Fostering an Environment of Equity and Opportunity

The following slides and images are a summary of a parent presentation from January $23^{\text {rd }}, 2017$. The images and text are meant as informative.

## PURPOSE OF THE PRESENTATION

## 1.SHARE INFORMATION

2.GATHER INPUT
3.SPARK AN OPEN AND ONGOING DIALOGUE -EMAIL FOLLOW-UP QUESTIONS TO: -middleschoolday@sd129.org

## IMPORTANT REMINDER

-The content of this presentation is the product of a collaborative effort. It is not a final product and parent input is desired to help inform future decisions
-The earliest this initiative would go into place is 2018-19.

## TWO IMPORTANT ITEMS TO REMEMBER

- We are better today than we were three years ago.
-The plan we will discuss is about continuing to improve as a school district.


## Part 1: <br> Problem Identification

While 70-75\% of West High graduates students are going on to post high school college of some kind, only about $38 \%$ of them are graduating from college within 6 years of graduation. This information is shown in graphic form on the next two slides.

Percent of Students Enrolled in College at Any Time During the First Two Years After High School


$$
\text { AVG }=72 \%
$$

## Percent of High School Class Who Completed a Degree Within Six Years



AVG $=\mathbf{3 8} \%$

WEST AURORA HIGH SCHOOL Report Run Date: 10/06/2016 11:09 AM NATIONAL STUDENT Page 1 of 2

## WHY IS THIS HAPPENING?

## Remedial College Course Work



- AS A DISTRICT WE INVESTIGATED REASONS WHY SO MANY OF OUR students were taking remedial level math courses in COLLEGE.
- THE NEXT TWO SLIDES SHOW THE DATA OF THE PERCENTAGE OF INCOMING FRESHMEN OVER THE LAST TWO YEARS WHO HAVE BEEN PLACED INTO REMEDIAL HIGH SCHOOL MATH i.e. SEQUENTIAL ALGEBRA

Freshman Class Math Placements (20152016)


Freshman Class Math Placement (2016-17)


## - THE NEXT SLIDE SHOWS THE SEQUENCE BY SCHOOL YEAR OF WHAT

 BEING PLACED INTO SEQUENTIAL ALGEBRA AS A FRESHMAN HAS ON A STUDENT'S EDUCATION.- As indicated by the graph, a student placed into Sequential Algebra will not take the math courses that are covered on the SAT or ACT until their Senior year of High School, which is one year after those tests are first administered.

Students Placed in Sequential Algebra as Freshmen


- BY CONTRAST, THE NEXT SLIDE SHOWS THE SEQUENCE BY SCHOOL YEAR OF WHAT BEING PLACED INTO ALGEBRA 1 AS A FRESHMAN HAS ON A STUDENT'S EDUCATION.
- It should be noted that placement into Algebra 1 as a Freshman allows a student to be exposed to all the pre-requisite math topics covered on the SAT or ACT prior to sitting for those exams.

Students Placed in Algebra 1 as Freshmen


- THE NEXT SLIDE SHOWS THE SEQUENCE BY SCHOOL YEAR OF WHAT BEING PLACED INTO GEOMETRY AS A FRESHMAN HAS ON A STUDENT'S EDUCATION. THIS IS THE TRACK OUR MOST ADVANCED STUDENTS TAKE.

MATH SEQUENCE (Advanced Students)

- Algebra 2
- Geometry
- Algebra
- Pre Algebra



## Go Even Further Back....

As we examined the achievement data of $8^{\text {th }}$ grade students in 2014-15 to their subsequent high school math placement as Freshmen in 2015-16 we noticed that when low percentages of students are at grade level or above (left graph) a high number of them are placed in remedial (Sequential) Algebra (right graph)


Freshman Math Placements 2015-2016


Similarly, we found that as $8^{\text {th }}$ grade student achievement rose in 201516 (left graph) that placement into Sequential Algebra (right graph) declined significantly.

