Northwood Academy Charter School

Student Achievement Committee Meeting

Date and Time

Wednesday March 4, 2020 at 5:00 PM EST

Location

Northwood Academy Charter School (4621 Castor Avenue)

This is a public meeting of the Student Achievement Committee of the Board of Trustees of Northwood Academy Charter School that was properly advertised pursuant to the Pennsylvania Sunshine Act.

Mission Statement

Northwood Academy Charter School is a comprehensive learning sanctuary that educates and supports the whole child. We achieve this by working as a highly qualified team, that delivers collective knowledge, creativity, and real-world learning experiences needed for students to become successful individuals.

Agenda

I. Opening Items

A. Call the Meeting to Order

B. Record Attendance

II. Student Achievement

A. Math Curriculum Status

B. Review Current Academic Program

III. New Business

A. Parent Survey

Review and discuss proposed survey questions.

IV. Closing Items

A. Adjourn Meeting

Coversheet

Math Curriculum Status

Section:	II. Student Achievement
Item:	A. Math Curriculum Status
Purpose:	Discuss
Submitted by:	
Related Material:	MathPracticesandData.pdf

Future Ready PA Index

Overall proficiency, growth, and attendance outcomes are presented below with their respective ratings and comparison to State averages. Each of the overall outcomes are further broken down by subgroup on the PDE website.

PROFICIENCY						
School Year	2017-18			2018-19		
Subject	ELA	Math	Science	ELA	Math	Science
Rating	Met Interim Goal					
Percent Prof/Adv	63.6%	30.1%	54.4%	58.4%	34.5%	58.8%
Statewide Average	63.0%	45.5%	64.3%	62.1%	45.2%	66.0%
Gap above/below State	0.6%	-15.4%	-9.9%	-3.7%	-10.7%	-7.2%

GROWTH						
School Year	2017-18			2018-19		
Subject	ELA	Math	Science	ELA	Math	Science
Rating	Met the Standard	Exceeded the Standard	Met the Standard		Exceeded the Standard	
Growth Score	79.0	96.5	70.0	68.0	91.0	66.0
Statewide Average	74.9	75.2	74.9	75.0	75.3	75.1
Meeting Growth Standard	70.0	70.0	70.0	70.0	70.0	70.0

ATTENDANCE		
School Year	2017-18	2018-19
Rating	Met the Standard	Met the Standard
Percent Regular Attendance	92.8%	93.0%
Statewide Average	85.4%	85.8%
Gap above/below State	7.4%	7.2%

Strengths

- All student group and every subgroup meets the performance standard for attendance, which is being within the 25th to 75th percentile statewide.
- Increases in math and science proficiency from 2017-18 to 2018-19 overall and for each subgroup apart from multiracial math.
- No significant gaps in achievement between Black and Hispanic students, the two largest racial/ethnic subgroups.

Areas of Focus

- All student group did not meet interim goal for ELA, math, and science proficiency in 2018-19.
- All student group did not meet the standard demonstrating growth in ELA and science in 2018-19.

Charter School Performance Framework

Outcomes on the Charter School Performance Framework are reported for the first four years of a charter term in an Annual Charter Evaluation (ACE) and the last year of a charter term in a Renewal Recommendation Report. The overall Academic Success points earned is provided, followed by proficiency, growth, and attendance outcomes for each respective ACE. Thereafter the number of compliant organizational standards and financial standards meeting the standard are provided.

Academic Success Notes:

Proficiency: Y = surpassed Similar Schools or District average.

Growth: Y = met the State growth standard; overall = all students; Low 20% = a subset of the lowest performing 20% of students. Science is reported separately for 4th grade and 8th grade (the two years tested).

Attendance: Y = surpassed Similar Schools or District average for 95%+ attendance; Y = lower chronic absenteeism than Similar Schools or District average. 95%+ is attending 95% or more of instructional days; chronic absenteeism is attending fewer than 90% of instructional days.

ACADEMIC SUCCESS			
	2016 ACE	**2017 ACE**	**2018 ACE**
Overall Points Earned	N/A	85%	86%

Proficiency									
Year	**2016 ACE**			**2017 ACE**			**2018 ACE**		
Subject	ELA	Math	Science	ELA	Math	Science	ELA	Math	Science
Similar Schools	Y	Y	Y	Y	Y	Y	Y	N	Y
District Average	Y	Y	Y	Y	Y	Y	Y	Y	Y

Growth																		
Year	**2016 ACE**						**2017 ACE**						**2018 ACE**					
Subject	ELA		Math		Science		ELA		Math		Science		ELA		Math		Science	
Metric	Overall	Low 20%	Overall	Low 20%	Overall	Low 20%	Overall	Low 20%	Overall	Low 20%	Overall	Low 20%	Overall	Low 20%	Overall	Low 20%	Overall	Low 20%
Met Growth Standard	Y	Y	Y	Y	Y/N	NA	Y	Y	N	N	Y/Y	N/N	Y	Y	Y	Y	N/Y	Y/Y

