Kenosha Unified School District

REGULAR MONTHLY BOARD MEETING

November 28, 2017

7:00 PM

Educational Support Center
Board Meeting Room
3600-52nd Street
Kenosha, Wisconsin

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Kenosha Unified School District

Regular School Board Meeting
November 28, 2017
Educational Support Center
7:00 PM

I. Pledge of Allegiance

II. Roll Call of Members

III. Awards/Recognition

A. Tremper Girls Soccer Team - United Soccer Coaches Academic All-American Team

B. Indian Trail Students - 2017 KEMPA (Kettle Moraine Press Association) Journalism Contest Award Winners

C. Tremper Girls Golf (Individual) - Golf Coaches Association of Wisconsin Academic All-State Honorees

IV. Administrative and Supervisory Appointments

V. Introduction and Welcome of Student Ambassador

VI. Legislative Report

VII. Views and Comments by the Public

VIII. Response and Comments by Board Members (Three Minute Limit)

IX. Remarks by the President

X. Superintendent's Report

XI. Consent Agenda

A. Consent/Approve 4
Recommendations Concerning Appointments, Leaves of Absence, Retirements, Resignations and Separations

B. Consent/Approve 5
Minutes of 10/16/17 Special Meeting, 10/24/17 Special Meeting and Executive Session and 10/24/17 Regular Meeting

C. Consent/Approve 17
Summary of Receipts, Wire Transfers and Check Registers

D. Consent/Approve 25
Board Policy 7400 - Naming or Renaming District Buildings and 7410 - Naming an Area Within or on a District Site (Second Reading)

XII. Old Business

XIII. New Business

A. Discussion
2017-18 Adopted Budget Book
Click Here

B. Discussion 31
2017 Parent/Guardian Survey

C. Discussion 43
Advanced Placement Update

D. Discussion/Action 108
New Course Proposal: Career and Technical Education

E. Discussion/Action 113
New Course Proposal: Supermileage Vehicle

F. Discussion/Action 120
Course Change Proposals: Family and Consumer Science

G. Discussion/Action 133
Course Change Proposals: Indian Trail Business Academy

H. Discussion/Action 144
Course Change Proposals: Fine Arts

I. Discussion/Action 175
Course Change Proposals: Science

J. Discussion/Action 195
Donations to the District

XIV. Other Business as Permitted by Law 196
Tentative Schedule of Reports, Events and Legal Deadlines For School Board (November/December)

XV. Predetermined Time and Date of Adjourned Meeting, If Necessary

XVI. Adjournment

Kenosha Unified School District
Kenosha, WI
November 28, 2017

The Office of Human Resources recommends the following actions:

ACTION	LAST NAME	FIRST NAME	SCHOOL/DEPT	POSITION	STAFF	DATE	FTE	SALARY
Appointment	de la Torre	Andrew	Dimensions of Learning	Secretary 1	Secretary	10/25/2017	0.8	$17.56
Appointment	Drucks	Michael	Pleasant Prairie Elementary School	Custodian	Service	10/25/2017	1	$20.62
Appointment	Hawlish	Deanna	Head Start/Chavez	Family Service Provider	ESP	10/16/2017	1	$15.53
Appointment	Hyland	Amy	Professional Learning	Teacher Consultant/Profesional Development	Instructional	11/13/2017	0.49	$34,766.48
Appointment	Klinefelter	James	Frank Elementary/Bradford High School	Custodian	Service	10/25/2017	1	$20.62
Appointment	Malsack	Rachael	Reuther/Harborside	Clerical	ESP	11/20/2017	1	$14.53
Appointment	Morales	Jose	EBSOLA CA	Custodian	Service	10/17/2017	1	$20.62
Appointment	Ortiz	Martha	Lincoln Middle School	Special Education	ESP	11/09/2017	1	$15.53
Appointment	Sykora	John	Tremper High School	Math	Instructional	10/13/2017	0.5	$27,654.50
Appointment	Wilde	Cody	Vernon/Southport Elementary Schools	2nd Shift Custodian - Grade 3	Service	11/06/2017	1	$20.62
Early Retirement	Luckhardt	Beth	Roosevelt Elementary School	Cross Categorical	Instructional	06/14/2018	1	$79,891.00
Early, Early Retirement	Nelsen	Elizabeth	Grewenow Elementary School	Kindergarten	Instructional	04/12/2018	1	$66,692.00
Resignation	Campbell	Antoinette	Washington Middle School	Home/School Parent Liaison	ESP	11/29/2017	0.49	$14.67
Resignation	Irizarry	Sonimarie	Bradford High School	Attendance	ESP	11/14/2017	1	$14.53
Resignation	Middlecamp	Peter	Facility Services	Custodian	Service	10/25/2017	1	$21.62
Resignation	Pust	Melissa	Special Education & Student Support	Occupational Therapy	Teacher	10/27/2017	1	$46,580.00
Resignation	Rice	Cassandra	Student Support/Guidance	Guidance	Instructional	10/20/2017	1	$46,580.00
Retirement	Hicks	Kathleen	Stocker Elementary School	Information/Health Services	ESP	12/19/2017	1	$16.83
Retirement	Watson	Nancy	Mahone Middle School	Art	Instructional	01/20/2018	1	$67,810.00

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A SPECIAL MEETING OF
THE KENOSHA UNIFIED SCHOOL BOARD
HELD OCTOBER 16, 2017

A special meeting of the Kenosha Unified School Board was held on Monday, October 16, 2017, at 5:30 P.M. in the Board Meeting Room at the Educational Support Center. The purpose of this meeting was for Views and Comments by the Public and Review of School Board Policies 1331 – Classification of Groups Using School District Facilities, 1350 – Equipment Use by Community Groups, 1400 – Gifts, Grants and Bequests, 1500 – Solicitations/Fundraising, 1510 – Advertising/Promotions, 2810 – Incident Reporting, 3422 – Exclusivity Agreements With Vendors, 3900 – Insurance Management, 6740 – Student Fund Raising Activities and 6741 – Raffles.

The meeting was called to order at 5:32 P.M. with the following members present: Mr. Falkofske, Mr. Kunich, Ms. Stevens, Mrs. Snyder, Mr. Garcia, and Mrs. Coleman. Dr. Savaglio-Jarvis, Mr. Tarik Hamdan, Mrs. Lisa Salo, Mrs. Amber Danielski from Schenck, S.C., and Attorney Shana Lewis from Strang, Patteson, Renning, Lewis & Lacy were also present. Mr. Wade was excused.

Mrs. Coleman, President, opened the meeting by announcing that this was a special meeting of the School Board of the Kenosha Unified School District No. 1. Notice of this special meeting was given to the public by forwarding a copy of the notice to all requesting radio stations and newspapers.

Views and comments were made by the public.

Mrs. Coleman presented the Review of School Board Policies submitted by Mr. Michael Falkofske, Ms. Rebecca Stevens and Mrs. Coleman, excerpts follow:

“At the request of School board members Michael Falkofske and Rebecca Stevens, ten school board policies were placed on the July 25, 2017, regular school board meeting agenda for discussion. Below is the report that was contained in the July 25 agenda packet:

> “As a district we must ensure that all the money raised on behalf of students is used solely for the students. As a Board we must insist that the District's policies are followed to the letter.
>
> The first goal of this review was to look at how existing policies dealt with the money raised by Student Related Activity Groups. As you will see in the items we outlined, the tools for financial oversight already exist. The issue is the current policies are not being followed. The review does list some additional items such as ensuring that Student Related Activity Groups are certified non-profit organizations. Having a non-profit status will ensure they have to file an annual report with the IRS.

> The second goal is to ensure that all possible vendors have an opportunity to submit bids to school related activity groups. Again, it appears that existing policy covers some of our concerns. However, we could use policy updates that ensure vendors are in good standing with the IRS and personal finances. We also must have more oversight on how vendors are selected to ensure there is a fair process for selecting vendors.
>
> We must be diligent in ensuring that District policies regarding oversight of School Related Activity Groups are being followed. We cannot allow these groups to create their own rules for the profit of individuals."

During the July 25 discussion, there was unanimous consent to have the noted school board policies reviewed by legal counsel and then discussed at a board working session."

Board members discussed each policy separately and Mr. Hamdan, Mrs. Salo, Mrs. Danielski, and Attorney Lewis answered questions from Board members.

Mrs. Coleman noted that Attorney Lewis will incorporate the suggested changes and bring back to the Board for another review.

Mr. Kunich moved to adjourn the meeting. Mr. Garcia seconded the motion. Unanimously approved.

Meeting adjourned at 7:33 P.M.

Stacy Schroeder Busby
School Board Secretary

SPECIAL MEETING & EXECUTIVE SESSION
OF THE KENOSHA UNIFIED SCHOOL BOARD
HELD OCTOBER 24, 2017

A special meeting of the Kenosha Unified School Board was held on Tuesday, October 24, 2017, in the Small Board Room at the Educational Support Center. The purpose of this meeting was to vote on holding an executive session to follow immediately.

The meeting was called to order at 6:02 P.M. with the following members present: Mr. Falkofske, Mr. Wade, Mrs. Snyder, Mr. Garcia, and Mrs. Coleman. Dr. Savaglio-Jarvis was also present. Mr. Kunich and Ms. Stevens were excused.

Mrs. Coleman, President, opened the meeting by announcing that this was a special meeting of the School Board of the Kenosha Unified School District. Notice of this special meeting was given to the public by forwarding a copy of the notice to all requesting radio stations and newspapers.

Mrs. Coleman announced that an executive session had been scheduled to follow this special meeting for the purpose of Reviewing Findings/Orders by Independent Hearing Officer and Litigation.

Mr. Falkofske moved that the executive session be held. Mr. Wade seconded the motion.

Roll call vote. Ayes: Mr. Falkofske, Mr. Wade, Mrs. Snyder, Mr. Garcia, and Mrs. Coleman. Noes: None. Unanimously approved.

1. Litigation

Attorney Aaron Graf from Mallery & Zimmerman, S.C. arrived at 6:06 P.M. He updated Board members on a pending litigation matter and asked for direction from the Board.

Mr. Graf was excused at 6:41 P.M.

2. Review of Findings/Orders by Independent Hearing Officer

Mr. Brian Geiger, Regional Coordinator of Leadership and Learning – Secondary, arrived at 6:42 P.M. and presented Board members with information relating to two expulsions.

Mr. Geiger and Dr. Savaglio-Jarvis were excused at 6:48 P.M.

Mrs. Snyder moved to approve the recommendation of the hearing officer in regards to the first expulsion. Mr. Falkofske seconded the motion. Unanimously approved.

Mr. Wade moved to approve the recommendation of the hearing officer in regards to the second expulsion. Mr. Garcia seconded the motion. Unanimously approved.

Mr. Falkofske moved to adjourn the meeting. Mr. Wade seconded the motion. Unanimously approved.

Meeting adjourned at 6:55 P.M.

Stacy Schroeder Busby
School Board Secretary

REGULAR MEETING OF
THE KENOSHA UNIFIED SCHOOL BOARD
HELD OCTOBER 24, 2017

A regular meeting of the Kenosha Unified School Board was held on Tuesday, October 24, 2017, at 7:00 P.M. in the Board Room of the Educational Support Center. Mrs. Coleman, President, presided.

The meeting was called to order at 7:01 P.M. with the following Board members present: Mr. Falkofske, Mr. Wade, Mrs. Snyder, Mr. Garcia, and Mrs. Coleman. Dr. Savaglio-Jarvis was also present. Mr. Kunich and Ms. Stevens were excused.

Mrs. Coleman, President, opened the meeting by announcing that this was a regular meeting of the School Board of Kenosha Unified School District. Notice of this regular meeting was given to the public by forwarding the complete agenda to all requesting radio stations and newspapers. Copies of the complete agenda are available for inspection at all public schools and at the Superintendent's office. Anyone desiring information as to forthcoming meetings should contact the Superintendent's office.

There were no awards/recognitions.

There were no Administrative and/or Supervisory Appointments.

Mr. Wade introduced the student ambassador, Jamal Hansen from Tremper High School, and he made his comments.

There was no legislative report.

Views and/or comments were made by the public.

Board members made their responses/comments.

Mrs. Coleman and Dr. Savaglio-Jarvis yielded their time for Board President remarks and the Superintendent's Report to Ms. Laurie Bonnar, faculty adviser at Reuther Central High School, and the Reuther Bulldog Leadership Team for their anti-bullying PowerPoint presentation which covered the following topics: what is bullying, what if I am being bullied, conflict vs. bullying, what if I see someone being bullied and if someone is spreading rumors.

Board members considered the following Consent-Approve items:

Consent-Approve item XI-A – Recommendations Concerning Appointments, Leaves of Absence, Retirements, Resignations and Separations.

Consent-Approve item XI-B – Minutes of the 9/26/17 Special Meeting and Executive Session and the 9/16/17 Regular Meeting.

Consent-Approve item XI-C – Summary of Receipts, Wire Transfers, and Check Registers submitted by Mrs. Lisa Salo, Accounting Manager; Mr. Tarik Hamdan, Chief Financial Officer; and Dr. Sue Savaglio-Jarvis, excerpts follow:

"It is recommended that the September 2017 cash receipt deposits totaling $321,736.51, and cash receipt wire transfers-in totaling $29,089,298.05, be approved.

Check numbers 555436 through 556650 totaling $7,803,239.75, and general operating wire transfers-out totaling $243,477.66, are recommended for approval as the payments made are within budgeted allocations for the respective programs and projects.

It is recommended that the September 2017 net payroll and benefit EFT batches totaling $11,348,036.06, and net payroll check batches totaling $25,813.09, be approved."

Mr. Wade moved to approve the consent agenda. Mrs. Snyder seconded the motion. Unanimously approved.

Mr. Kristopher Keckler, Chief Information Officer, presented the Official Third Friday Enrollment Report (School Year 2017-18) submitted by Mrs. Erin Roethe, Data Analyst; Mrs. Lorien Thomas, Research Analyst; Mrs. Renee Blise, Research Coordinator; Mr. Keckler and Dr. Savaglio-Jarvis, excerpts follow:

"Annually, Administration provides the Kenosha Unified School Board with the District's Official Third Friday Enrollment Report. The data contained in this report are also reported to the Wisconsin Department of Public Instruction (DPI) in its designated format. The School Board should note that this report contains only enrollment data and does not contain student membership data that are used to develop revenue projections and budgetary planning documents.

District-wide, enrollment decreased 274 students, from 21,929 students in 2016-17 to 21,655 students in 2017-18. Beginning in 2009-10, Kenosha started to experience a decline in community birth rates, with the related effect of declines in enrollments five years later. Since 2010, KUSD boundary areas have averaged 250 less births compared to previous years. This trend has now impacted grades pre-kindergarten through grade 2.

The District reported decreases for all boundary groups. Boundary elementary schools decreased overall by -65 students, boundary middle schools decreased by -123 students, and boundary high schools decreased by -170 students. Overall, this is attributed to both the declining birth rate and the expansion of KTEC.

The 2017-18 Official Third Friday Enrollment Report is an informational item."

Mr. Keckler gave a PowerPoint presentation which covered the following topics: overall enrollment trends, number of births, KUSD exits to area private schools, KUSD open enrollment, student race/ethnicity, 8 year trend, cohort average, change in enrollments and teacher FTE.

Mrs. Snyder presented Resolution 339 – American Education Week 2017 – November 13-17 – Great Public Schools: A Basic Right and Our Responsibility which read as follows:

"WHEREAS, public schools are the backbone of our democracy, providing young people with the tools they need to maintain our nation's precious values of freedom, civility and equality; and

WHEREAS, by equipping Kenosha's youth with both practical skills and broader intellectual abilities, we give them hope for, and access to, a productive future; and

WHEREAS, all Kenosha Unified staff work tirelessly to serve our children and community with care and professionalism; and

WHEREAS, schools encourage community, bringing together adults and children, educators and volunteers, business leaders and elected officials in a common enterprise.

NOW, THEREFORE, be it resolved that Kenosha Unified School District does hereby proclaim November 13-17 as the annual observance of American Education Week which honors individuals who work to make public schools great for children.

BE IT FURTHER RESOLVED, that a true copy of this resolution be spread upon the official minutes of the Board of Education."

Mr. Falkofske moved to approve Resolution 339 – American Education Week 2017 – November 13-17 – Great Public Schools: A Basic Right and Our Responsibility. Mr. Garcia seconded the motion. Unanimously approved.

Dr. Savaglio-Jarvis introduced the 2017-2019 Administrative, Supervisory and Technical Personnel Policy – Revised Edition, submitted by Mrs. Annie Petering, Chief Huma Resources Officer, and Dr. Savaglio-Jarvis, excerpts follow:

"Kenosha Unified School District ("the District") has a classification, compensation and personnel policy for administrative, supervisory and technical personnel which expired on June 30, 2017. On a biannual basis, the Office of Human Resources reviews and updates this policy.

Administration recommends that the School Board approve the 2017-2019 classification, compensation and personnel policy for administrative, supervisory and technical personnel as presented this evening. Administration also recommends that the School Board approve one step for all eligible AST's."