Students At Or Above Grade
Level Grades $5^{\text {th }}-8^{\text {th }}$ 2013-2016


Freshman Math Placements
2016-2016


## Conclusions



## Solution Identification

The next slide shows the current structure for our students in Middle School through High School in regards to Math courses taken.

## CURRENT MODEL: AGE/GRADE=MATH COURSE TAKEN

## ON TRACK STUDENT/STRUGGLING STUDENT

| $\underline{6^{\text {TH }} \text { GRADE }}$ | $7^{\text {TH }}$ GRADE | $8{ }^{\text {TH }}$ GRADE | $\underline{9^{\text {TH }} \text { GRADE }}$ | $10^{\text {TH }}$ GRADE | 11 ${ }^{\text {TH }}$ GRADE | $12^{\text {TH }}$ GRADE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $6^{\text {TH }} \text { GRADE }$ <br> MATH | $7^{\text {TH }} \text { GRADE }$ <br> MATH | $8^{\text {TH }}$ GRADE <br> MATH (Pre- <br> Algebra) | ALGEBRA | GEOMETRY | ALGEBRA 2 | PRE-CALCULUS/ STATISTICS/ FINITE MATH |
|  |  |  | SEQUENTIAL <br> ALGEBRA 1 A | SEQUENTIAL <br> ALGEBRA 1 B | TECHNICAL GEOMETRY | ALGEBRA 2 |

## ET STUDENT

| $\underline{\mathbf{6}}^{\text {TH }}$ GRADE | $\underline{\mathbf{7}^{\text {TH }} \text { GRADE }}$ | $\underline{\mathbf{8}^{\text {TH }} \text { GRADE }}$ | $\underline{\mathbf{9}^{\text {TH }} \text { GRADE }}$ | $\underline{\mathbf{1 0}^{\text {TH }} \text { GRADE }}$ | $\underline{\mathbf{1 1}^{\text {TH }} \text { GRADE }}$ | $\underline{\mathbf{1 2}^{\text {TH }} \text { GRADE }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $6^{\text {TH }}$ GRADE ET <br> MATH (7 <br> GRADE MATH) | $7^{\text {TH }}$ GRADE ET <br> MATH (Pre- <br> Algebra) | ALGEBRA | GEOMETRY | ALGEBRA 2 | PRE CALCULUS | AP CALCULUS |

## PROPOSED MODEL

-COURSE BASED APPROACH TO MATHEMATICS CONSISTING OF 5 COURSES.

1. MATH 1 ( $6^{\text {TH }}$ GRADE MATH)
2. MATH 2 ( $7^{T H}$ GRADE MATH)
3. MATH 3 ( $8^{\text {TH }}$ GRADE MATH/PRE ALGEBRA)
4. ALGEBRA
5. GEOMETRY

- 2 PERIODS OF MATH IN $6^{\text {TH }}$ GRADE AND THEN 2 PERIODS AS NEEDED.
-The next slides show a different, more flexible model of delivering Math education to middle school students. These slides show various paths through our proposed Math courses based on student individuality.


## FOR SOME STUDENTS

| 6th Grade | 7th Grade | 8th Grade | Freshman Year |
| :---: | :---: | :---: | :---: |
| Math 1 | Math 2 | Math 3 |  |
| Math 1 | Math 2 | Math 3 |  |

For some students they may need 2 periods of math over three consecutive years in order to take Algebra 1 as a Freshman as represented above.

## FOR OTHER STUDENTS

| 6th Grade | 7th Grade | 8th Grade | Freshman Year |
| :---: | :---: | :---: | :---: |
| Math 1 | Math 2 | Math 3 |  |
|  |  |  | Algebra I |
| Math 1 | Math 2 | Math 3 |  |



Some students may need 2 periods of math only in $6^{\text {th }}$ and $7^{\text {th }}$ grade in order to take Algebra 1 as a Freshman as represented above.