Attendance						
Year	**2016 ACE**		**2017 ACE**		**2018 ACE**	
Subject	95%+	Chronic Abs	95%+	Chronic Abs	95%+	Chronic Abs
Similar Schools	Y	Y	Y	Y	Y	Y
District Average	Y	Y	Y	Y	Y	Y

ORGANIZATIONAL COMPLIANCE AND VIABILITY			
Year	**2016 ACE**	**2017 ACE**	**2018 ACE**
# Standards Compliant	15/19	24/26	26/26

FINANCIAL HEALTH AND SUSTAINABILITY			
Year	**2016 ACE**	**2017 ACE**	**2018 ACE**
# Metrics Meeting Standard	7/8	6/10	10/10

2017-18 Similar Schools include: A.L. Fitzpatrick School, Ad Prima Charter School, Charles W. Henry School, Christopher Columbus Charter School, Cook-Wissahickon School, Discovery Charter School, Independence Charter School, James Dobson School, Jenks Academy for Arts and Sciences, Philadelphia Performing Arts: A String Theory Charter School, Russell Byers Charter School, Shawmont School, Stephen Decatur School, Tacony Academy Charter School

Additional Data Analyzed

In addition to the three external accountability frameworks, data was also analyzed from GreatPhillySchools ratings, suspension information, student, parent/guardian, and staff surveys, and teacher retention information.

GreatPhillySchools Ratings

GreatPhillySchools (GPS), an arm of the Philadelphia School Partnership, produces school ratings to accompany other informational materials about public and Catholic schools in the city. You can directly access ApplyPhillyCharter from Northwood's GPS page.

Please note that 70% of the overall score is drawn from proficiency rates. Growth outcomes do not factor into the overall ranking. Proficiency scores are based on ranking all public (District and charter) and Catholic school outcomes and cutting performance into deciles.

Scores	
Overall Score	7
Reading	7
Math	5
Science	6
Attendance	8
School Incidents	9
Growth	High Growth

Student Achievement Data		
	School	State
English	63.5%	61.4%
Math	30.2%	42.0%
Science	54.4%	64.8%

Safety & Culture	
Reported Incidents	0.51 per 100 students
Reported Suspensions	0.51 per 100 students
Reported Expulsions	0 per 100 students

Strengths

- When comparing Northwood's GPS overall score of 7 to the 14 Similar Schools used in the Charter School Performance Framework, Northwood's 7 is the same or higher than 11 of 14 Similar Schools.
- ELA proficiency is higher than the State average.
- Few reported incidents, suspensions, or expulsions. High score of 9 for school incidents.

Areas of Focus

- Math proficiency had the lowest reported rating with a score of 5. Math proficiency has the largest gap to the State average with a 12 percentage point margin.

COMMON CORE STATE STANDARDS FOR MATHEMATICS
Standards for Mathematical Practice

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important "processes and proficiencies" with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council's report *Adding It Up*: adaptive reasoning , strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately) and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one's own efficacy).

1 **Make sense of problems and persevere in solving them.**
Mathematically proficient students:
- explain to themselves the meaning of a problem and looking for entry points to its solution.
- analyze givens, constraints, relationships, and goals.
- make conjectures about the form and meaning of the solution attempt.
- consider analogous problems, and try special cases and simpler forms of the original problem.
- monitor and evaluate their progress and change course if necessary.
- transform algebraic expressions or change the viewing window on their graphing calculator to get information.
- explain correspondences between equations, verbal descriptions, tables, and graphs.
- draw diagrams of important features and relationships, graph data, and search for regularity or trends.
- use concrete objects or pictures to help conceptualize and solve a problem.
- check their answers to problems using a different method.
- ask themselves, "Does this make sense?"
- understand the approaches of others to solving complex problems.

2. **Reason abstractly and quantitatively.**
Mathematically proficient students:
- make sense of quantities and their relationships in problem situations.
  - ✓ *decontextualize* (abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents and
  - ✓ *contextualize* (pause as needed during the manipulation process in order to probe into the referents for the symbols involved).
- use quantitative reasoning that entails creating a coherent representation of quantities, not just how to compute them
- know and flexibly use different properties of operations and objects.