The proposed changes were presented by Mrs. Petering and board members had no questions.

Mr. Wade moved to approve the 2017-2019 Administrative, Supervisory and Technical Personnel Policy – Revised Edition and the recommended one step for all eligible AST's. Mr. Falkofske seconded the motion. Unanimously approved.

Dr. Savaglio-Jarvis introduced Board Policy 7400 – Naming or Renaming District Buildings and 7410 – Naming an Area Within or on a District Sight submitted by Mrs. Ruder and Dr. Savaglio-Jarvis, excerpts follow:

"The communications team was asked to review Policy 7400 – Naming or Renaming District Buildings and 7410 – Naming an Area Within or On a District Site to bring forth a revised document that would provide clarity as to the intention of each policy. Upon review, it was determined that the policies are very close in nature and that a combination of the policies along with cleanup of the wording would better suit the needs of the district and those reading/utilizing the policy.

It is recommended that language in Policy 7410 – Naming an Area Within or On a District Site be combined with Policy 7400 – Naming or Renaming District Buildings and that Policy 7410 as written be eliminated. This streamlines the entire policy and clarifies which areas may be named and how that process must take place. The language regarding committee duties was also adjusted for clarity purposes.

Updates and rationale were shared with board members at July 2017 Agenda Review meetings and board members provided the following feedback to administration:

- Consider not requiring the committee to rank suggested names
- Consider eliminating the use of names when naming buildings
- Consider allowing buildings to be named after things

On July 20, 2017, Dr. Sue Savaglio-Jarvis sent an email reminder to the board of education to submit any additional feedback to Tanya Ruder. No one responded and no feedback was received.

On July 27, 2017, Stacy Busby sent another email reminding board members to submit any additional feedback to Tanya Ruder. One board member responded that they had no additional feedback.

On Aug. 3, 2017, Stacy Busby emailed board members with a final reminder to submit additional feedback to Tanya Ruder. Two board members responded that they had no additional feedback.

On Sept. 11, 2017, board members were provided an opportunity to submit final feedback to Tanya Ruder. No feedback was received.

Oct. 10, 2017, the Personnel/Policy Committee reviewed the report and policies and made additional recommendations that were discussed and/or included for board consideration.

After review by the School Board and Personnel/Policy Committee, administration is forwarding revised Policy/Rule 7400 Naming or Renaming District Buildings, which includes the elimination of Policy/Rule 7410 Naming an Area Within or on a District Site, to the school board for a first reading on Oct. 24, 2017."

Mrs. Ruder presented the suggested changes to Board members and answered questions.

Mrs. Snyder moved to approve revised Policy/Rule 7400 Naming or Renaming District Buildings, which includes the elimination of Policy/Rule 7410 Naming an Area Within or on a District Site, as a first reading. Mr. Garcia seconded the motion. Unanimously approved.

Mr. Hamdan presented the Change in the Fiscal Year 2016-17 Adopted Budget submitted by Mr. Hamdan and Dr. Savaglio-Jarvis, excerpts follow:

"The Board of Education adopted the 2016-2017 budget on October 25, 2016, as prescribed by Wisconsin State Statute 65.90. From time to time there is a need to modify or amend the adopted budget for a variety of reasons. The majority of the changes are the result of carryover notifications determined to be available for various grants after the budget was formally adopted. Other grant awards (e.g. Education Foundation, mini-grants) were also received after the adoption of the budget. These grant awards conform to existing board policy and have been previously shared with the Board of Education through the approval of the grant as well as grant summary reports submitted to the Audit/Budget/Finance Committee.

Since State Statutes authorize the budget to be adopted by function; administration also requests approval of additional budget modifications that did not add or subtract dollars to the overall budget, but may have changed the function or purpose of the funding.

Administration requests that the School Board approve this report and that the attached Class 1 notice be published within 10 days of the official board adoption."

Mr. Wade moved to approve the Change in the Fiscal Year 2016-17 Adopted Budget and that the attached Class 1 notice be published within 10 days of the official board adoption. Mr. Falkofske seconded the motion. Unanimously approved.

Mr. Hamdan presented the 2016-17 Budget Carryovers to the 2017-18 Budget submitted by Mr. Hamdan and Dr. Savaglio-Jarvis, excerpts follow:

"Historically, Kenosha Unified School District (KUSD) has prohibited the carryover of unutilized budget authority from one fiscal year to the next. At the August 9, 2000, meeting of the School Board, it was unanimously approved to discontinue the practice of site carryovers.

Occasionally, purchases that were authorized but not fully paid for by the close of the respective fiscal year lead to a request to carry budget dollars over to the next year to cover those expenses.

In addition, there are several exceptional items that are potentially carried over from year to year. The administration is requesting to carryover the following amounts to the 2017-2018 fiscal year budget:

Site Requested Carryover	$786,737
Donation and Mini-Grant Carryover	$153,110
	$939,847

The charter schools are allowed carryover of any unspent general fund dollars, as stipulated in their individual contracts with the District. This is necessitated due to the unique funding of the schools, the responsibility they have for their entire budget, and their responsibility for future major maintenance issues or technology replacement not funded by the District. Starting the fiscal year 2012-2013, charter school carryovers were accounted for as assigned portions of the general fund balance rather than be added as additional amounts in expense budgets as in the past. This method provides for a more accurate year to year budgeting while preserving the charter school's access to their surplus funds. The schedule at the bottom of Attachment A shows the total balance in the charter fund balance reserve accounts as $1,958,042.50 as of June 30, 2017.

Administration requests that the School Board approve this report so that these carryover funds can be incorporated into the adopted 2017-2018 budget."

Mr. Falkofske moved to approve the 2016-17 Budget Carryovers to the 2017-18 Budget. Mr. Garcia seconded the motion. Unanimously approved.

Mr. Hamdan presented the Formal Adoption of the 2017-18 Budget submitted by Mr. Hamdan and Dr. Savaglio-Jarvis, excerpts follow:

"The public hearing on the 2017-2018 budget and the annual meeting of district electors were held on September 19, 2017, in the auditorium of Indian Trail High School and Academy. At the annual meeting of district electors, our stakeholders voted to approve the tax levy at the maximum amount allowed by law. At the time of the annual meeting, it is important to note that the State budget had yet to be approved, therefore conservative estimates were included.

Since the public hearing and the annual meeting, the administration has updated the budget to reflect key variables such as staffing costs, student membership, equalized property valuations, certified state aid, and tax levies. In the official October general aid certification, our state aid decreased by $4,480,106 as compared to last year. KUSD also qualifies for high poverty aid since our free/reduced lunch population exceeds 50%.

The 2017-2018 general fund (10) is being presented as a balanced budget in which expenditures are projected to equal revenues. We are in a positive position where we can absorb the carryover spending authority request of $939,847 within this balanced budget. In addition to that, projections show $1.4 MM of available funds yet to be allocated. These funds are available for the Board of Education to allocate in the 2017-18 budget as they see fit.

The administration has identified some potential priority items for future consideration: Response to Interventions (RtI), District assessments, screening applicant tools/recruitment and retention of employees, and information technology network equipment replacements.

Unassigned general fund balance reserves are currently greater than 10% of budgeted expenditures; therefore, the portion of school board policy 3323 that requires a one million dollar budgeted surplus (if the fund balance is below the 10% threshold) will not be applicable for 2017-18.

The proposed tax levy for the general fund (10) is the maximum amount allowable within State law without going to referendum. The overall 4.00% increase in total tax levy equates to $3,486,046 more local property tax dollars needed for the Kenosha Unified School District as compared to the previous year. This increase can be directly attributed to the loss of general state aid for 2017-2018.

The total mill rate per $1,000 of equalized property valuation is $10.23, a 0.61% increase as compared to the prior year. The equalized property values increased by 3.36% from last year which contributed to the overall mill rate changing minimally (even with the tax levy increase) as overall the tax levy was spread over a larger base of property values. Attachment A delineates this tax levy scenario in a ten-year historical view of the District's equalized property values, tax levies, and mill rates.

It is requested that the Board of Education accept the following recommendations:

1. Formally adopt the District's 2017-2018 budget using the accompanying budget adoption motion (Attachment B).

2. Direct the administration to prepare a class one legal notice to be published publicly within ten days of the adoption (Attachment C).

3. Approve the property tax levy to be collected from the municipalities within the school district in the amount of $73,540,969 for the general fund, $15,700,879 for the debt service fund, and $1,500,000 for the community service fund. The Board must approve levy amounts on or before November 1st each year, per Wis. Stats. 120.12 (3)(a).

4. Direct the district clerk to certify and deliver the Board approved tax levy to the clerk of each municipality on or before November 10, 2017."

Mrs. Snyder moved that the 2017-18 budget for the Kenosha Unified School District, as presented, for all funds to show expenditures, other revenues, and tax levies in summary be adopted as set forth in the board agenda packet and the accompanying format required by the Wisconsin Department of Public Instruction. Mr. Wade seconded the motion. Unanimously approved.

Mr. Falkofske moved to approve the class one legal notice to be published publicly within ten days of the adoption (Attachment C), that the property tax levy to be collected from the municipalities within the school district in the amount of $73,540,969 for the general fund, $15,700,879 for the debt service fund, and $1,500,000 for the community service fund on or before November 1st, and that the district clerk certify and deliver the Board approved tax levy to the clerk of each municipality on or before November 10, 2017. Mr. Garcia seconded the motion. Unanimously approved.

Mrs. Snyder presented the Donations to the District.

Mrs. Snyder moved to approve the Donations to the District. Mr. Falkofske seconded the motion. Unanimously approved.

Mr. Falkofske moved to adjourn the meeting. Mr. Garcia seconded the motion. Unanimously approved.

Meeting adjourned at 8:29 P.M.

Stacy Schroeder Busby
School Board Secretary

Kenosha Unified School District
Kenosha, Wisconsin
Summary of Cash Receipts and Disbursements
November 28, 2017

CASH RECEIPTS	reference	total
October 2017 Wire Transfers-In, to Johnson Bank from:		
WI Department of Public Instruction	*state aids register receipts*	$ 596,603.90
Johnson Bank	*account interest*	164.38
Bankcard Services (MyLunchMoney.com)	*food services credit card receipts (net of fees)*	171,247.26
Bankcard Services (Purple Pass)	*fine arts ticket sales receipts (net of fees)*	1,933.68
Bank (RevTrak)	*district web store receipts (net of fees)*	23,710.83
Retired & Active Leave Benefit Participants	*premium reimbursements*	41,463.14
HHS	*head start grant*	194,036.83
Various Sources	*small miscellaneous grants / refunds / rebates*	27,574.13
Total Incoming Wire Transfers		1,056,734.15
October 2017 Deposits to Johnson Bank - All Funds:		
General operating and food services receipts	*(excluding credit cards)*	239,612.99
TOTAL OCTOBER CASH RECEIPTS		$ 1,296,347.14

CASH DISBURSEMENTS	reference	total	
October 2017 Wire Transfers-Out, from Johnson Bank to:			
Payroll & Benefit wires			
Individual Employee Bank Accounts	*net payrolls by EFT (net of reversals)*	$ 7,200,362.09	
WI Department of Revenue	*state payroll taxes*	757,069.26	
WI Department of Revenue	*state wage attachments*	5,269.83	
IRS	*federal payroll taxes*	2,746,202.54	
Delta Dental	*dental insurance premiums*	247,478.07	
Diversified Benefits Services	*flexible spending account claims*	18,797.96	
Employee Trust Funds	*wisconsin retirement system*	0.00	
NVA	*vision insurance premiums*	15,971.41	
Various	*TSA payments*	306,228.05	
Subtotal		11,297,379.21	
General Operating Wires			
US Bank	*purchasing card payment-individuals*	276,172.87	*
Aegis	*workers' compensation payment*	150,000.00	
Kenosha Area Business Alliance	*LakeView lease payment*	16,666.67	
Johnson Bank	*banking fees*	304.91	
Various	*returned checks*	89.00	
Subtotal		443,233.45	
Total Outgoing Wire Transfers		$ 11,740,612.66	
October 2017 Check Registers - All Funds:			
Net payrolls by paper check	*Register# 01021DP, 01022DP*	$ 15,278.43	
General operating and food services	*Check# 556651 thru Check# 557877 (net of void batches)*	11,422,481.45	
Total Check Registers		$ 11,437,759.88	
TOTAL OCTOBER CASH DISBURSEMENTS		$ 23,178,372.54	

**See attached supplemental report for purchasing card transaction information*

KUSD Purchasing Card Program - Individual Cardholders

Transaction Summary by Merchant

Billing Cycle Ending October 16, 2017

Merhant Name	Total	
MENARDS KENOSHA WI	$	18,221.20
CONVERGINT	$	16,832.00
HOTEL	$	14,645.52
3654 INTERSTATE	$	10,041.93
WW GRAINGER	$	9,233.61
AIRLINE	$	9,154.90
EDS ARCHITECTURAL OPENING	$	6,065.00
MAYFAIR RENT A CAR KENO	$	6,039.03
KITCHEN CUBES LLC	$	5,915.00
LINCOLN CONTRACTOR	$	5,881.32
INDUSTRIAL CONTROLS	$	4,837.16
HEAT & POWER PRODUCTS INC	$	4,376.70
NATL CCL TEACHERS OF MATH	$	4,292.34
VEHICLE MAINT. & FUEL	$	4,237.38
RESTAURANTS & CATERING	$	4,211.46
REINDERS - BRISTOL	$	4,122.24
HAJOCA KENOSHA PC354	$	4,077.53
IN *GAPPA SECURITY SOLUTI	$	3,975.00
MARK S PLUMBING PARTS	$	3,972.37
JOHNSTONE SUPPLY	$	3,729.82
SCRIPPS SPELLING BEE	$	3,322.00
VIKING ELECTRIC-CREDIT DE	$	3,171.29
IN *A BEEP, LLC	$	3,140.50
ACT*ASSOCIATION OF WIS	$	2,715.00
PROVANTAGE	$	2,672.35
MCMASTER-CARR	$	2,664.15
ACME TOOLS	$	2,574.13
TRANE SUPPLY-116407	$	2,515.19
HAINAN AIRLINES BOSTON	$	2,500.00
CLASS 1 AIR INC	$	2,482.64
KIMBALL MIDWEST	$	2,388.00
ULINE *SHIP SUPPLIES	$	2,348.71
BATTERIES PLUS #0561	$	2,342.43
GLEASON REDI MIX LLC	$	2,281.00
FIRST STAGE CHILDRENS THE	$	2,265.50
VIKING ELECTRIC-MILWAUKEE	$	2,215.96
HALLMAN LINDSAY PAINTS	$	2,183.62
FIRST SUPPLY LLC #2033	$	2,112.66
COLLEGEBOARDWORKSHOPS	$	1,975.00
AMAZON MKTPLACE PMTS	$	1,917.69
CHESTER ELECTRONIC SUPPLY	$	1,823.78
NAFME	$	1,669.00
DALE L PRENTICE CO.	$	1,664.17
CAVE OF THE MOUNDS	$	1,580.00
EB WICUG 2017 FALL CO	$	1,575.00
ORBITZ*7299422765785	$	1,545.52
MILWAUKEE PUBLIC MUSEUM	$	1,470.00

HIGHLAND PRODUCTS GROUP L	$	1,362.88
WOODWORKERS HARDWARE - W	$	1,355.59
WI SHS OWW ADMISSIONS	$	1,250.00
HIGHWAY C SVC	$	1,244.83
TRINITY INTERNATIONAL UN	$	1,200.00
THE GILDER LEHRMAN INS	$	1,180.00
HEMISPHERE ED TRVL	$	1,171.50
HEMISPHERE ED TRVL HEMI	$	1,166.50
RSCHOOLTODAY	$	1,163.00
NATIONAL COUNCIL FOR THE	$	1,120.00
GETTY IMAGES	$	1,080.00
DASH MEDICAL GLOVES	$	1,035.00
REINDERS - SUSSEX AR	$	1,004.38
AWSA	$	995.00
LITTLE FLOWER YOGA	$	990.00
WALMART.COM 8009666546	$	968.53
VIKING ELECTRIC - KENOSHA	$	956.73
ACT*WISCONSIN ART EDUC	$	945.00
WASBO FOUNDATION INC	$	925.00
AMAZON.COM	$	923.86
GFS STORE #1919	$	875.77
FASTENAL COMPANY01	$	862.97
PESI INC	$	816.29
CONNEY SAFETY	$	803.21
EUROFINS S F ANALYTICAL L	$	795.75
PENSKE TRK LSG 567510	$	785.90
MENARDS RACINE WI	$	772.29
JMAC SUPPLY	$	767.98
B&H PHOTO 800-606-6969	$	761.00
NAEHCY	$	760.00
SPEEDY METALS - WEBSITE	$	712.60
NASP INC	$	700.00
BIRDX	$	685.02
ASU CONFERENCES CONT EDU	$	675.00
STU*STUMPS	$	655.25
EVENT MGMT CITYCAREERFAI	$	645.00
CHICAGO HISTORY MUSEUM	$	624.00
CHICAGO HISTORY MUSEUM AD	$	624.00
STAGE RIGHT CORPORATION	$	614.00
NELSON ELECTRIC SUPPLY	$	610.31
WI SCIENCE OLYMPIAD	$	600.00
CPO COMMERCE, LLC	$	597.00
NATL ART EDU ASSOC	$	595.00
GRASSROOTS WORKSHOPS	$	594.00
KENOSHA HISTORICAL	$	586.00
THELEN MATERIALS LLC	$	577.13
WASC	$	560.00
KRANZ INC	$	558.27
SMARTSIGN	$	556.08
ZORN COMPRESSOR & EQUIPM	$	548.48
E-CONOLIGHT	$	519.93
BUREAU OF EDUCATION AND R	$	518.00
GIA PUBLICATIONS IN	$	510.00
FESTIVAL FOODS	$	502.06

