on the smart board. Students may use a calculator or app as an aid.
b. http://www.pbs.org/wgbh/nova/proof/puzzle/baseball.html
13. Have students report their scores - this is the summative assessment.

Closure: After the students have reported their IXL scores, the teacher will pass out the Tweet it Back forms. Students will write up a short synopsis in tweet format that synthesis what they learned today about the Pythagorean Theorem. This could be done on Twitter if appropriate. The room returned to its original state.

Technology Use: The smart board, iPad/iPhone, Apple TV and apps are used during this lesson. Students will record their tables and graphs for the shoe triangle on the smart board (if done). IPads and/or iPhones are used for the second part and projected on the smart board using Apple TV. While the students will not actually tweet their responses, this format will be utilized as a reflective synthesis of what they have learned. While it is low-tech, the shoe triangle on the floor is also considered technology.

## Accommodations/adaptations:

- The only safety concerns would be downloading appropriate apps. I found ones that doesn't cost anything and doesn't have any advertising.
- Instruction was differentiated to allow for different learning styles - kinetic, visual, and verbal.
- There are also a variety of teaching styles from direct instruction to cooperative groups constructing knowledge within the groups to accommodate cultural leaning preferences.
- Because this lesson is to be used in a resource room setting, individual learners IEP goals have also been taken into consideration and any individual accommodations, such as the use of calculators, oral and written directions and additional time have been incorporated.
- This lesson incorporates students form two different resource rooms in a cooperative exchange between the two rooms.

Assessment/Evaluation: The teacher will make systematic observations during and after the group activities to form formative assessments. The Tweet it Back response acts as a summative assessment of the knowledge students have about the Pythagorean Theorem ; what they do not know; and where they still have questions .

## Teacher Reflection:

## References

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## Graphic Organizer for Solving Equations