3 **Construct viable arguments and critique the reasoning of others.**
Mathematically proficient students:
- understand and use stated assumptions, definitions, and previously established results in constructing arguments.
- make conjectures and build a logical progression of statements to explore the truth of their conjectures.
- analyze situations by breaking them into cases
- recognize and use counterexamples.
- justify their conclusions, communicate them to others, and respond to the arguments of others.
- reason inductively about data, making plausible arguments that take into account the context
- compare the effectiveness of plausible arguments
- distinguish correct logic or reasoning from that which is flawed
  - ✓ elementary students construct arguments using objects, drawings, diagrams, and actions..
  - ✓ later students learn to determine domains to which an argument applies.
- listen or read the arguments of others, decide whether they make sense, and ask useful questions

4 **Model with mathematics.**

Mathematically proficient students:

- apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.
  - ✓ In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community.
  - ✓ By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another.
- simplify a complicated situation, realizing that these may need revision later.
- identify important quantities in a practical situation
- map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas.
- analyze those relationships mathematically to draw conclusions.
- interpret their mathematical results in the context of the situation.
- reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

5 **Use appropriate tools strategically.**

Mathematically proficient students

- consider available tools when solving a mathematical problem.
- are familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools
- detect possible errors by using estimations and other mathematical knowledge.
- know that technology can enable them to visualize the results of varying assumptions, and explore consequences.
- identify relevant mathematical resources and use them to pose or solve problems.
- use technological tools to explore and deepen their understanding of concepts.

6 **Attend to precision.**

Mathematically proficient students:

- try to communicate precisely to others.
- use clear definitions in discussion with others and in their own reasoning.
- state the meaning of the symbols they choose, including using the equal sign consistently and appropriately.
- specify units of measure and label axes to clarify the correspondence with quantities in a problem.
- calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the context.
  - ✓ In the elementary grades, students give carefully formulated explanations to each other.
  - ✓ In high school, students have learned to examine claims and make explicit use of definitions.

7 **Look for and make use of structure.**

Mathematically proficient students:

- look closely to discern a pattern or structure.
  - ✓ Young students might notice that three and seven more is the same amount as seven and three more.
  - ✓ Later, students will see 7 x 8 equals the well-remembered 7 x 5 + 7 x 3, in preparation for the distributive property.
  - ✓ In the expression $x^2 + 9x + 14$, older students can see the 14 as 2 x 7 and the 9 as 2 + 7.
- step back for an overview and can shift perspective.
- see complicated things, such as some algebraic expressions, as single objects or composed of several objects.

8 **Look for and express regularity in repeated reasoning.**

Mathematically proficient students:

- notice if calculations are repeated
- look both for general methods and for shortcuts.
- maintain oversight of the process, while attending to the details.
- continually evaluate the reasonableness of intermediate results.

Reason abstractly and quantitatively



I can use reasoning habits to help me contextualize and decontexualize problems.

CONTEXTUALIZE

I can take numbers and put them in a real-world context.

For example, if given
3 x 2.5 = 7.5
I can create a context:

I walked 2.5 miles per day for 3 days. I walked a total of 7.5 miles.

DECONTEXTUALIZE

I can take numbers out of context and work mathematically with them.

For example, if given
'I walked 2.5 miles per day for 3 days. How far did I walk?',
I can write and solve

3 x 2.5 = 7.5

Reasoning Habits include *1) creating an understandable representation of the problem solved, 2) considering the units involved, 3) attending to the meaning of quantities, and 4) using properties to help solve problems.*

Clip art licensed from the Clip Art Gallery on DiscoverySchool.com

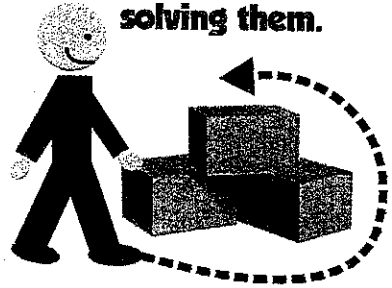
Powered by BoardOnTrack

Northwood Academy Charter School - Student Achievement Committee Meeting - Agenda - Wednesday March 4, 2020 at 5:00 PM

Northwood Academy Charter School - Student Achievement Committee Meeting - Agenda - Wednesday March 4, 2020 at 5:00 PM

Standards for Student Mathematical Practice

1 Make sense of problems and persevere in solving them.



Keep on going!

2 Reason abstractly and quantitatively.

Write a story for the mathematical equation

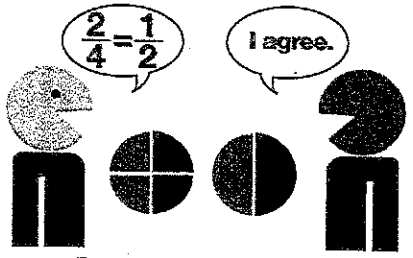


$\frac{1}{2} \times 4$

DeJuan exercises 1/2 hour a day for 4 days. How many total hours does he exercise?