JOHNSON CONTROLS SS	$	500.20
IN *BOOMERANG PROJECT (83	$	500.00
SP * GREG TANG MATH	$	495.00
APPLE HOLLER	$	493.00
SAMSCLUB #6331	$	488.13
RACINE ZOOLOGICAL SOCIETY	$	483.00
ESCAPE INC ESCAPE INC	$	479.20
UWW CAMPS AND CONFERENCES	$	455.00
GROSH BACKDROPS & DRAPERY	$	451.06
WWW.KENNYPRODUCTS.COM	$	450.00
AIRGASS NORTH	$	442.68
DECKER EQUIPMENT	$	433.67
ARC*SERVICES/TRAINING	$	432.00
ZORO TOOLS INC	$	423.59
WAL-MART #1167	$	421.46
SAMS CLUB #6331	$	412.40
123 SECURITYPRODUCTS.C	$	410.05
EXPEDIA 7295958078622	$	407.92
CDW GOVT #KKW8300	$	405.30
PAYPAL *COOPERATIVE	$	400.00
MOTION INDUSTRIES WI04	$	397.45
OTC BRANDS, INC.	$	392.09
SHERWIN WILLIAMS 703180	$	382.16
WM SUPERCENTER #1167	$	370.14
WISCONSIN MUSIC EDUCATORS	$	367.00
WONDERLAND CAMP & CONFE	$	366.00
LOYOLA UNIV AGCCE	$	350.00
IN *ECONO SEWER AND DRAIN	$	345.00
4IMPRINT	$	342.87
SP * FORMUFIT	$	338.95
AED SUPERSTORE	$	334.70
PAYNE & DOLAN INC 40023	$	331.50
COLOSSEUM GAMES	$	320.69
ORBOTIX	$	318.46
WALMART.COM	$	301.68
SCHOLASTIC READING CLUB	$	300.00
WWW.MATHCOUNTS.ORG	$	300.00
BLAINE RAY WORKSHOPS INC	$	289.00
REI*GREENWOODHEINEMANN	$	277.36
SPEEDY METALS	$	269.24
FEED & SEED STATION	$	251.00
AUER STEEL - MILWAULKEE	$	245.67
AT&T*BILL PAYMENT	$	243.65
EXPEDIA 7296801457556	$	241.89
ESCAPE INC	$	239.60
WANAKI GOLF COURSE	$	233.00
WISCONSIN ASSOCIATION OF	$	229.00
DOLLAR TREE	$	225.66
US FIRST	$	225.00
HARBOR FREIGHT TOOLS 358	$	223.93
USPS PO 5666100158	$	217.00
STU*SHINDIGZ DECORATIO	$	216.94
GOVERNMENT FINANCE	$	215.00
VISTAPR*VISTAPRINT.COM	$	214.73

WI SURPLUS AUCTION	$	211.50
WISCONSIN SCHOOL SA	$	210.00
L AND S ELECTRIC	$	207.00
PARTSWAREHOUSE.COM	$	206.84
AMERICAN FLOOR MATS	$	198.96
BUS MGMT DAILY	$	197.00
WISCONSIN ASSOC. OF CONV	$	195.00
DICKOW CYZAK TILE CARP	$	192.00
KENOSHA COUNTY PARKS	$	189.58
GOOD ARMSTRONG TRAINING	$	185.00
WI DHFS LEAD AND ASBESTOS	$	175.00
STATE BAR OF WISCONSIN	$	175.00
LEARNING A-Z, LLC	$	174.90
RESA POWER LLC	$	170.46
CDW GOVT #KLG8097	$	168.96
FARM & FLEET STURTEVANT	$	167.57
SAN-A-CARE	$	167.37
COSTCO WHSE #1198	$	163.99
SUPERIOR CHEMICAL CORP	$	159.25
SUPERSHUTTLE OF MIAMI	$	159.04
NATIONAL FEDERATION OF ST	$	156.16
THINK SOCIAL PUBLISHING	$	150.55
SMUGMUG*ONLINE PHOTOS	$	150.00
BROOKES PUBLISHING	$	149.95
SKILLPATH NATIONAL	$	149.00
USPS PO 5642800260	$	147.00
MARTINPETERSEN CO	$	142.63
HOMEDEPOT.COM	$	135.76
ASSOC SUPERV AND CURR	$	133.00
AABACO SMALL BUSINESS	$	131.28
OTHER WORLD COMPUTING INC	$	129.75
FLUENCY MATTERS	$	125.00
LOWES #02560*	$	123.17
U-HAUL OF FOREST PARK	$	122.50
TEACHERSPAYTEACHERS.COM	$	120.60
NATL MUSEUM MEXICAN	$	120.00
ACSSW	$	115.00
PAYPAL *ACSSW	$	115.00
DISCOVERY WORLD, LTD	$	113.00
KENOSHA FRESH MARKE	$	111.83
CROWN TROPHY	$	110.90
BILINGUAL DICTIONARIES	$	109.73
AMAZON.COM AMZN.COM/BILL	$	109.54
TOOLUP.COM	$	107.64
EAI EDUCATION	$	105.78
HOBBY LOBBY ECOMM	$	103.77
TARGET 00022517	$	102.90
NAMEBADGE.COM	$	101.49
NATIONAL COUNCIL OF SUPER	$	100.00
STATE OF WI DPI REGONLINE	$	100.00
SUB*WASHPOST DIGITAL	$	100.00
BUILDASIGN.COM	$	99.99
GETPAPER.COM	$	94.22
SOUTHPORT VACUUM	$	92.35

SUPERSHUTTLE EXECUCARBWI	$	92.04
CARDINAL STRITCH UNIVERSI	$	90.00
CEC	$	90.00
VZWRLSS*MY VZ VN P	$	89.48
SMITH WALBRIDGE BAND PROD	$	88.81
WHOLE HOG JANITORIAL LLC	$	88.29
LEGO EDUCATION	$	88.25
CREATESPACE	$	86.93
BESTBUYCOM804768004360	$	85.44
MEIJER STORE #284	$	85.01
WWW.TICKETPRINTING.COM	$	84.43
PRICELINE*AIR TICKETS	$	75.49
WI ASSOC. FOR LANGUAGE	$	75.00
IRONWEAR FITNESS	$	71.45
PINT SIZE	$	70.95
SAGE PUBLICATIONS	$	70.58
TEACHER'S DISCOVERY	$	69.50
ARO LOCK & DOOR	$	68.00
PAYPAL *CESA 5	$	65.00
FLIPGRID	$	65.00
HOBBY LOBBY #350	$	63.20
ORBITZ*7299425502974	$	62.83
UW HEALTH CAFE SVCS 24040	$	61.10
SN *WISCONSIN ASSOCIATION	$	60.00
SUPER SPORTS FOOTWEAR	$	60.00
PRESENTERMEDIA	$	59.95
PLANK ROAD PUBLISHING	$	52.90
BEST BUY 00011916	$	52.74
ID WHOLESALER	$	52.31
CWI*CAMPING WORLD	$	52.14
SHEETMUSICPLUS.COM	$	50.00
PIGGLY WIGGLY #004	$	48.80
TRIANGLE MANUFACTURING	$	37.72
GATEWAY TECHNICAL COLLEGE	$	37.00
MEARS WEB-SHUTTLE	$	37.00
PRAIRIE SIDE TRUE VALUE	$	35.96
ASOPE INC	$	35.00
PAYPAL *ASOPE INC	$	35.00
SOCIAL STUDIES SCH SRV	$	33.95
SQ *YELLOW CAB 614	$	33.60
PARTY CITY	$	33.55
WALGREENS #3617	$	33.03
ADOBE	$	31.64
ADOBE *STOCK	$	31.64
BELL TRANS PC	$	31.00
WALGREENS #5387	$	30.99
SOLUTION TREE INC	$	30.95
FLUID HANDLING INC	$	30.69
SMK*WUFOO.COM CHARGE	$	29.95
PICK N SAVE #871	$	26.38
KENOSHA AREA BUSINESS	$	25.00
WIAA	$	23.00
ETAHAND2MIND	$	21.60
APSTYLEBOOK.COM	$	20.80

PP*WALKING MKE	$	20.00
THESTAMPMAKER	$	19.15
KENOSHA APPLIANCE PARTS I	$	18.45
TCD*CENGAGE LEARNING	$	18.25
FLASH CAB	$	17.75
METRA MOBILE	$	17.75
HOLLAND SUPPLY INC	$	17.58
TENUTAS	$	16.87
WALGREENS #12413	$	16.46
POWERWERX 8220790	$	15.99
TOWN & COUNTRY GLASS INC	$	15.83
PICK N SAVE #874	$	15.01
ZOOM.US	$	14.99
DOLLAR-GENERAL #6776	$	13.50
JAMECO/JIMPAK ELECTRONICS	$	13.05
BIG LOTS STORES - #0423	$	12.00
OFFICE DEPOT #3260	$	10.92
APL* ITUNES.COM/BILL	$	9.72
DOJ EPAY RECORDS CHECK	$	7.00
TRAVEL GUARD GROUP INC	$	7.00
EASYKEYSCOM INC	$	5.97
KMART 3088	$	3.78
BURRIS EQUIPMENT CO	$	(49.49)
BEST CHOICE PRODUCT	$	(3,082.55)
US Bank Purchasing Card Payment - Individuals	$	276,172.87

KENOSHA UNIFIED SCHOOL DISTRICT
Kenosha, Wisconsin

November 28, 2017

Administrative Recommendation

It is recommended that the October 2017 cash receipt deposits totaling $239,612.99, and cash receipt wire transfers-in totaling $1,056,734.15, be approved.

Check numbers 556651 through 557877 totaling $11,422,481.45, and general operating wire transfers-out totaling $443,233.45, are recommended for approval as the payments made are within budgeted allocations for the respective programs and projects.

It is recommended that the October 2017 net payroll and benefit EFT batches totaling $11,297,379.21, and net payroll check batches totaling $15,278.43, be approved.

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

Tarik Hamdan
Chief Financial Officer

Lisa M. Salo, CPA
Accounting Manager

Nov. 28, 2017

BOARD POLICY 7400 – NAMING OR RENAMING DISTRICT BUILDINGS AND 7410 – NAMING AN AREA WITHIN OR ON A DISTRICT SITE

Background:

The communications team was asked to review Policy 7400 – Naming or Renaming District Buildings and 7410 – Naming an Area Within or On a District Site to bring forth a revised document that would provide clarity as to the intention of each policy. Upon review, it was determined that the policies are very close in nature and that a combination of the policies along with cleanup of the wording would better suit the needs of the district and those reading/utilizing the policy.

It is recommended that language in Policy 7410 – Naming an Area Within or On a District Site be combined with Policy 7400 – Naming or Renaming District Buildings and that Policy 7410 as written be eliminated. This streamlines the entire policy and clarifies which areas may be named and how that process must take place. The language regarding committee duties was also adjusted for clarity purposes.

Updates and rationale were shared with board members at July 2017 Agenda Review meetings and board members provided the following feedback to administration:

- Consider not requiring the committee to rank suggested names
- Consider eliminating the use of names when naming buildings
- Consider allowing buildings to be named after things

Timeline

On July 20, 2017, Dr. Sue Savaglio-Jarvis sent an email reminder to the board of education to submit any additional feedback to Tanya Ruder. No one responded and no feedback was received.

On July 27, 2017, Stacy Busby sent another email reminding board members to submit any additional feedback to Tanya Ruder. One board member responded that they had no additional feedback.

On Aug. 3, 2017, Stacy Busby emailed board members with a final reminder to submit additional feedback to Tanya Ruder. Two board members responded that they had no additional feedback.

On Sept. 11, 2017, board members were provided an opportunity to submit final feedback to Tanya Ruder. No feedback was received.

On Oct. 10, 2017, the Personnel/Policy Committee reviewed the report and policies and made additional recommendations that were discussed and/or included for board consideration.

Administration Recommendation:

After review by the School Board and Personnel/Policy Committee on Oct. 10, 2017, administration forwarded revised Policy/Rule 7400 Naming or Renaming District Buildings, which includes the elimination of Policy/Rule 7410 Naming an Area Within or on a District Site, to the school board for a first reading on Oct. 24, 2017. It is recommended that the board approve revised Policy/Rule 7400 and eliminate Policy/Rule 7410 as a second reading on Nov. 28, 2017.

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

Tanya Ruder
Chief Communications Officer

POLICY 7400

NAMING OR RENAMING DISTRICT-**OWNED** ~~BUILDINGS~~**PROPERTY**

The School Board shall be responsible for naming or renaming **district-owned** ~~buildings in the District~~**property**. -**Name recommendations shall be made in accordance with district guidelines outlined in Rule 7400.**

For the purpose of this policy, district facilities shall be defined as schools, district office buildings, auditoriums, athletic facilities, athletic fields and field houses. Other spaces shall be defined as any other areas in or around a district facility other than an actual school building, district office building, auditorium, athletic facility, athletic fields or field house (e.g. pond, library, courtyard, green space, etc.).

~~A Building Naming Committee may be appointed to present recommendations to the School Board for suitable names for District buildings. Representation of the District's demographic will be reflected in the committee. Name recommendations shall be made in accordance with established District guidelines.~~

LEGAL REF.: Wisconsin Statutes
Section 120.12(1) (Care and management of school property)

CROSS REF.: Policy 1131, Memorials/Dedications within Schools
Policy 8860 – Citizen Advisory Committees

ADMINISTRATIVE REGULATIONS: None

AFFIRMED: June 10, 1991

REVISED: January 12, 1999
September 11, 2001
September 25, 2007
November 28, 2017

RULE 7400
NAMING OR RENAMING DISTRICT-**OWNED** ~~BUILDINGS~~**PROPERTY**

~~1.~~ ~~1.~~ At the request of the School Board, a ~~Building N~~**n**aming ~~C~~**c**ommittee shall **be formed in accordance with Policy 8860 Citizen Advisory Committees to research and present recommendations along with supporting evidence to the School Board when naming or renaming district-owned property, including facilities or other spaces. Individuals interested in renaming a facility or dedicating other spaces must submit their request in writing to the School Board for consideration.** ~~advise on the naming or renaming of District buildings within 30 days of referral. Committee members shall include the School Board President, the Superintendent of Schools, and community representatives appointed by the Superintendent~~

~~a.~~ **For the purpose of this policy, district facilities shall be defined as schools, district office buildings, auditoriums, athletic facilities, athletic fields and field houses. Other spaces shall be defined as any other areas in or around a district facility other than an actual school building, district office building, auditorium, athletic facility, athletic fields or field house (e.g. pond, library, courtyard, green space, etc.).**

a. The duties of the ~~Building N~~**n**aming ~~C~~**c**ommittee shall include compiling a list of name recommendations **and submitting them in rank order (#1 being the top choice) to the School Board for consideration.** ~~and setting up guidelines and criteria for the selection of name recommendations.~~

~~b.~~**i. NOTE: The School Board will consider all names submitted by the committee and reserves the right to choose a name other than the #1 choice submitted by the committee.**

~~a.~~**b.** The committee may use the following sources ~~for the suggestion of building names~~**to acquire name suggestions**:

i. Public participation
ii. Student participation
~~ii.~~ ~~_____~~
~~iii.~~ ~~_____ile of suggested names~~

~~A permanent file of previously suggested names shall be maintained by the Superintendent of Schools.~~

NAMING OR RENAMING A BUILDING

~~2.~~ When considering potential names **for district buildings**, ~~the~~**the** ~~c~~**C**ommittee shall keep in mind the following**:** ~~requirements:~~

~~a. Person or place names may be used from the following categories:~~

~~(1) Geographic areas within the District~~
~~(2) Arts~~
~~(3) Business~~
~~(4) Education~~
~~(5) Government~~
~~(6) History~~
~~(7) Humanitarianism~~
~~(8) Industry~~
~~(9) Inventions~~
~~(10) Labor~~
~~(11) Military Services~~
~~(12) Philanthropy~~
~~(13) Professions~~
~~(14) Science~~
~~(15) Service to the District~~
~~(16) Cultural Significance~~

a. Buildings must be named after a person or place.

i. Individuals ~~A person's name may be recommended only if the candidate has been dead~~**must be deceased** for at least two years ~~prior to the nomination~~**before they may be nominated**.

ii. ~~Consideration for nominations, which may be solicited from the public,~~ **Individuals who are nominated** must be limited to ~~candidates of exemplary moral character, who have made outstanding contributions, who~~ **those who** have historical significance, ~~who~~ have performed **exemplary** service **in**~~to~~ the community or **for** humanity**,**~~, or who~~ have displayed outstanding leadership **and/or are of exemplary moral character**.

iii. Places that are nominated must be very well known and have a great deal of significance to the district and/or community.

b. First consideration shall be given to local persons **or places**, but ~~additional~~ consideration may **also** be given to state, national and international persons.