## FOR OTHER STUDENTS

| 6th Grade | 7th Grade | 8th Grade | Freshman Year |
| :---: | :---: | :---: | :---: |
| Math 1 | Math 2 | Math 3 |  |
| Math 1 | Math 2 | Math 3 |  |



Other students may only need 2 periods of math in their $6^{\text {th }}$ grade year and could be ready for Geometry as a Freshman.

## FOR OTHER STUDENTS

| 6th Grade | 7th Grade | 8th Grade | Freshman Year |
| :---: | :---: | :---: | :---: |
| Math 1 | Math 2 | Math 3 |  |
| Math 1 | Math 2 | Math 3 |  |



Other students may only need 2 periods of math in their $6^{\text {th }}$ grade year and could be ready for Algebra 2 as Freshmen.


This graphic displays how each of the displayed pathways articulate throughout a student's high school career.

| 6th Grade | 7th Grade | 8th Grade | Freshman Year | Sophomore Year | Junior Year | Senior Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Math 1 | Math 2 | Math 3 | $\rightarrow$ Algebra I | Geometry | Algebra 2 | Pre-Calculus |
| Math 1 | Math 2 |  |  |  |  |  |
| Math 1 $\qquad$ <br> Math 2 | Math 2 | Algebra |  | Algebra 2 | Pre-Calculus | AP Calculus or AP Statistics |
|  | Math 3 | Support |  |  |  |  |
|  | Math 3 | Algebra | Geometry | Algebra 2 | Pre-Calculus | AP Calculus or AP Statisitcs |
| Math 2 | Algebra | etry | Algebra II Honors | Pre-Calculus | AP Calculus | *Multi-Variable Calculus |
| Math 3 |  |  | Algebra II |  |  |  |

## STUDENT SCHEDULES

The following slides offer a perspective on what a current $6^{\text {th }}, 7^{\text {th }}, 8^{\text {th }}$ grade schedule look like now as compared to the proposed changes.

## RESTRUCTURE OFFERING TO PROVIDE 2 PERIODS OF MATH

## CURRENT $6^{\text {TH }}$ GRADE SCHEDULE

1. ELA 1
2. ELA 2
3. SCIENCE
4. MATH
5. Intervention / support or Enrichment Period
6. LUNCH
7. PE
8. SOCIAL STUDIES
9. ELECTIVE

PROPOSED $6^{\text {TH }}$ GRADE SCHEDULE

1. ELA 1
2. ELA 2
3. SCIENCE
4. MATH 1 (ET=MATH2)
5. MATH 2 (ET=MATH3)
6. LUNCH
7. PE
8. SOCIAL STUDIES
9. ELECTIVE

## RESTRUCTURE OFFERING TO PROVIDE 2 PERIODS OF MATH IF NECESSARY

## CURRENT $7^{\text {TH }}$ GRADE SCHEDULE

1. ELA 1
2. ELA 2
3. SCIENCE
4. MATH
5. Intervention / support or Enrichment Period
6. LUNCH
7. PE
8. SOCIAL STUDIES
9. ELECTIVE

PROPOSED $7^{\text {TH }}$ GRADE SCHEDULE

1. ELA 1
2. ELA 2
3. SCIENCE
4. MATH 2 / ELECTIVE* / Intervention
5. MATH 3 (ET=ALGEBRA)
6. LUNCH
7. PE
8. SOCIAL STUDIES
9. ELECTIVE

## RESTRUCTURE OFFERING TO PROVIDE 2 PERIODS OF MATH IF NECESSARY

## CURRENT $8^{\text {TH }}$ GRADE SCHEDULE

1. ELA 1
2. ELA 2 or World Language
3. SCIENCE
4. MATH
5. Intervention / support or Enrichment Peried
6. LUNCH
7. PE
8. SOCIAL STUDIES
9. ELECTIVE