Think what makes sense.

3 Construct viable arguments and critique the reasoning of others.



Talk and explain.

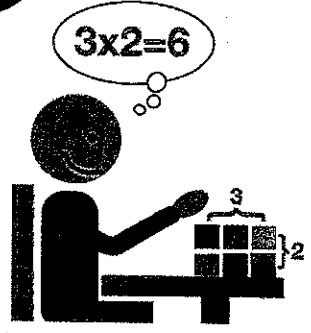
4 Model with mathematics.



$\frac{1}{2} \times 4 = 2$ or $4 \times \frac{1}{2} = 2$

Show your thinking.

5 Use appropriate tools strategically.



Use the right tools.

6 Attend to precision.

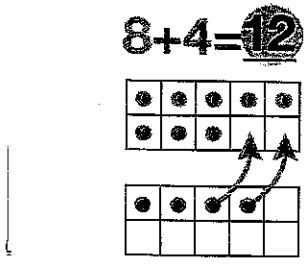
symbol: equals (the same as)

120 minutes = 2 hours

units of measure

Check your work.

7 Look for and make use of structure.



See the pattern or connection.

8 Look for and express regularity in repeated reasoning.



See the pattern or connection.

WAYNE RESA Leading... Learning for All
SERVICE LEADERSHIP COLLABORATION EXCELLENCE

33500 Van Born Road • Wayne, MI 48184-2497
734.334.1300 • 734.334.1620 FAX • www.resa.net

Board of Education: James S. Beri • Kenneth E. Berlinn • Mary E. Blackmon • Lynda S. Jackson • James Petrie
Christopher A. Wigent, Superintendent

COMMON CORE STATE STANDARDS INITIATIVE
Common Core State Standards Initiative for Mathematics

Powered by BoardDocs

Coversheet

Review Current Academic Program

Section: II. Student Achievement
Item: B. Review Current Academic Program
Purpose: Discuss
Submitted by:
Related Material: Courses of Study.docx

All students in K-8, will receive the following aligned to the PA Core Standards:
English Language Arts
Math
Science
Mathematics

Other courses include:
Music(varies year-to-year)
Art(K-8)
Technology(K-8)
Physical Education(K-8)
Health Education(5th and 6th only)
Character(K-3 only)
Language (7th and 8th only)
Career Development (5th grade)
Ballroom Dancing(5th only)

Coversheet

Parent Survey

Section:	III. New Business
Item:	A. Parent Survey
Purpose:	Discuss
Submitted by:	
Related Material:	Internal Survey for Parents at Report Card Conferences Spring 2020.pdf

Internal Survey for Parents at Report Card Conferences Spring 2020

1. My child's school (Can we change this to just say Northwood?)provides a high quality educational program by which children learn and succeed.

❏ I agree
❏ I disagree

2. My child's school meets the specific non-academic needs of my child (behavioral and socio-emotional).

❏ I agree
❏ I disagree

3. My child's school is helping to prepare him/her for their future.

❏ I agree
❏ I disagree

4. Your concerns as a parent have been reflected in your child's IEP goals and interventions.

❏ I agree
❏ I disagree
❏ Not applicable

5. Discipline issues at Northwood Academy are appropriately addressed in a fair manner.

❏ I agree
❏ I disagree

6. I feel that Northwood Academy provides resources and opportunities for me to grow as a parent in helping my child to succeed (i.e. parent education training on curriculum- math resources, homework help, reading resources, educational brochures and websites, summer curriculum guidance, parent education on social/emotional learning to support my child and information on upcoming community events).

❏ I agree
❏ I disagree and would like to see more of the following (please include specific topics):

_____

7. Please check what you consider to be the best form of communication for the way you would prefer to receive information concerning upcoming events, meetings, and school wide news? (Is this a one choice answer?)

❏ Facebook notifications
❏ Northwood's website
❏ Paper versions sent home
❏ An app notification on phone via text
❏ School Reach phone call weekly
❏ Other, please specify _____

8. Please check below the events that you have attended this year at Northwood Academy.

❏ Back to School Night
❏ Parent Core Organization Meetings
❏ Harrisburg Rally
❏ STEM Night
❏ Family Movie Night
❏ Grade Specific Event (Donuts with Dads, Grandparent/VIP Event)
❏ East Coast Wings and Grill Family Night
❏ Winter Concert
❏ Chat and Chew with the Principal
❏ Open House
❏ Rolling Thunder Family Skate Night
❏ Halloween Parade
❏ Chaperone for a class trip

If you have suggestions for school wide or community events for next year, please list below.

_____

9. Please write any comments/information that you feel might be beneficial feedback for Northwood Academy, such as went well this year or any areas in need of improvement.

_____
_____
_____