DEDICATING OTHER SPACES

When considering potential names for other spaces, the committee shall keep in mind the following:

a. Other spaces may only be named after a person.
b. Individuals must be deceased for at least two years before they may be nominated.
c. Individuals who are nominated must be limited to those who have historical significance, have performed exemplary service in the community or for humanity, have displayed outstanding leadership and/or are of exemplary moral character.
d. First consideration shall be given to local persons, but consideration may also be given to state, national and international persons.

~~b.~~

~~Based on the above criteria and the permanent file of previously suggested names, the Committee shall present a list of building name recommendations to the School Board.~~

~~POLICY 7410~~
~~NAMING AN AREA WITHIN OR ON A DISTRICT SITE~~

~~The Board of Education shall be the body to approve the official naming of all District facilities. It is not the intention of this policy to initiate the naming of areas within existing facilities or on a District site. However, when a former student, staff or community member who has been deceased for more than two years has achieved national, state or local prominence, the School Board may name an area within a school or on a District site after that individual.~~

~~Staff or community members may nominate a name for a specific area within a school or on a District site to the Board of Education. The nomination must include background information and significance to the educational process and cultural significance.~~

~~The School Board will request the Superintendent to appoint a broad based committee, which will research the name. When a school is affected by the recommended name, it will be given the opportunity to offer input to the committee. This committee will develop and present to the School Board the process used and the rationale used in making their determination.~~

~~LEGAL REF.: Wisconsin Statues~~
~~Section 120.12(1) (Care and Management of School Property)~~

~~CROSS REF.: Policy 1131, Memorials/Dedications Within Schools~~
~~Policy 7400, Naming or Renaming District Buildings~~

~~ADMINISTRATIVE REGULATION: None~~

~~AFFIRMED: May 14, 2002~~

~~REVISED: September 25, 2007~~

KENOSHA UNIFIED SCHOOL DISTRICT

November 28, 2017

2017 Parent/Guardian Survey

Kenosha Unified Policy 1110 Parent/Guardian/Caregiver Survey, stipulates that KUSD implement a parent/guardian survey every two years.

Survey Content

The 2017 Parent/Guardian Survey contained items in the following areas:

- School Climate
- Cleanliness/Safety
- Student Achievement/Grading/Assessment
- Curriculum
- Communication/Follow Up
- Expectations
- Shared Decision-making
- Instructional Calendar (new section)
- Student Information System (Infinite Campus Parent Portal)

Responses

Responses for each item were presented using a Likert-type scale where respondents were asked to rate their agreement using response categories that ranged from Strongly Agree to Strongly Disagree. A Neutral category was also available for selection. In addition, respondents were asked to write comments related to strengths of the school, areas for improvement at the school, and other areas to share thoughts.

Survey Administration

The 2017 Parent/Guardian Survey was administered from February 20 through April 3, 2017. Similar to the previous version of this survey, the current student information system, Infinite Campus, was utilized to allow for secure and anonymous delivery. A specific link to the anonymous survey was distributed to each parent/guardian account. This process removes the potential for incorrect multiple submissions and responses from non-parents/guardians. Parents/guardians were informed of the survey through various media notifications, both from the central office and the local school building.

Survey Results

KUSD parents and guardians provided 2,031 responses, which is a noticeable improvement over the 720 individuals responses from the previous survey. Parents had the ability to complete multiple submissions so they could reference different schools. 82.8% of the parents identified themselves as white, with 74.4% overall as white, non-Hispanic. Because of the small number of responses for several buildings, the quantitative analysis was completed for KUSD as a

whole. Seven (7) buildings had less than twelve (12) parent responses, which is a big improvement from 28 schools with low participation rates two years ago.

Summary Points for the Quantitative/Qualitative Analysis

School Climate: All of these related questions received improvements from the previous survey.

- 86.7% of parents felt welcome at their child's school, which is improved from the previous level of 81.4%.
- 88.9% of parents agreed that they are treated with respect at their school.
- 58.3% agreed they could visit a classroom if desired.
- 70.3% were encouraged to volunteer or become involved with school activities.
- 82.6% agreed that the schools were receptive to inquiries

School Cleanliness: The school cleanliness section continues to receive some of the highest positive response rates.

- The vast majority of KUSD parents/guardians agreed that their school and surrounding grounds were clean and well maintained (90.9 % and 89.5% respectively).
- 87.7% were happy with the school parking lots.

School Safety:

- 88.0% of parents/guardians agreed that their child feels safe at school.
- 89.2% feel safe in their travels to and from school.

School Achievement/Grading: Numerous survey questions related to the parent/guardian insight of the current student achievement and grading practices utilized within KUSD schools, with improved scores for this survey.

- 76.5% of parents are fully informed about student achievement goals.
- 82.8% felt fully aware of their own child's academic performance.
- 74.7% receive explanation for academic progress reports
- 77.4% feel that those progress reports are an accurate reflection of their child's progress in school.
- The opportunity for parents to discuss academic performance privately with teachers received a high agreeable response 81.3%.

School Curriculum:

- 81.2% of parents agreed that KUSD schools were helping students to be responsible citizens.
- 73.9% stated that the schools help students to understand and appreciate diversity.
- Most parents felt that they both understand (70.6%) and could assist (73.5%) their children with their school work.
- 65.7% of parents were pleased with the secondary schedule format.

- 76.3% of parents felt that the school curriculum was preparing students for the next grade
- 68.8% were pleased with the variety of course offerings.

School Communication:
- 47.5% of parents heard from the school if their child was doing well.
- 56.4% received prompt notice if their child was having difficulties.
- 62.2% reported that they received regular information about their child's overall progress.
- Once again, the question in this category with highest rated item related to the material sent from the school level, with 81.3% of parents having adequate awareness about school activities, events.

School Expectations:
- 79.4% of parents feel that schools believe that all students can learn.
- 75.3% of parents believe that their teachers are concerned about their child as an individual.

School Shared Decision-making:
- 60.5% of parents believe their community is actively involved in schools.
- 53.6% feel that concerns from parents are reflected in school decisions.
- 60.3% agreed that students do participate in planning student activities.

Instructional Calendar: Starting with this survey, some questions were added that refer to the current instructional calendar format.
- 65.4% of parents feel that it is important for a uniform end date.
- Equally applied, about two-thirds of parents prefer that there is "No Change" to the length of the instructional day calendars for elementary schools (71.0%), middle schools (64.5%), and high schools (65.6%).
- A similar trend, though slightly less, was found when evaluating the early release schedules for elementary schools (57.5%) for keeping the current format. 67.8% of middle school parents support their Friday release schedule while 70.7% or parents support the high school Friday early release schedule.
- There are currently 4 Professional Learning days at the secondary level, and 72.1% of parents prefer to keep that consistent. The majority of parents prefer to keep the existing time allotted for parent teacher conferences, with 75.5% for elementary schools, 68.3% for middle schools, and 62.9% for high schools.
- The remaining survey questions related to calendar options also resulted in a majority preference for consistency: winter break (64.8%), spring break (70.0%), Wednesday before Thanksgiving (83.8%), Friday before Memorial Day (75.5%), and having MLK Jr. Day off (63.2%).

School Student Information System: KUSD utilizes Infinite Campus (IC) as the Student Information System, with increased usage and features added each of the last three years.

- For those parents that use IC, nearly half (47.4%) of parents use the Campus Parent Portal on at least a weekly basis, however this figure rises to 68.3% for secondary schools.
- 82.5% of parents are finding Infinite Campus very useful.
- 74.5% of parents found the online registration process easy to use.
- Regarding the ability for parents to navigate and use the Parent Portal, 71.8% of responses agreed.

Other Areas:

- 51.5% of parents responded that staff are meeting the requirements of students with special needs, most parents were in agreement, though (40.9%) were neutral.
- Only 11.6% of parents are dissatisfied with the current state of bussing.

School Strengths: Once again many respondents gave credit towards a caring staff, plenty of educational and extra-curricular offerings, and the ability to participate in the growth of their child while enrolled in KUSD. Staff from every area (classroom teachers, counselors, educational assistants, support staff, administrators) received directed praise and compliments for addressing the various needs of their students. Repeated accolades existed for the quality of positive school climates and initiatives (PBIS, recognitions) along with the frequent appearance of a clean and orderly set of buildings.

School Areas of Improvement: Concerns were submitted for the perceived lack of curriculum choices (more AP courses, electives) or support options for several different situations. Parents listed a desire for a better drop-off and pickup procedure and parking options for schools. Multiple calendar changes were requested, most asking for less “off” days for students so parents didn’t have to address childcare.

Informational Item

The 2017 Parent/Guardian survey summary is provided as an informational item, as mandated by KUSD Policy 1110. The survey results with an adequate sample size will be disseminated by school and shared at the building level through School Leadership.

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Superintendent of Schools

Kristopher Keckler
Chief Information Officer

Ms. Renee Blise
Research Coordinator

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Kenosha Unified School District
Parent/Guardian Survey
Spring 2017

District Results

		SA	A	N	D	SD	Average Score	Count
School Climate								
Q4	I feel welcome in my child's school.	**51.7%**	35.0%	10.1%	2.2%	1.0%	4.34	1,929
Q5	I am treated with respect at my child's school.	**52.6%**	36.3%	8.3%	1.9%	0.9%	4.38	1,929
Q6	I am welcomed to visit or observe my child's classroom(s).	**31.5%**	26.7%	34.1%	5.7%	1.9%	3.80	1,929
Q7	My child's school encourages me to volunteer for school activities and to become involved in his/her education.	**39.0%**	31.3%	19.8%	8.1%	1.8%	3.98	1,929
Q8	My child's school is receptive to my phone calls and emails.	**46.9%**	35.7%	11.8%	4.0%	1.6%	4.22	1,929
Cleanliness								
Q10	My child's school is clean and well maintained.	**46.5%**	44.4%	7.4%	1.6%	0.2%	4.35	1,907
Q11	The school grounds are clean and well maintained.	43.0%	**46.5%**	8.0%	2.2%	0.3%	4.30	1,907
Q12	The school parking lot is clean and free of debris/litter.	41.9%	**45.8%**	8.9%	2.7%	0.6%	4.26	1,907
Safety								
Q14	My child feels safe at school.	**45.2%**	42.8%	7.9%	3.5%	0.6%	4.28	1,893
Q15	My child feels safe going to and from school.	**46.4%**	42.7%	7.5%	2.7%	0.6%	4.32	1,893
Achievement/Grading/Assessments								
Q17	I feel fully informed about the school's goals for student achievement.	37.6%	**38.9%**	13.9%	8.1%	1.5%	4.03	1,860
Q18	I feel fully informed about my child's academic performance.	**42.4%**	40.4%	9.5%	5.8%	1.9%	4.16	1,860
Q19	Progress reports and/or report cards are explained to me.	37.3%	**37.4%**	15.3%	7.3%	2.7%	3.99	1,860
Q20	My child's progress reports and/or report cards are an accurate reflection of my child's achievement and progress in school.	33.7%	**43.7%**	14.9%	5.7%	2.0%	4.01	1,860
Q21	I have an opportunity to discuss how to improve my child's performance privately with teachers.	**43.1%**	38.2%	12.1%	4.7%	1.9%	4.16	1,860
Curriculum								
Q23	My child's school helps teach students to be responsible citizens.	40.0%	**41.2%**	14.1%	3.7%	1.0%	4.16	1,821
Q24	My child's school is helping to teach students to understand and appreciate cultural diversity.	34.3%	**39.6%**	20.8%	4.0%	1.3%	4.02	1,821
Q25	I understand what my child is learning and how he/she is being taught.	29.8%	**40.8%**	18.8%	8.1%	2.4%	3.87	1,821
Q26	I am able to assist my child with what he/she is learning at school.	32.3%	**41.2%**	17.0%	7.2%	2.3%	3.94	1,821
Q27	I am pleased with the implementation of the class scheduling at the middle and/or high school level.	22.8%	**42.9%**	27.1%	5.4%	1.8%	3.80	1,255
Q28	The curriculum at my child's school helps prepare students for the next grade level and/or further education beyond high school.	30.2%	**46.1%**	16.3%	5.4%	2.0%	3.97	1,270
Q29	I am pleased with the variety of course offerings at my child's school.	24.4%	**44.4%**	20.8%	8.5%	2.0%	3.81	1,276

NOTES: Strongly Agree (SA)=5, Agree (A)=4, Neutral (N)=3, Disagree (D) =2, Strongly Disagree (SD)=1
Bold cells represent the response with the largest pecent selected (excluding Neutral).

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District Results

		SA	A	N	D	SD	Average Score	Count
Communication								
Q31	I hear from my child's teacher(s) if he/she is doing something well.	**23.8%**	23.7%	19.1%	23.9%	9.5%	3.28	1,788
Q32	I am notified promptly if my child has difficulties at school or falls behind.	27.0%	**29.5%**	22.3%	14.4%	6.8%	3.55	1,788
Q33	Communications from the school (such as: newsletters, email, website, etc.) provide adequate information to keep me informed of important dates, activities and events.	**41.1%**	40.2%	11.0%	5.9%	1.8%	4.13	1,788
Q34	I am regularly informed about my child's progress in school.	26.7%	**35.5%**	20.6%	12.0%	5.1%	3.67	1,788
Q35	My child's teachers are approachable and available when I have concerns.	**42.7%**	36.1%	15.3%	4.0%	1.9%	4.14	1,788
Q36	My child's principal is approachable and available when I have concerns.	**39.1%**	29.3%	24.7%	4.3%	2.7%	3.98	1,788
Q37	School documents are translated and I am provided with an interpreter when needed.	**20.2%**	13.4%	65.0%	0.7%	0.7%	3.52	1,788
Expectations								
Q39	Teachers at my child's school believe all students can learn.	**41.3%**	38.2%	18.0%	1.9%	0.6%	4.18	1,771
Q40	Teachers at my child's school are concerned about my child as an individual.	**40.0%**	35.3%	17.1%	4.8%	2.8%	4.05	1,771
Shared Decision Making								
Q42	Our community is actively involved in the school.	23.0%	**37.6%**	29.9%	8.1%	1.4%	3.73	1,760
Q43	The concerns of parents are reflected in decisions made by my child's school.	21.0%	**32.6%**	36.8%	7.5%	2.1%	3.63	1,760
Q44	Students at my child's school participate in planning student activities.	23.8%	**36.6%**	33.1%	4.9%	1.6%	3.76	1,760
Infinite Campus								
Q59	Using the Infinite Campus Parent Portal to register my child for the school year was easy.	**37.6%**	36.9%	18.1%	4.8%	2.6%	4.02	1,685
Q60	The Infinite Campus Parent Portal is easy to navigate and use.	32.8%	**39.0%**	21.2%	4.6%	2.4%	3.95	1,685
Accommodating Special Needs								
Q62	My child's school is able to meet the requirements of students with disabilities or special needs (i.e. gifted, learning and/or physically challenged, limited English proficiency, etc.).	25.2%	**26.3%**	40.9%	4.9%	2.7%	3.66	1,679
Bussing								
Q63	I am pleased with the level of busing service my child receives.	20.3%	**23.0%**	45.2%	6.4%	5.1%	3.47	1,679

NOTES: Strongly Agree (SA)=5, Agree (A)=4, Neutral (N)=3, Disagree (D) =2, Strongly Disagree (SD)=1
Bold cells represent the response with the largest pecent selected (excluding Neutral).