PROPOSED $\mathbf{8}^{\text {TH }}$ GRADE SCHEDULE

1. ELA 1
2. ELA 2
3. SCIENCE
4. ALGEBRA/GEOMETRY
5. ELECTIVE* / Intervention
6. LUNCH
7. PE
8. SOCIAL STUDIES
9. ELECTIVE

## WHAT THIS MEANS FOR FUTURE STUDENTS

## 6TH GRADE:

EVERYONE HAS 2 PERIODS OF MATH;
1 ELECTIVE PERIOD
NO INTERVENTION PERIOD

## 7TH GRADE:

EVERYONE HAS 1 ELECTIVE PERIOD (At least)
WORLD LANGUAGE IS AN ELECTIVE OPTION
MATH AND READING SCORES DETERMINE IF A STUDENT HAS A SECOND PERIOD OF MATH OR A READING INTERVENTION. IF NEITHER ARE NEEDED THEN A SECOND ELECTIVE IS TAKEN

8TH GRADE:
ALL STUDENTS HAVE TWO PERIODS OF LANGUAGE ARTS
WORLD LANGUAGE IS AN ELECTIVE OPTION
MATH AND READING SCORES DETERMINE IF A STUDENT NEEDS A SECOND PERIOD OF
MATH OR A READING INTERVENTION. IF NEITHER ARE NEEDED THEN A SECOND ELECTIVE
IS TAKEN TAKEN

## LOCAL EVIDENCE OF THIS PRACTICE

One of our four middle schools was able to use Federal grant dollars to run a pilot in which 21 students took 2 periods of Math during second semester last school year. The next slide shows the results.

JEFFERSON FOCUS GROUP

|  | Student 4 | Grade 7 | 35 | 34 | -1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Results from the | Student 5 | Grade 7 | 54 | 66 | 12 |
| pilot show that on | Student 6 | Grade 7 | 60 | 96 | 36 |
| average students | Student 7 | Grade 7 | 38 | 64 | 26 |
| average students | Student 8 | Grade 7 | 62 | 95 | 33 |
| grew by 22 National | Student 9 | Grade 7 | 62 | 93 | 31 |
| Percentile Points. | Student 10 | Grade 7 | 26 | 70 | 44 |
| This means that a | Student 11 | Grade 7 | 48 | 80 | 32 |
|  | Student 12 | Grade 7 | 66 | 91 | 25 |
| student who was | Student 13 | Grade 7 | 63 | 90 | 27 |
| the $50{ }^{\text {th }}$ percentile | Student 14 | Grade 7 | 58 | 83 | 25 |
| of students their | Student 15 | Grade 7 | 67 | 71 | 4 |
|  | Student 16 | Grade 7 | 57 | 96 | 39 |
| age at the start of | Student 17 | Grade 7 | 70 | 64 | -6 |
| the semester would | Student 18 | Grade 7 | 47 | 91 | 44 |
|  | Student 19 | Grade 7 | 47 | 81 | 34 |
|  | Student 20 | Grade 7 | 45 | 66 | 21 |
| the semester at the | Student 21 | Grade 7 | 54 | 55 | 1 |
| $72^{\text {nd }}$ percentile. |  |  |  |  |  |
|  |  |  |  | Avg. Growth | 22.71429 |

## PROPOSED TIMELINE

9/28/16: First Meeting of Middle School Day Committee.
10/17/16: Update to Board of Education on our Status and Next Steps.
November-December 2016: Listening Tour of Internal Stakeholders.
January-March 2017: Listening to External Stakeholders.
Spring 2017: Based Upon Feedback Seek Board of Education Approval.
2017-2018: Planning and Communication.
2018-2019: Implementation of Grade 6.
2019-2020: Implementation of Grade 6, \& Grade 7.
2020-2021: Implementation of Grades 6,7 \& 8.

## Your Opportunity for Feedback <br> -QUESTION CARDS

-EMAILS
-PHONE CALLS

## Send Questions/Suggestions/Ideas to....

middleschoolday@sd129.org