Kenosha Unified School District
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Elementary School Results

		SA	A	N	D	SD	Average Score	Count
School Climate								
Q4	I feel welcome in my child's school.	**63.3%**	26.3%	7.1%	1.7%	1.6%	4.48	1,007
Q5	I am treated with respect at my child's school.	**63.2%**	27.4%	6.2%	2.1%	1.2%	4.50	1,007
Q6	I am welcomed to visit or observe my child's classroom(s).	**45.2%**	28.6%	20.6%	4.0%	1.7%	4.12	1,007
Q7	My child's school encourages me to volunteer for school activities and to become involved in his/her education.	**53.6%**	31.3%	10.4%	3.4%	1.3%	4.33	1,007
Q8	My child's school is receptive to my phone calls and emails.	**56.9%**	29.3%	8.8%	3.2%	1.8%	4.36	1,007
Cleanliness								
Q10	My child's school is clean and well maintained.	**58.1%**	35.3%	4.9%	1.4%	0.3%	4.50	995
Q11	The school grounds are clean and well maintained.	**52.8%**	38.9%	5.8%	2.1%	0.4%	4.42	995
Q12	The school parking lot is clean and free of debris/litter.	**53.4%**	38.6%	6.3%	1.2%	0.5%	4.43	995
Safety								
Q14	My child feels safe at school.	**59.4%**	32.6%	4.7%	2.5%	0.7%	4.47	990
Q15	My child feels safe going to and from school.	**58.0%**	34.3%	4.9%	2.1%	0.6%	4.47	990
Achievement/Grading/Assessments								
Q17	I feel fully informed about the school's goals for student achievement.	**47.7%**	34.6%	10.8%	5.3%	1.5%	4.21	977
Q18	I feel fully informed about my child's academic performance.	**51.3%**	35.1%	7.9%	4.3%	1.4%	4.31	977
Q19	Progress reports and/or report cards are explained to me.	**49.8%**	35.0%	9.6%	4.0%	1.5%	4.27	977
Q20	My child's progress reports and/or report cards are an accurate reflection of my child's achievement and progress in school.	**42.3%**	36.7%	14.1%	4.8%	2.0%	4.12	977
Q21	I have an opportunity to discuss how to improve my child's performance privately with teachers.	**56.9%**	32.3%	6.9%	3.0%	0.9%	4.41	977
Curriculum								
Q23	My child's school helps teach students to be responsible citizens.	**52.0%**	37.0%	8.0%	1.9%	1.0%	4.37	957
Q24	My child's school is helping to teach students to understand and appreciate cultural diversity.	**44.2%**	37.3%	14.9%	2.3%	1.3%	4.21	957
Q25	I understand what my child is learning and how he/she is being taught.	**40.3%**	38.3%	13.9%	5.2%	2.2%	4.09	957
Q26	I am able to assist my child with what he/she is learning at school.	**46.5%**	40.1%	7.7%	3.8%	1.9%	4.26	957
Q27	I am pleased with the implementation of the class scheduling at the middle and/or high school level.	**29.3%**	26.2%	39.7%	2.4%	2.4%	3.78	416
Q28	The curriculum at my child's school helps prepare students for the next grade level and/or further education beyond high school.	**42.6%**	38.1%	14.9%	2.3%	2.1%	4.17	430
Q29	I am pleased with the variety of course offerings at my child's school.	33.4%	**36.9%**	24.1%	3.7%	1.9%	3.96	431

NOTES: Strongly Agree (SA)=5, Agree (A)=4, Neutral (N)=3, Disagree (D) =2, Strongly Disagree (SD)=1
Bold cells represent the response with the largest pecent selected (excluding Neutral).

Kenosha Unified School District
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Elementary School Results

		SA	A	N	D	SD	Average Score	Count
Communication								
Q31	I hear from my child's teacher(s) if he/she is doing something well.	**36.4%**	28.4%	16.0%	14.8%	4.4%	3.78	935
Q32	I am notified promptly if my child has difficulties at school or falls behind.	**35.6%**	31.2%	20.4%	8.2%	4.5%	3.85	935
Q33	Communications from the school (such as: newsletters, email, website, etc.) provide adequate information to keep me informed of important dates, activities and events.	**50.8%**	35.0%	8.2%	4.2%	1.8%	4.29	935
Q34	I am regularly informed about my child's progress in school.	35.8%	**37.4%**	16.4%	7.0%	3.4%	3.95	935
Q35	My child's teachers are approachable and available when I have concerns.	**58.2%**	30.2%	7.8%	2.7%	1.2%	4.42	935
Q36	My child's principal is approachable and available when I have concerns.	**49.1%**	27.1%	15.7%	5.3%	2.8%	4.14	935
Q37	School documents are translated and I am provided with an interpreter when needed.	**27.3%**	15.1%	56.0%	0.9%	0.7%	3.67	935
Expectations								
Q39	Teachers at my child's school believe all students can learn.	**55.2%**	33.5%	9.9%	0.8%	0.6%	4.42	926
Q40	Teachers at my child's school are concerned about my child as an individual.	**52.2%**	31.3%	10.7%	3.3%	2.5%	4.27	926
Shared Decision Making								
Q42	Our community is actively involved in the school.	31.9%	**37.7%**	21.5%	7.6%	1.3%	3.91	921
Q43	The concerns of parents are reflected in decisions made by my child's school.	30.1%	**34.1%**	28.0%	5.5%	2.3%	3.84	921
Q44	Students at my child's school participate in planning student activities.	28.1%	**30.2%**	33.7%	6.4%	1.6%	3.77	921
Infinite Campus								
Q59	Using the Infinite Campus Parent Portal to register my child for the school year was easy.	32.0%	**36.2%**	23.2%	5.6%	3.1%	3.89	881
Q60	The Infinite Campus Parent Portal is easy to navigate and use.	27.0%	**35.8%**	29.5%	5.0%	2.7%	3.79	881
Accommodating Special Needs								
Q62	My child's school is able to meet the requirements of students with disabilities or special needs (i.e. gifted, learning and/or physically challenged, limited English proficiency, etc.).	**32.4%**	27.5%	32.2%	5.4%	2.6%	3.82	877
Bussing								
Q63	I am pleased with the level of busing service my child receives.	**24.5%**	19.4%	45.6%	5.0%	5.5%	3.52	877

NOTES: Strongly Agree (SA)=5, Agree (A)=4, Neutral (N)=3, Disagree (D) =2, Strongly Disagree (SD)=1
Bold cells represent the response with the largest pecent selected (excluding Neutral).

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Middle School Results

		SA	A	N	D	SD	Average Score	Count
School Climate								
Q4	I feel welcome in my child's school.	36.4%	**47.6%**	12.5%	2.2%	1.3%	4.16	313
Q5	I am treated with respect at my child's school.	41.2%	**45.4%**	9.9%	2.2%	1.3%	4.23	313
Q6	I am welcomed to visit or observe my child's classroom(s).	16.0%	**23.3%**	49.8%	7.3%	3.5%	3.41	313
Q7	My child's school encourages me to volunteer for school activities and to become involved in his/her education.	24.0%	**31.0%**	30.7%	12.1%	2.2%	3.63	313
Q8	My child's school is receptive to my phone calls and emails.	35.1%	**42.5%**	15.7%	4.5%	2.2%	4.04	313
Cleanliness								
Q10	My child's school is clean and well maintained.	36.4%	**54.9%**	6.5%	2.3%	0.0%	4.26	308
Q11	The school grounds are clean and well maintained.	33.8%	**57.1%**	7.1%	1.9%	0.0%	4.23	308
Q12	The school parking lot is clean and free of debris/litter.	31.2%	**55.2%**	8.1%	4.5%	1.0%	4.11	308
Safety								
Q14	My child feels safe at school.	27.4%	**54.5%**	12.2%	5.3%	0.7%	4.03	303
Q15	My child feels safe going to and from school.	31.7%	**50.5%**	11.6%	5.3%	1.0%	4.07	303
Achievement/Grading/Assessments								
Q17	I feel fully informed about the school's goals for student achievement.	25.3%	**41.6%**	20.3%	10.5%	2.4%	3.77	296
Q18	I feel fully informed about my child's academic performance.	36.5%	**43.2%**	10.1%	7.1%	3.0%	4.03	296
Q19	Progress reports and/or report cards are explained to me.	24.7%	**43.9%**	18.9%	7.4%	5.1%	3.76	296
Q20	My child's progress reports and/or report cards are an accurate reflection of my child's achievement and progress in school.	27.4%	**50.7%**	13.5%	5.7%	2.7%	3.94	296
Q21	I have an opportunity to discuss how to improve my child's performance privately with teachers.	29.1%	**45.9%**	15.9%	4.7%	4.4%	3.91	296
Curriculum								
Q23	My child's school helps teach students to be responsible citizens.	26.5%	**46.7%**	20.3%	5.8%	0.7%	3.93	291
Q24	My child's school is helping to teach students to understand and appreciate cultural diversity.	24.1%	**44.3%**	26.5%	4.1%	1.0%	3.86	291
Q25	I understand what my child is learning and how he/she is being taught.	17.2%	**43.6%**	24.7%	11.0%	3.4%	3.60	291
Q26	I am able to assist my child with what he/she is learning at school.	18.2%	**44.3%**	26.1%	7.9%	3.4%	3.66	291
Q27	I am pleased with the implementation of the class scheduling at the middle and/or high school level.	21.0%	**51.2%**	21.0%	6.2%	0.7%	3.86	291
Q28	The curriculum at my child's school helps prepare students for the next grade level and/or further education beyond high school.	22.6%	**47.9%**	20.5%	7.3%	1.7%	3.82	288
Q29	I am pleased with the variety of course offerings at my child's school.	19.3%	**47.6%**	21.7%	9.7%	1.7%	3.73	290

NOTES: Strongly Agree (SA)=5, Agree (A)=4, Neutral (N)=3, Disagree (D) =2, Strongly Disagree (SD)=1
Bold cells represent the response with the largest pecent selected (excluding Neutral).

Kenosha Unified School District
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Spring 2017

Middle School Results

		SA	A	N	D	SD	Average Score	Count
Communication								
Q31	I hear from my child's teacher(s) if he/she is doing something well.	15.0%	21.6%	20.9%	**29.6%**	12.9%	2.96	287
Q32	I am notified promptly if my child has difficulties at school or falls behind.	26.5%	**30.0%**	20.6%	16.4%	6.6%	3.54	287
Q33	Communications from the school (such as: newsletters, email, website, etc.) provide adequate information to keep me informed of important dates, activities and events.	29.6%	**43.2%**	16.0%	8.4%	2.8%	3.88	287
Q34	I am regularly informed about my child's progress in school.	20.6%	**36.6%**	21.6%	15.7%	5.6%	3.51	287
Q35	My child's teachers are approachable and available when I have concerns.	30.3%	**41.8%**	19.9%	5.2%	2.8%	3.92	287
Q36	My child's principal is approachable and available when I have concerns.	26.8%	**30.3%**	35.5%	4.5%	2.8%	3.74	287
Q37	School documents are translated and I am provided with an interpreter when needed.	**17.4%**	12.5%	69.7%	0.3%	0.0%	3.47	287
Expectations								
Q39	Teachers at my child's school believe all students can learn.	31.4%	**45.6%**	20.5%	1.8%	0.7%	4.05	283
Q40	Teachers at my child's school are concerned about my child as an individual.	32.9%	**35.7%**	21.6%	6.0%	3.9%	3.88	283
Shared Decision Making								
Q42	Our community is actively involved in the school.	11.1%	**34.1%**	43.7%	9.0%	2.2%	3.43	279
Q43	The concerns of parents are reflected in decisions made by my child's school.	11.5%	**28.0%**	49.5%	8.2%	2.9%	3.37	279
Q44	Students at my child's school participate in planning student activities.	15.4%	**40.9%**	37.6%	4.7%	1.4%	3.64	279
Infinite Campus								
Q59	Using the Infinite Campus Parent Portal to register my child for the school year was easy.	**46.2%**	38.6%	11.0%	2.3%	1.9%	4.25	264
Q60	The Infinite Campus Parent Portal is easy to navigate and use.	**44.3%**	39.8%	10.6%	3.0%	2.3%	4.21	264
Accommodating Special Needs								
Q62	My child's school is able to meet the requirements of students with disabilities or special needs (i.e. gifted, learning and/or physically challenged, limited English proficiency, etc.).	21.7%	**24.0%**	45.6%	6.1%	2.7%	3.56	263
Bussing								
Q63	I am pleased with the level of busing service my child receives.	20.2%	**26.6%**	39.2%	8.0%	6.1%	3.47	263

NOTES: Strongly Agree (SA)=5, Agree (A)=4, Neutral (N)=3, Disagree (D) =2, Strongly Disagree (SD)=1
Bold cells represent the response with the largest pecent selected (excluding Neutral).

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High School Results

		SA	A	N	D	SD	Average Score	Count
School Climate								
Q4	I feel welcome in my child's school.	40.4%	**42.9%**	13.6%	3.1%	0.0%	4.21	609
Q5	I am treated with respect at my child's school.	41.1%	**46.3%**	11.2%	1.3%	0.2%	4.27	609
Q6	I am welcomed to visit or observe my child's classroom(s).	16.9%	**25.5%**	48.4%	7.7%	1.5%	3.49	609
Q7	My child's school encourages me to volunteer for school activities and to become involved in his/her education.	22.7%	**31.5%**	29.7%	13.8%	2.3%	3.59	609
Q8	My child's school is receptive to my phone calls and emails.	36.5%	**42.9%**	14.6%	5.1%	1.0%	4.09	609
Cleanliness								
Q10	My child's school is clean and well maintained.	32.5%	**54.1%**	11.9%	1.5%	0.0%	4.18	604
Q11	The school grounds are clean and well maintained.	31.6%	**53.6%**	11.9%	2.5%	0.3%	4.13	604
Q12	The school parking lot is clean and free of debris/litter.	28.5%	**53.0%**	13.6%	4.3%	0.7%	4.05	604
Safety								
Q14	My child feels safe at school.	30.7%	**53.7%**	11.0%	4.2%	0.5%	4.10	600
Q15	My child feels safe going to and from school.	34.8%	**52.7%**	9.7%	2.5%	0.3%	4.19	600
Achievement/Grading/Assessments								
Q17	I feel fully informed about the school's goals for student achievement.	27.1%	**44.6%**	15.7%	11.6%	1.0%	3.85	587
Q18	I feel fully informed about my child's academic performance.	30.5%	**47.9%**	11.9%	7.7%	2.0%	3.97	587
Q19	Progress reports and/or report cards are explained to me.	22.8%	**38.0%**	22.8%	12.8%	3.6%	3.64	587
Q20	My child's progress reports and/or report cards are an accurate reflection of my child's achievement and progress in school.	22.5%	**51.8%**	16.9%	7.2%	1.7%	3.87	587
Q21	I have an opportunity to discuss how to improve my child's performance privately with teachers.	27.1%	**44.1%**	18.9%	7.5%	2.4%	3.86	587
Curriculum								
Q23	My child's school helps teach students to be responsible citizens.	26.9%	**45.4%**	20.9%	5.8%	1.0%	3.91	573
Q24	My child's school is helping to teach students to understand and appreciate cultural diversity.	23.0%	**41.0%**	27.6%	6.8%	1.6%	3.77	573
Q25	I understand what my child is learning and how he/she is being taught.	18.7%	**43.5%**	24.1%	11.5%	2.3%	3.65	573
Q26	I am able to assist my child with what he/she is learning at school.	15.7%	**41.5%**	27.7%	12.7%	2.3%	3.55	573
Q27	I am pleased with the implementation of the class scheduling at the middle and/or high school level.	18.8%	**51.2%**	20.9%	7.3%	1.8%	3.78	549
Q28	The curriculum at my child's school helps prepare students for the next grade level and/or further education beyond high school.	24.6%	**51.3%**	15.2%	6.9%	2.0%	3.90	552
Q29	I am pleased with the variety of course offerings at my child's school.	20.0%	**48.6%**	17.7%	11.5%	2.2%	3.73	555

NOTES: Strongly Agree (SA)=5, Agree (A)=4, Neutral (N)=3, Disagree (D) =2, Strongly Disagree (SD)=1
Bold cells represent the response with the largest pecent selected (excluding Neutral).

Kenosha Unified School District
Parent/Guardian Survey
Spring 2017

High School Results

		SA	A	N	D	SD	Average Score	Count
Communication								
Q31	I hear from my child's teacher(s) if he/she is doing something well.	7.6%	16.8%	23.3%	**36.2%**	16.1%	2.64	566
Q32	I am notified promptly if my child has difficulties at school or falls behind.	12.9%	**26.3%**	26.3%	23.7%	10.8%	3.07	566
Q33	Communications from the school (such as: newsletters, email, website, etc.) provide adequate information to keep me informed of important dates, activities and events.	30.7%	**47.3%**	13.1%	7.6%	1.2%	3.98	566
Q34	I am regularly informed about my child's progress in school.	14.8%	**31.8%**	27.0%	18.6%	7.8%	3.27	566
Q35	My child's teachers are approachable and available when I have concerns.	23.3%	**42.9%**	25.4%	5.7%	2.7%	3.78	566
Q36	My child's principal is approachable and available when I have concerns.	28.8%	**32.5%**	33.9%	2.3%	2.5%	3.83	566
Q37	School documents are translated and I am provided with an interpreter when needed.	9.9%	**11.1%**	77.6%	0.5%	0.9%	3.29	566
Expectations								
Q39	Teachers at my child's school believe all students can learn.	23.3%	**42.2%**	30.1%	3.9%	0.5%	3.84	562
Q40	Teachers at my child's school are concerned about my child as an individual.	23.5%	**41.6%**	25.4%	6.6%	2.8%	3.76	562
Shared Decision Making								
Q42	Our community is actively involved in the school.	14.1%	**39.1%**	37.0%	8.6%	1.3%	3.56	560
Q43	The concerns of parents are reflected in decisions made by my child's school.	10.7%	**32.5%**	45.0%	10.4%	1.4%	3.41	560
Q44	Students at my child's school participate in planning student activities.	20.7%	**45.0%**	30.0%	2.7%	1.6%	3.81	560
Infinite Campus								
Q59	Using the Infinite Campus Parent Portal to register my child for the school year was easy.	**42.4%**	37.2%	13.3%	4.8%	2.2%	4.13	540
Q60	The Infinite Campus Parent Portal is easy to navigate and use.	36.5%	**43.9%**	13.0%	4.8%	1.9%	4.09	540
Accommodating Special Needs								
Q62	My child's school is able to meet the requirements of students with disabilities or special needs (i.e. gifted, learning and/or physically challenged, limited English proficiency, etc.).	15.2%	**25.6%**	52.7%	3.5%	3.0%	3.47	539
Bussing								
Q63	I am pleased with the level of busing service my child receives.	13.4%	**27.1%**	47.5%	8.0%	4.1%	3.38	539

NOTES: Strongly Agree (SA)=5, Agree (A)=4, Neutral (N)=3, Disagree (D) =2, Strongly Disagree (SD)=1
Bold cells represent the response with the largest pecent selected (excluding Neutral).

Kenosha Unified School District
Kenosha, Wisconsin

November 28, 2017
REVISED

ADVANCED PLACEMENT UPDATE

In past years an annual report has been presented to the school board to review the Advanced Placement (AP) program in the Kenosha Unified School District. This report is intended to provide an overview of the program, to summarize the 2016-17 action steps and performance, present future action steps, and recognize AP Scholars.

Program Overview

EXAMINATION DATES

The AP examinations are administered the first two weeks in May. The 2017 AP examinations were administered beginning on Monday, May 1, 2017, and ending on Friday, May 12, 2017. Late exams were given between May 17 and 19, 2017.

The 2018 AP examinations will be administered beginning Monday, May 7, 2018, and ending Friday, May 18, 2017 (Appendix A).

EXAMINATION SITE LOCATIONS

To accommodate the increase in the number of AP exams being administered and to stay compliant with AP exam regulations, the exams were administered at various locations. Tremper High School and Indian Trail High School and Academy administered the exams at their respective schools. Bradford High School administered the exam at the United Auto Workers facilities due to the lack of necessary space at Bradford. Harborside Academy, LakeView Technology Academy, and Kenosha e-School combined to form a "multischool exam center" and administered exams in the St. James gymnasium.

EXAMINATION FEES

Students and their parents continue to pay for the cost of AP examinations, with the exception of those students who qualify for free/reduced lunch status. Per state statute, the district pays for these exams at a reduced rate. The cost of an examination for students increased from $92 to $93 in 2016-17. College Board provides districts with a reduced rate of $53 per

examination for students that qualify for the reduced lunch status. The cost per examination for the 2017-18 school year will increase to $94 per examination. This will be an increase of $1 per exam from the previous year.

ADVANCED PLACEMENT COORDINATOR

High school building administrators designate an AP coordinator(s) (Appendix B). The designated coordinator(s) must be identified on the school's AP Participation Form and must not have a conflict of interest according to the College Board-stated requirements. The primary responsibilities of the AP coordinator are:

- Order AP exams.
- Manage the receipt, storage, and distribution of AP materials and exams.
- Oversee the administration of AP exams.
- Return AP exams.
- Along with the coordinator of talent development, assign AP proctors.
- Meet and communicate with the coordinator of talent development as needed.

COLLEGE BOARD UPDATES FOR 2016-17

- Digital recording and online submission of audio responses for AP Music Theory and AP World Language and Culture exams (French and Spanish) replaced the submission of cassette tapes and compact discs.

- AP Calculus AB and AP Calculus BC were updated with a new framework that follows an Understanding by Design model. This model presents the subject matter of the updated courses in a table format, organized around big ideas, enduring understandings, learning objectives, and essential knowledge statements.

- The AP World History course was revised to further strengthen the focus on mastering essential concepts and developing historical thinking skills.

Advanced Placement Program Action Steps

COLLEGE BOARD COMPLIANCE

Schools wishing to use the AP designation on their courses must participate yearly in the AP Course Audit. Teachers who are new to AP as well as those whose course has undergone a revision are required to submit their syllabi to the College Board to receive authorization to teach the course. College Board adheres to strict guidelines, and all of the district's teachers and courses must be approved by College Board prior to appearing on the AP Course Ledger. Only courses that appear on the AP Course Ledger are recorded as AP on a student's transcript.

PROFESSIONAL LEARNING OPPORTUNITIES

College Board sponsors week-long summer institutes and one-day refresher workshops for AP teachers to attend. All Kenosha Unified School District AP teachers are required to attend the summer institute prior to teaching an AP course.

These workshops are content specific and provide networking opportunities as well as professional learning on best instructional practices and strategies. The one-day workshops are typically held at the start of the school year and are within driving distance of Kenosha. College Board has also initiated AP teacher communities, in which AP teachers can communicate and network with other AP teachers in their content area.

College Board has a variety of resources on their website for teachers to refer to. The following are some examples of the available resources:

- Instructional Planning Reports (with specific exam data)
- Free-response questions from previous exams (to enhance writing skills)
- Previously released AP exams (for review of exam structure and content)
- Practice AP exams (for student practice and exposure to structure and content of exams)
- Free study skills and test-taking tips specific to content areas (to assist students in preparing for AP exams and other exams such as ACT, SAT, etc.)
- Students free-response booklets from the previous year exam administration

  (Review student's responses to the exam questions to guide instruction.)

ADVANCED PLACEMENT COURSE PARTICIPATION

The number of students taking AP courses continues to grow. In 2016-17 Kenosha Unified School District students occupied 2,550 seats in AP courses. This was an increase of 9 percent, or 220 seats, from the previous year. More specifically:

- 1,519 students enrolled in an AP course;
- 788 students, or 52 percent, were enrolled one AP course;
- 487 students, or 32 percent, were enrolled in two AP courses; and
- 244 students, or 16 percent, were enrolled in three or more AP courses.

A variety of options are offered by Kenosha Unified School District high schools to encourage student participation in AP courses.

- Bradford—A presentation is given at the Freshman Parent Night, and AP explanations and descriptions are on the school website.

- Tremper—An Evening with the Counselors is held before registration to explain the variety of AP course offerings. The school website and newsletter also provide information regarding AP courses.

- Indian Trail—A presentation by the counselors is held during the school day for parents and students to attend. After the presentation a panel of current and/or former AP students and teachers are available to answer questions. AP information is also available on the school website.

- LakeView—Individual student conferences are held to assist students in the course selection process, including an explanation of AP courses. An Evening with the Counselors is also held for parents and students to attend.

- Harborside—During registration in March, individual student conferences are held; and AP course options are discussed at this time.

Appendix C provides the AP course enrollments for the district as well as for each high school.

ADVANCED PLACEMENT EXAMINATION PARTICIPATION

The number of students taking the AP examination continues to grow. In 2016-17 1,522 examinations were administered. This number equates to 62.2 percent of the students taking AP courses participating in the exam. Over 80 more exams were administered in 2016-17 from the previous year (2015-16), in which 1,438 examinations were administered (or 61.7 percent of the students took the exam [Appendix C]).

ADVANCED PLACEMENT EXAMINATION RESULTS

Students passed 950 of the 1,528 exams taken in May 2017, receiving a score of 3, 4, or 5. This was an increase of 72 exams from the previous year. The percentage of students passing the examination also increased from 60 percent in 2016 to 62 percent in 2017 (Appendix D).

Kenosha Unified School District students passing AP exams in 2016-17 matched or exceeded the national and global averages in the following AP courses:

- English Literature and Composition,
- English Language and Composition,
- Studio Art,
- Calculus AB,

- Computer Science A,
- Computer Science Principles,
- Biology,
- Physics II,
- Human Geography,
- Microeconomics,
- US History, and
- World History.

Conversely, there are AP exams in which the district's performance is not competitive with the national and global results, including:

- Statistics,
- Chemistry,
- Environmental Science,
- Physics I,
- Psychology,
- U.S. Government and Politics,
- French,
- Spanish, and
- Music Theory (Appendix E).

Appendix F illustrates a comparison between the district, state, and global mean scores on each exam. The mean score on the following AP exams is higher than the mean score at the state level:

- English Literature and Composition,
- Studio Art 2D and Drawing,
- Biology,
- Human Geography, and
- World History.

In English Literature, Calculus AB, Calculus BC, Computer Science Principles, Chemistry, Physics II, Microeconomics, and U.S. History, the district mean scores were fewer than .25 points from meeting the state mean score. The district performed lower than the state in at least one AP exam in each content area based on the mean score.

English/Language Arts. College Board recognizes AP English Language and Composition as the largest of all AP subjects. In Kenosha Unified School District, this course is the fourth largest, with an enrollment of 248 students. District students passed the AP English Language and Composition exam at a 10 percent higher rate than the national passing rate and were even with the state passing rate. It should be noted that the passing rate for this course increased by 8.4 percent from 56.6 percent in 2015-16 to 65 percent in 2016-17. The district also

saw a significant increase in the AP English Literature and Composition course performance from 59 percent passing in 2015-16 to 72 percent passing in 2016-17. This passing rate surpassed the state, national, and global passing rates by 11 percentile points or higher.

Computer Science. AP Computer Science A is noted as being one of the fastest growing courses during the 2016-17 school year. This was the second year that LakeView Technology Academy offered the course. The district passing rate of 75 percent was just below the state passing rate of 76 percent and was above both the national and global 67 percent passing rate. The 2016-17 school year was the first year that AP Computer Science Principles was offered by College Board. LakeView Technology Academy offered the course for the first time as well. The district passing rate of 100 percent was above the state, national, and global passing rates. For the 2017-18 school year, the course will be offered at Indian Trail High School and Academy and at Tremper High School.

Mathematics. AP Calculus AB saw not only an increase in exam participation but also in the district passing rate. The 60 percent passing rate was an almost 20 percent increase from the 2015-16 rate of 40.5 percent.

The district overall mean score of 3.44 for AP Calculus BC was close to the state mean score of 3.66 and the national and global mean score of 3.78. The district saw an increase in the AP Statistics mean score of 3.44 for 2016-17 compared to 3.22 in 2015-16. This mean score was lower than the state mean score of 2.64 and the national mean score of 2.92 and global mean score of 2.72.

For the 2017-18 school year, over 200 more students are registered for AP statistics, increasing from 93 students in 2016-17 to 307 students.

Science. AP Biology and AP Physics I are large enrollment courses for the district, with respective enrollments of 141 students and 184 students. AP Biology students exceeded the state, national, and global passing rate by 8 percent; however, AP Physics I students did not outperform the state, national, and global passing rates. The AP Physics I course content is the same as Physics Honors, resulting in a significant number of students seeking the additional rigor of AP Physics I as compared to Physics Honors. AP Physics I enrollment of 175 students is significantly larger than the AP Physics II enrollment of 12 students.

When comparing the mean scores in science exams between the district and the national scores, the district mean score of 2.70 in Environmental Science exceeds the national and global mean scores of 2.66 and 2.67, respectively. In other science exams the district's mean score is lower than the state's.

In summer 2014 the board adopted the Next Generation Science Standards (NGSS). NGSS define specific course pathways that include content in life science, physical science, and earth science. In the current system students may not receive content in each area depending on the course selections that they make. As the district’s courses become fully aligned to the NGSS, student performance on AP Chemistry and AP Physics exams is anticipated to increase.

Social Studies. Both AP Human Geography and AP World History outperformed the state, national, and global passing percentages. World History saw a significant increase in the passing rate of 64 percent for 2016-17 compared to 45.8 percent in 2015-16.

Document-based questions are an instructional strategy that has been added to all social studies courses, and this instructional strategy is a component of the exam. College Board noted that the average score on this section was 2.96 out of 9 possible points.

The mean scores in AP Microeconomics exceed the mean score at the national and global level.

AP Psychology continues to be the most popular AP course in the district with over 400 students taking the course and over 285 exams administered. In Kenosha Unified School District the majority of students enrolled in U.S. History or Honors U.S. History are freshmen. As a result there are a reduced number of students electing to take this course *again* as a junior or a senior. Twenty-three exams were administered, with the district passing rate being above the national and global passing rates. In order to increase the opportunity for students to participate in all AP courses offered, adjustments to existing course pathways in social studies are being explored.

World Language. As a district 145 students participated in AP Spanish Language and Culture with lower course enrollments in both AP French and AP Chinese. For the second year in a row, Bradford High School had a 100 percent passing rate for AP Spanish.

Fine Arts. Students participating in AP Drawing, AP Studio Art 2D and AP Studio Art 3D had a 100 percent passing rate.

In AP Music Theory the district was below the state, national and global passing rates. The AP Music Theory exam is a challenging exam; however, it is a wonderful course to prepare students for a music major in college.

Appendix G provides data from 2013 to 2017 for each school and for each content area within a school. This data provides the number of exams administered as well as the mean exam score for each course for the district, the state, and the global results.

Advanced Placement Support

- The coordinator of gifted and talented education and summer school will provide building administration and AP coordinators with a yearly calendar of AP deadlines.

- Fall meetings took place at each school between the principal, the building AP coordinator(s), and the coordinator of gifted and talented education and summer school to monitor compliance with AP guidelines. At these meetings AP courses in need of additional

support will be identified. A plan to address the areas of concern will be developed by the AP coordinator and principal. Follow-up meetings will be scheduled at each school to monitor progress.

- Content coordinators along with building administrators will conduct informal classroom visits to ensure that AP course content is being followed at an appropriate pace and rigor.

- An opportunity will be provided for AP teachers to participate in peer-to-peer observation and collaboration.

NEXT STEPS

- The coordinator of gifted and talented education and summer school will work with administrators, counselors, teachers, and parents to expand the opportunities for all students to participate and be successful in AP courses, particularly students of color and those in other under-represented groups.

- Content coordinators and building principals will work collaboratively to develop course pathways for students to take AP courses.

- AP presentations will be developed and conducted for middle school parents and students in spring 2018.

- The coordinator of gifted and talented education and summer school will work with building administrators, AP coordinators, counselors, and teachers to:

    - Develop and implement an AP summer boot camp to prepare students for AP classes to be offered in summer 2018.

    - Increase opportunities for students to take AP practice exams.

    - Explore opportunities for an AP tutoring program.

Advanced Placement Scholars

Each August through the AP Scholar Awards, College Board recognizes high school students who have demonstrated exemplary college-level achievement on AP exams. In 2017 Kenosha Unified School District increased the number of AP scholars from 162 in 2016 to 167. Appendix H shows the breakdown of the scholars by level and school. There are three levels of the AP Scholar Award. The AP Scholar Award was granted to 100 students who received scores of three or higher on three or more AP exams. There were 32 AP Scholar with Honors Awards, which were granted to students who received an average score of at least 3.25 on all AP exams

taken and scores of 3 or higher on 4 or more of these exams. The AP Scholar with Distinction Award was granted to 35 students who received an average score of at least 3.5 on all AP exams taken and scores of 3 or higher on 5 or more of these exams.

The National AP Scholar award was granted to one student in the district who received an average score of at least four on all AP Exams taken and scores of four or high on eight or more of these exams. Appendix H provides a breakdown of AP Scholars by school.

This is an informational report only.

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

Ms. Julie Housaman
Chief Academic Officer

Ms. Patricia Clements
Coordinator of Gifted and Talented Education and Summer School

Kenosha Unified School District

2018 ADVANCED PLACEMENT EXAMINATION DATES

The 2018 AP Exams will be administered over two weeks in May: May 7 through 11 and May 14 through 18. Late exams will be administered May 23 through 25, 2018. Early testing or testing at times other than those published by College Board are not permitted under any circumstances. The cost per exam is $94.

WEEK 1	MORNING—8 A.M.	AFTERNOON—12 P.M.
Monday, May 7, 2018	Chemistry Spanish Literature and Culture	Psychology
Tuesday, May 8, 2018	Spanish Language and Culture	Art History Physics 1: Algebra Based
Wednesday, May 9, 2018	English Literature and Composition	Japanese Language and Culture Physics 2: Algebra Based
Thursday, May 10, 2018	United States Government and Politics	Chinese Language and Culture Environmental Science
Friday, May 11, 2018	German Language and Culture United States History	Computer Science Principles
	Studio Art—Last day for coordinators to submit digital portfolios (by 8 p.m. EDT) and to gather 2-D Design and Drawing students for physical portfolio assembly	

WEEK 2	MORNING—8 A.M.	AFTERNOON—12 P.M.	AFTERNOON—2 P.M.
Monday, May 14, 2018	Biology Music Theory	Physics C: Mechanics	Physics C: Electricity and Magnetism
Tuesday, May 15, 2018	Calculus AB Calculus BC	French Language and Culture Computer Science A	
Wednesday, May 16, 2018	English Language and Composition	Italian Language and Culture Macroeconomics	

WEEK 2	MORNING—8 A.M.	AFTERNOON—12 P.M.	AFTERNOON—2 P.M.
Thursday, May 17, 2018	Comparative Government and Politics World History	Statistics	
Friday, May 19, 2018	Human Geography Microeconomics	European History Latin	

Students who wish to take a late exam must obtain permission from their school's AP coordinator. An additional $45 fee will be assessed for each late exam ordered.

LATE TESTING	MORNING—8 A.M.	AFTERNOON—12 P.M.
Wednesday, May 23, 2018	English Language and Composition European History Microeconomics Psychology Statistics	Computer Science A Chemistry Japanese Language and Culture Music Theory Physics C: Mechanics Physics C: Electricity and Magnetism (2 p.m.)
Thursday, May 24, 2018	Biology Computer Science Principles Environmental Science Italian Language and Culture Physics 1: Algebra Based United States History	Art History Chinese Language and Culture French Language and Culture Latin Physics 2: Algebra Based World History
Friday, May 25, 2018	Calculus AB Calculus BC English Literature and Composition Human Geography United States Government and Politics	Comparative Government and Politics German Language and Culture Macroeconomics Spanish Language and Culture Spanish Literature and Culture

Kenosha Unified School District

2017-18 ADVANCED PLACEMENT COORDINATORS

SCHOOL	CONTACT	EMAIL ADDRESS	TITLE	EXTENSION
Bradford	Adam Sulko*	asulko@kusd.edu	Assistant principal	6189
	Robin Mars	rmars@kusd.edu	Counselor	6213
Harborside	Julie Mulligan*	jamullig@kusd.edu	Counselor	7854
	Trent Barnhart	tbarnhar@kusd.edu	Assistant principal	5932
Indian Trail	Elizabeth Ekstrom	eekstrom@kusd.edu	Counselor	8537
Kenosha eSchool	Kim Gorman	kgorman@kusd.edu	Counselor	7764
LakeView	Jason Creel	jcreel@kusd.edu	Academic dean	8980
Tremper	Michelle Santelli*	msantell@kusd.edu	Assistant principal	2215
	Therese Hujik	thujik@kusd.edu	Counselor	2208

*Primary contact

KENOSHA UNIFIED SCHOOL DISTRICT

Advanced Placement Test Participation by District

2016-17

AP Course Name	Course Enrollment	AP Test Participation Number	Percent
AP Biology	127	77	60.6%
AP Calculus AB	140	91	65.0%
AP Calculus BC	46	40	87.0%
AP Chemistry	60	41	68.3%
AP Chinese Language & Culture	6	0	0.0%
AP Computer Science A	22	4	18.2%
AP Computer Science Principles	20	9	45.0%
AP English Literature	1	0	0.0%
AP Environmental Science	28	10	35.7%
AP French Language and Culture	19	2	10.5%
AP Human Geography	92	43	46.7%
AP Language/Composition	248	184	74.2%
AP Literature /Composition	155	88	56.8%
AP Macroeconomics	2	0	0.0%
AP Microeconomics	30	19	63.3%
AP Music Theory	21	11	52.4%
AP Physics 1	175	44	25.1%
AP Physics 2	12	9	75.0%
AP Psychology	428	286	66.8%
AP Spanish Language & Culture	145	59	40.7%
AP Statistics	150	77	51.3%
AP Studio Art: 2D Design	14	11	78.6%
AP Studio Art: 3D Design	4	1	25.0%
AP Studio Art: Drawing	15	4	26.7%
AP U.S. Government & Pol	257	162	63.0%
AP United States History	41	23	56.1%
AP World History	292	213	72.9%
	2,550	**1,508**	**59.1%**

KENOSHA UNIFIED SCHOOL DISTRICT

Advanced Placement Exam Results by District

2016-17

AP Exam Name	Number Tested	Mean Score	AP Exam Score - Percent of Students Tested 1	2	3	4	5	Passed Exam Number	Percent
AP Biology	77	3.16	0.0%	18.2%	50.6%	28.6%	2.6%	63	81.8%
AP Calculus AB	91	2.99	6.6%	33.0%	29.7%	16.5%	14.3%	55	60.4%
AP Calculus BC	41	3.44	12.2%	19.5%	14.6%	19.5%	34.1%	28	68.3%
AP Chemistry	41	2.49	14.6%	39.0%	29.3%	17.1%	0.0%	19	46.3%
AP Chinese Language & Culture	1	1.00	100.0%	0.0%	0.0%	0.0%	0.0%	0	0.0%
AP Computer Science A	4	2.75	25.0%	0.0%	50.0%	25.0%	0.0%	3	75.0%
AP Computer Science Principles	9	3.33	0.0%	0.0%	66.7%	33.3%	0.0%	9	100.0%
AP Environmental Science	10	2.70	20.0%	40.0%	0.0%	30.0%	10.0%	4	40.0%
AP French Language and Culture	2	2.00	0.0%	100.0%	0.0%	0.0%	0.0%	0	0.0%
AP Human Geography	44	3.30	11.4%	15.9%	25.0%	27.3%	20.5%	32	72.7%
AP Language/Composition	186	2.97	3.2%	32.3%	36.6%	20.4%	7.5%	120	64.5%
AP Literature /Composition	89	3.02	2.2%	25.8%	42.7%	25.8%	3.4%	64	71.9%
AP Microeconomics	19	3.47	10.5%	15.8%	21.1%	21.1%	31.6%	14	73.7%
AP Music Theory	11	2.36	54.5%	0.0%	18.2%	9.1%	18.2%	5	45.5%
AP Physics 1	44	2.36	6.8%	61.4%	20.5%	11.4%	0.0%	14	31.8%
AP Physics 2	9	2.78	0.0%	33.3%	55.6%	11.1%	0.0%	6	66.7%
AP Psychology	287	2.99	17.1%	19.5%	23.7%	26.8%	12.9%	182	63.4%
AP Spanish Language & Culture	60	3.15	0.0%	30.0%	31.7%	28.3%	8.3%	41	68.3%
AP Statistics	77	2.64	18.2%	31.2%	31.2%	7.8%	11.7%	39	50.6%
AP Studio Art: 2D Design	19	3.95	0.0%	0.0%	21.1%	63.2%	15.8%	19	100.0%
AP Studio Art: 3D Design	1	3.00	0.0%	0.0%	100.0%	0.0%	0.0%	1	100.0%
AP Studio Art: Drawing	6	3.67	0.0%	0.0%	50.0%	33.3%	16.7%	6	100.0%
AP U.S. Government & Pol	164	2.55	19.5%	33.5%	27.4%	11.0%	8.5%	77	47.0%
AP United States History	23	2.61	26.1%	21.7%	30.4%	8.7%	13.0%	12	52.2%
AP World History	213	2.91	6.6%	29.1%	36.6%	22.1%	5.6%	137	64.3%
All Exams*	**1,528**	**2.92**	**10.5%**	**27.3%**	**31.3%**	**21.2%**	**9.7%**	**950**	**62.2%**

*NOTE: Calculus AB Subscore and Music Theory Subscores are not included in totals.

Kenosha Unified School District

KENOSHA UNIFIED SCHOOL DISTRICT ADVANCED PLACEMENT RESULTS COMPARED TO WISCONSIN, UNITED STATES, AND GLOBAL ADVANCED PLACEMENT RESULTS

2016-17

(Percent passed: Percent of students with a 3 or higher on the exam)

English

COURSE	NUMBER TESTED	KUSD PERCENT PASSED	WI PERCENT PASSED	NATIONAL PERCENT PASSED	GLOBAL PERCENT PASSED
English Language and Composition	185	65%	65%	54%	55%
English Literature and Composition	89	72%	61%	56%	53%

Fine Arts

COURSE	NUMBER TESTED	KUSD PERCENT PASSED	WI PERCENT PASSED	NATIONAL PERCENT PASSED	GLOBAL PERCENT PASSED
Music Theory	11	46%	63%	61%	61%
Studio Art 2-D Design Portfolio	18	100%	85%	85%	85%
Studio Art 3-D Design Portfolio	1	100%	77%	71%	72%
Studio Art Drawing Portfolio	6	100%	88%	85%	85%

Math

COURSE	NUMBER TESTED	KUSD PERCENT PASSED	WI PERCENT PASSED	NATIONAL PERCENT PASSED	GLOBAL PERCENT PASSED
Calculus AB	91	60%	63%	57%	58%
Calculus BC	41	68%	79%	81%	81%
Computer Science A	4	75%	76%	67%	67%
Computer Science Principles	9	100%	91%	74%	74%
Statistics	77	51%	63%	54%	54%

Science

Course	Number Tested	KUSD Percent Passed	WI Percent Passed	National Percent Passed	Global Percent Passed
Biology	77	82%	74%	64%	64%
Chemistry	41	46%	54%	51%	52%
Environmental Science	10	40%	52%	49%	49%
Physics I	44	32%	48%	41%	42%
Physics II	9	68%	66%	61%	64%

Social Studies

Course	Number Tested	KUSD Percent Passed	WI Percent Passed	National Percent Passed	Global Percent Passed
Human Geography	44	73%	59%	49%	49%
Microeconomics	19	74%	79%	68%	70%
Psychology	285	63%	75%	64%	64%
US Government and Politics	164	47%	59%	49%	49%
U.S. History	23	52%	59%	51%	51%
World History	213	64%	58%	55%	55%

World Language

Course	Number Tested	KUSD Percent Passed	WI Percent Passed	National Percent Passed	Global Percent Passed
Chinese Language and Culture	1	0%	81%	91%	93%
French Language and Culture	2	0%	68%	73%	75%
Spanish Language and Culture	58	68%	85%	88%	88%

Kenosha Unified School District

KENOSHA UNIFIED SCHOOL DISTRICT ADVANCED PLACEMENT MEAN SCORE COMPARED TO WISCONSIN, UNITED STATES, AND GLOBAL MEAN SCORES

2016-17

(Mean score: Average of potential Advanced Placement scores from 1 to 5)

English

Course	Number Tested	District Mean Score	WI Mean Score	National Mean Score	Global Mean Score
English Language and Composition	185	2.96	3.00	2.77	2.77
English Literature and Composition	89	3.02	2.88	2.68	2.69

Fine Arts

Course	Number Tested	District Mean Score	WI Mean Score	National Mean Score	Global Mean Score
Music Theory	11	2.36	3.09	3.01	3.02
Studio Art 2-D Design Portfolio	18	3.89	3.52	3.52	3.53
Studio Art 3-D Design Portfolio	1	3.00	3.30	3.14	3.14
Studio Art Drawing Portfolio	6	3.67	3.53	3.55	3.56

Math

Course	Number Tested	District Mean Score	WI Mean Score	National Mean Score	Global Mean Score
Calculus AB	13	2.99	3.06	2.91	2.93
Calculus BC	41	3.44	3.66	3.78	3.78
Computer Science A	4	2.75	3.38	3.13	3.15
Computer Science Principles	9	3.33	3.51	3.15	3.16
Statistics	77	2.64	2.92	2.69	2.72

Science

Course	Number Tested	District Mean Score	WI Mean Score	National Mean Score	Global Mean Score
Biology	77	3.16	3.09	2.89	2.90
Chemistry	41	2.49	2.68	2.63	2.67
Environmental Science	10	2.70	3.12	2.66	2.67
Physics I	44	2.36	2.60	2.36	2.40
Physics II	9	2.78	2.94	2.89	2.97

Social Studies

Course	Number Tested	District Mean Score	WI Mean Score	National Mean Score	Global Mean Score
Human Geography	44	3.30	2.83	2.53	2.54
Microeconomics	19	3.47	3.50	3.18	3.26
Psychology	285	2.98	3.41	3.05	3.06
US Government and Politics	164	2.55	2.86	2.58	2.58
US History	23	2.61	2.87	2.64	2.65
World History	213	2.91	2.80	2.76	2.77

World Language

Course	Number Tested	District Mean Score	WI Mean Score	National Mean Score	Global Mean Score
Chinese Language and Culture	1	1.00	3.96	4.31	4.38
French Language and Culture	2	2.00	3.00	3.21	3.29
Spanish Language and Culture	58	3.16	3.52	3.60	3.61

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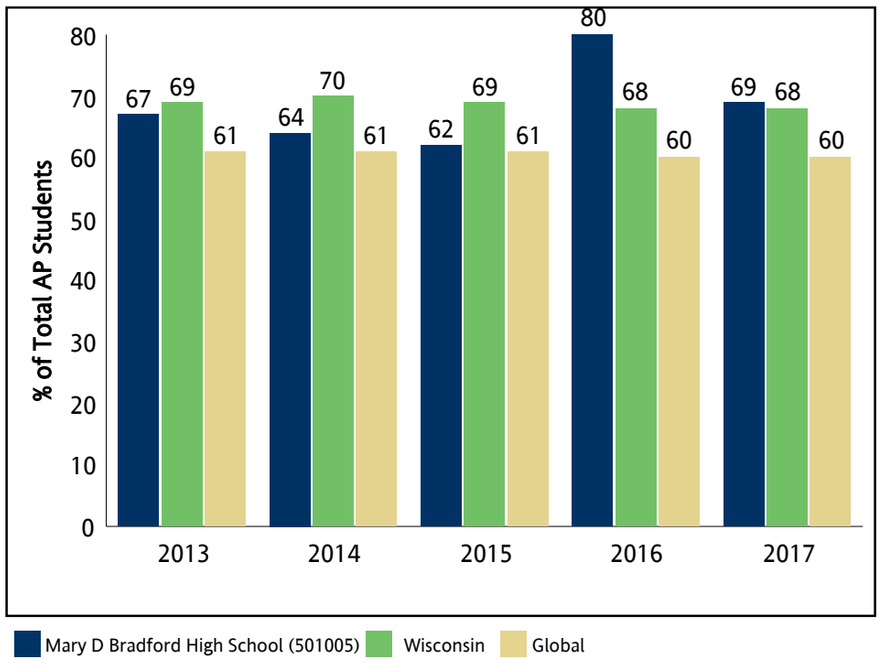
AP® Five-Year School Score Summary (2017)

This report shows five years of data at the school, state and global levels. On the first page, a graph illustrates the year-over-year change in the percentage of AP students with scores of 3 or higher, next to a table that provides the overall total exams, total unique students and both the number and percentage of AP students with one or more scores of 3 or higher. On subsequent pages, the report provides subject-specific summary data by year: total exams, total exams by score and mean score.

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Mary D Bradford High School (501005)

% of Total AP Students with Scores 3+



	2013	2014	2015	2016	2017
Mary D Bradford High School (501005)					
Total AP Students	132	121	162	176	213
Number of Exams	202	195	277	318	329
AP Students with Scores 3+	88	77	101	141	147
% of Total AP Students with Scores 3+	66.7	63.6	62.3	80.1	69.0
Wisconsin					
Total AP Students	36,882	38,629	41,489	44,296	47,189
Number of Exams	61,472	64,916	70,246	74,785	80,201
AP Students with Scores 3+	25,501	27,006	28,667	30,088	32,115
% of Total AP Students with Scores 3+	69.1	69.9	69.1	67.9	68.1
Global					
Total AP Students	2,225,625	2,352,026	2,497,164	2,625,319	2,761,755
Number of Exams	3,955,410	4,199,454	4,516,044	4,741,566	5,005,281
AP Students with Scores 3+	1,354,800	1,442,136	1,515,264	1,583,115	1,665,651
% of Total AP Students with Scores 3+	60.9	61.3	60.7	60.3	60.3

"Success" on an AP Exam is defined as an exam score of 3 or higher, which represents the score point that research finds predictive of college success and college graduation. These findings have held consistent across the decades. One example of such a study comes from the National Center for Educational Accountability, which found that an AP Exam score, and a score of 3 or higher in particular, is a strong predictor of a student's ability to persist in college and earn a bachelor's degree.

The data in this report differs from other College Board reports, such as *The AP Cohort Data Report*, which tracks exams taken by seniors throughout their time in high school (cohort-based) and includes public school data only.

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Mary D Bradford High School (501005)

	Mary D Bradford High School (501005)					Wisconsin					Global				
Biology	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	2			1		206	221	260	257	290	11,188	14,169	14,351	15,738	16,470
4	9	6	4	4	2	881	932	1,070	991	1,205	44,035	47,989	49,708	50,161	53,707
3	17	13	6	11	5	1,532	1,558	1,734	1,666	2,025	73,865	75,312	80,744	80,218	93,869
2	1	6	3	5	4	979	881	886	1,051	1,070	59,665	58,024	61,741	68,659	70,367
1						132	141	127	146	138	15,149	18,770	18,384	24,163	21,666
Total Exams	29	25	13	21	11	3,730	3,733	4,077	4,111	4,728	203,902	214,264	224,928	238,939	256,079
Mean Score	3.41	3.00	3.08	3.05	2.82	3.01	3.06	3.11	3.04	3.09	2.88	2.91	2.91	2.85	2.89

Calculus AB	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5					1	1,293	1,400	1,257	1,389	1,122	67,783	72,511	66,411	76,875	59,587
4					1	1,126	1,095	1,158	1,104	1,308	51,440	48,984	51,769	53,696	57,081
3						1,131	1,287	1,337	1,282	1,530	49,101	52,076	56,482	53,743	66,214
2						719	724	660	722	1,501	31,833	31,360	31,371	30,109	69,896
1						1,271	1,383	1,409	1,538	832	83,261	89,775	98,285	95,103	64,892
Total Exams					2	5,540	5,889	5,821	6,035	6,293	283,418	294,706	304,318	309,526	317,670
Mean Score					4.50	3.08	3.07	3.03	3.01	3.06	2.96	2.94	2.86	2.96	2.93

Calculus BC	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1	4	2	2	1	703	832	787	960	858	47,972	54,335	54,148	60,907	56,706
4	4	1		4	1	359	385	381	381	477	16,896	18,525	19,551	19,248	24,101
3	6	4	5	6	2	395	406	496	492	564	18,762	18,200	21,482	21,481	26,467
2	3	1		2	3	147	123	159	155	417	5,950	5,966	6,505	7,207	18,746
1	16	4	13	6	2	250	269	312	240	92	15,018	15,259	17,725	16,461	7,101
Total Exams	30	14	20	20	9	1,854	2,015	2,135	2,228	2,408	104,598	112,285	119,411	125,304	133,121
Mean Score	2.03	3.00	1.90	2.70	2.56	3.60	3.69	3.55	3.75	3.66	3.73	3.81	3.72	3.81	3.79

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Mary D Bradford High School (501005)

	Mary D Bradford High School (501005)					Wisconsin					Global				
Calculus BC: AB Subscore	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	3	5	2	4	1	942	988	1,089	1,022	1,027	58,790	61,853	66,942	64,077	64,516
4	7	2	3	5	3	427	409	389	568	627	20,792	18,826	19,481	26,201	29,995
3	6	3	3	4	1	270	307	356	321	394	11,725	14,440	15,234	16,379	18,773
2	4	1	2	4	4	101	134	128	123	270	5,640	7,040	6,555	5,764	13,313
1	10	3	10	3		114	177	173	194	90	7,645	10,121	11,194	12,875	6,515
Total Exams	30	14	20	20	9	1,854	2,015	2,135	2,228	2,408	104,592	112,280	119,406	125,296	133,112
Mean Score	2.63	3.36	2.25	3.15	3.11	4.07	3.94	3.98	3.94	3.93	4.12	4.03	4.04	3.98	4.00

Chemistry	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5				1		385	225	181	195	185	26,535	15,047	14,178	16,203	16,079
4		2	1		4	600	530	477	473	489	30,081	25,155	24,703	23,994	25,924
3			1			643	849	1,010	905	932	26,318	38,533	43,084	42,332	41,752
2			1		3	457	863	838	799	961	20,841	38,359	38,033	38,067	41,811
1					1	581	503	423	386	431	36,403	31,946	33,277	33,371	34,110
Total Exams		2	3	1	8	2,666	2,970	2,929	2,758	2,998	140,178	149,040	153,275	153,967	159,676
Mean Score		4.00	3.00	5.00	2.88	2.91	2.70	2.71	2.74	2.68	2.93	2.68	2.66	2.69	2.67

Comparative Government and Politics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		1				39	61	59	99	94	3,847	4,018	3,239	4,536	5,225
4						41	63	69	76	90	4,315	4,841	4,262	4,676	5,494
3	1					40	42	66	45	70	4,011	3,822	4,666	4,499	4,582
2						53	41	59	35	58	4,648	4,502	4,892	4,730	4,011
1						21	15	32	14	40	3,550	3,304	4,395	3,614	3,171
Total Exams	1	1				194	222	285	269	352	20,371	20,487	21,454	22,055	22,483
Mean Score	3.00	5.00				3.12	3.51	3.22	3.78	3.40	3.01	3.09	2.86	3.08	3.25

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Mary D Bradford High School (501005)

	Mary D Bradford High School (501005)					Wisconsin					Global				
English Language and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	8		1	2	2	739	670	714	694	759	48,927	48,497	52,434	58,643	53,195
4	9	4	5	6	8	1,231	1,485	1,696	1,511	1,861	77,548	90,548	97,172	96,625	106,531
3	16	3	7	7	7	2,129	2,255	2,356	2,445	2,886	136,438	143,859	144,613	149,154	161,290
2	8	2	5	7		1,596	1,699	1,885	2,356	2,331	142,270	152,507	157,552	176,254	179,108
1	1					378	391	457	400	512	72,552	71,713	78,604	69,453	83,279
Total Exams	42	9	18	22	17	6,073	6,500	7,108	7,406	8,349	477,735	507,124	530,375	550,129	583,403
Mean Score	3.36	3.22	3.11	3.14	3.71	3.06	3.05	3.05	2.97	3.00	2.77	2.79	2.79	2.82	2.77

English Literature and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		2		1		452	470	410	460	431	29,387	30,531	30,460	30,224	27,622
4		4	4	2	7	1,376	1,366	1,369	1,410	1,203	72,663	70,802	73,125	72,400	65,346
3		15	7	8	12	2,607	2,399	2,577	2,498	2,426	121,601	118,081	122,631	119,608	120,712
2		12	19	9	9	2,105	2,140	2,133	2,204	2,222	122,374	131,572	131,534	135,861	137,888
1				1	1	299	280	269	348	340	40,506	47,745	45,004	48,942	54,967
Total Exams		33	30	21	29	6,839	6,655	6,758	6,920	6,622	386,531	398,731	402,754	407,035	406,535
Mean Score		2.88	2.50	2.67	2.86	2.94	2.94	2.93	2.92	2.87	2.81	2.76	2.78	2.75	2.69

European History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						183	156	164	131	178	11,439	9,557	11,177	8,090	9,942
4						410	353	336	332	357	20,678	18,661	18,770	17,562	19,872
3						697	633	667	592	557	38,307	37,602	38,484	32,016	29,848
2						170	199	150	468	423	12,116	13,011	11,535	38,575	33,857
1		1				198	270	239	79	75	27,564	31,877	28,363	13,505	12,891
Total Exams		1				1,658	1,611	1,556	1,602	1,590	110,104	110,708	108,329	109,748	106,410
Mean Score		1.00				3.13	2.95	3.02	2.98	3.09	2.78	2.65	2.75	2.71	2.81

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Mary D Bradford High School (501005)

	Mary D Bradford High School (501005)					Wisconsin					Global				
Italian Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						2	3		3	3	414	500	544	643	482
4									3		424	496	526	533	498
3						1	1		1		582	687	732	880	898
2	2					2			1		472	551	625	577	598
1										1	150	224	270	250	177
Total Exams	2					5	4		8	4	2,042	2,458	2,697	2,883	2,653
Mean Score	2.00					3.40	4.50		4.00	4.00	3.24	3.20	3.17	3.26	3.19

Macroeconomics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		1				227	284	385	433	470	15,878	18,908	19,390	23,694	24,765
4				1		352	434	530	569	602	25,298	27,343	28,223	31,776	33,127
3						265	292	319	345	388	18,072	21,758	21,685	21,841	24,010
2						241	232	253	300	313	20,745	20,497	21,579	22,957	22,401
1						152	144	165	201	198	28,919	29,036	36,195	35,182	37,841
Total Exams		1		1		1,237	1,386	1,652	1,848	1,971	108,912	117,542	127,072	135,450	142,144
Mean Score		5.00		4.00		3.21	3.35	3.43	3.40	3.42	2.80	2.89	2.79	2.90	2.89

Microeconomics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						198	205	257	267	444	12,268	11,847	15,129	14,692	20,711
4		1				375	516	526	563	607	19,330	21,527	22,617	22,796	24,832
3		1				279	361	328	483	400	13,524	15,404	15,282	18,204	15,836
2			1	2		190	228	221	258	219	10,079	11,546	10,822	11,278	10,531
1						96	121	118	210	175	12,457	14,168	15,048	15,700	16,345
Total Exams		2	1	2		1,138	1,431	1,450	1,781	1,845	67,658	74,492	78,898	82,670	88,255
Mean Score		3.50	2.00	2.00		3.34	3.32	3.40	3.24	3.50	3.13	3.07	3.15	3.11	3.26

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Mary D Bradford High School (501005)

	Mary D Bradford High School (501005)					Wisconsin					Global				
Music Theory	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1		1			43	47	51	29	55	3,469	3,559	3,609	3,517	3,758
4						42	53	39	49	43	3,068	3,160	3,267	3,323	3,363
3			2			80	82	84	56	67	4,709	4,601	4,681	4,687	4,813
2			2			68	64	79	64	68	4,605	4,370	4,713	5,045	4,806
1					5	23	23	21	12	31	2,578	2,395	2,706	2,826	2,898
Total Exams	1		5		5	256	269	274	210	264	18,429	18,085	18,976	19,398	19,638
Mean Score	5.00		3.00		1.00	3.05	3.14	3.07	3.09	3.09	3.01	3.06	3.02	2.98	3.01

Music Aural Subscore	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1		1			41	55	47	31	53	3,429	3,631	3,602	3,511	3,652
4			2			42	50	51	37	49	2,974	3,064	3,378	3,253	3,579
3			1			78	70	81	59	65	5,035	4,732	4,532	4,524	4,650
2			1		3	75	73	72	70	71	4,296	4,387	4,820	5,419	4,818
1					2	19	21	23	13	26	2,692	2,271	2,643	2,690	2,925
Total Exams	1		5		5	255	269	274	210	264	18,426	18,085	18,975	19,397	19,624
Mean Score	5.00		3.60		1.60	3.04	3.17	3.10	3.01	3.12	3.01	3.08	3.03	2.97	3.01

Music Non-Aural Subscore	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1					41	45	40	30	46	3,466	3,423	3,551	3,595	3,743
4			1			46	47	58	48	45	2,884	3,278	3,355	3,393	3,226
3			1			76	97	80	59	66	4,704	4,673	4,659	4,411	4,763
2			3		1	63	52	76	54	79	4,704	4,396	4,759	5,105	5,055
1					4	29	28	20	19	28	2,668	2,315	2,651	2,893	2,837
Total Exams	1		5		5	255	269	274	210	264	18,426	18,085	18,975	19,397	19,624
Mean Score	5.00		2.60		1.20	3.03	3.11	3.08	3.08	3.01	2.99	3.06	3.02	2.98	3.00

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Mary D Bradford High School (501005)

	Mary D Bradford High School (501005)					Wisconsin					Global				
Physics 1	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5								112	122	133			8,619	7,789	9,300
4			3	2	1			529	483	487			23,632	23,885	27,711
3			4	4	4			742	765	669			35,691	36,033	34,761
2			2	10	8			1,037	925	907			51,239	51,310	49,844
1			6	6				543	541	462			53,337	51,296	49,924
Total Exams			15	22	13			2,963	2,836	2,658			172,518	170,313	171,540
Mean Score			2.27	2.09	2.46			2.54	2.55	2.59			2.32	2.33	2.40

Physics 2	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5								20	30	53			1,767	2,513	3,267
4			1	2	1			66	104	77			2,836	4,507	4,205
3			10	4	4			182	285	211			6,938	9,249	8,547
2			6	5	3			180	213	140			7,166	8,086	6,904
1				2				24	34	37			2,010	2,141	2,229
Total Exams			17	13	8			472	666	518			20,717	26,496	25,152
Mean Score			2.71	2.46	2.75			2.74	2.82	2.94			2.77	2.89	2.98

Physics B *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	2					292	250				14,830	14,828			
4	8	6				384	326				17,781	17,363			
3	6	1				497	508				23,358	24,823			
2	2	2				275	274				14,524	15,917			
1						154	164				18,881	20,939			
Total Exams	18	9				1,602	1,522				89,374	93,870			
Mean Score	3.56	3.44				3.24	3.15				2.95	2.89			

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AP® Five-Year School Score Summary (2017)

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Mary D Bradford High School (501005)

	Mary D Bradford High School (501005)					Wisconsin					Global				
Psychology	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		2	2	8	18	2,103	1,936	2,246	2,298	2,511	50,833	48,766	56,123	56,174	57,973
4	1	1	11	35	31	2,537	2,818	2,827	3,143	3,172	63,606	69,937	73,009	76,757	76,236
3	2		21	18	20	1,841	1,988	1,952	2,067	2,202	46,778	51,953	55,148	56,210	60,629
2	2	6	11	7	19	1,019	1,142	1,083	1,337	1,364	31,026	35,206	36,423	41,698	44,382
1	4	6	21	8	10	998	1,132	1,183	1,242	1,250	47,277	54,608	57,657	63,881	64,409
Total Exams	9	15	66	76	98	8,498	9,016	9,291	10,087	10,499	239,520	260,470	278,360	294,720	303,629
Mean Score	2.00	2.13	2.42	3.37	3.29	3.44	3.36	3.42	3.39	3.41	3.17	3.09	3.12	3.07	3.06

Spanish Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1	3		4	2	196	249	262	296	237	34,686	34,303	41,066	45,307	34,410
4	1	3	1	12	4	238	411	432	481	515	35,573	48,729	53,023	57,019	61,680
3	1	1		7	4	229	381	438	455	507	27,617	42,264	41,934	44,832	61,133
2						201	112	145	154	211	22,818	13,306	13,548	15,764	18,577
1						168	16	16	17	18	19,014	2,382	2,075	2,528	3,082
Total Exams	3	7	1	23	10	1,032	1,169	1,293	1,403	1,488	139,708	140,984	151,646	165,450	178,882
Mean Score	4.00	4.29	4.00	3.87	3.80	3.09	3.65	3.60	3.63	3.50	3.32	3.70	3.77	3.77	3.59

Statistics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1				1	397	470	477	555	584	21,678	26,333	26,390	29,674	29,454
4				2	1	755	840	844	1,067	781	34,573	38,613	37,489	44,966	34,512
3	4		1	8		889	1,050	1,133	1,130	1,312	42,148	45,137	49,495	51,457	53,664
2		1	3	4	4	644	663	669	623	926	31,879	32,794	36,556	32,193	43,734
1		3	3	2	1	354	424	453	551	706	39,757	41,746	46,435	48,876	55,477
Total Exams	5	4	7	16	7	3,039	3,447	3,576	3,926	4,309	170,035	184,623	196,365	207,166	216,841
Mean Score	3.40	1.25	1.71	2.63	2.57	3.06	3.08	3.06	3.12	2.91	2.80	2.86	2.80	2.88	2.72

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Mary D Bradford High School (501005)

Studio Art: 2-D Design Portfolio	Mary D Bradford High School (501005)					Wisconsin					Global				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5	3	2	1		3	37	47	53	58	82	3,411	3,795	4,892	4,542	6,447
4	4	2	5	6	3	90	113	114	123	127	7,931	8,055	8,177	10,412	10,363
3	8	1	3	5	2	143	149	142	189	166	8,757	9,646	9,200	11,109	11,569
2	1		2			75	77	65	78	62	4,553	5,039	5,077	4,952	4,423
1						6	6	8	3	1	893	969	1,385	796	707
Total Exams	16	5	11	11	8	351	392	382	451	438	25,545	27,504	28,731	31,811	33,509
Mean Score	3.56	4.20	3.45	3.55	4.13	3.22	3.30	3.36	3.34	3.52	3.33	3.32	3.35	3.41	3.52

Studio Art: Drawing Portfolio															
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5			1			36	39	41	40	52	2,576	2,749	2,872	3,196	4,472
4			1			41	47	52	91	74	3,451	3,611	4,100	5,100	5,634
3		1				104	106	113	130	112	7,242	7,007	7,470	7,310	7,302
2						40	50	46	31	28	3,226	3,316	3,466	2,779	2,653
1						1	6	1	5	3	518	679	732	536	387
Total Exams		1	2			222	248	253	297	269	17,013	17,362	18,640	18,921	20,448
Mean Score		3.00	4.50			3.32	3.25	3.34	3.44	3.54	3.26	3.26	3.26	3.40	3.55

United States Government and Politics															
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5	1	5	5	6	2	446	505	452	628	641	28,845	32,336	27,546	36,539	35,692
4	3	5	9	3	6	568	553	651	631	666	36,550	33,898	38,345	40,193	39,911
3	5	21	19	31	13	1,054	1,183	1,099	1,117	1,287	66,864	71,829	70,019	74,014	82,498
2	14	18	22	13	12	862	903	892	971	1,028	63,612	67,126	70,847	71,302	78,989
1	18	11	8	7	4	447	465	545	552	780	60,346	66,996	76,566	74,976	83,884
Total Exams	41	60	63	60	37	3,377	3,609	3,639	3,899	4,402	256,217	272,185	283,323	297,024	320,974
Mean Score	1.90	2.58	2.70	2.80	2.73	2.91	2.93	2.88	2.95	2.85	2.65	2.62	2.54	2.64	2.58

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AP® Five-Year School Score Summary (2017)

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Mary D Bradford High School (501005)

	Mary D Bradford High School (501005)					Wisconsin					Global				
United States History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						734	761	677	899	865	47,306	50,976	44,897	59,029	54,962
4	1	2	1	1		1,785	1,740	1,498	1,467	1,543	95,758	98,927	85,806	88,709	90,210
3	2	1		3		1,687	1,635	1,839	1,794	1,845	96,020	93,548	112,701	111,449	113,675
2	1	3	3	1	1	1,750	1,758	1,635	1,709	1,680	120,095	130,143	118,045	114,930	119,562
1	1		1	3	3	671	718	1,079	1,175	1,261	85,449	91,384	115,077	120,395	130,552
Total Exams	5	6	5	8	4	6,627	6,612	6,728	7,044	7,194	444,628	464,978	476,526	494,512	508,961
Mean Score	2.60	2.83	2.20	2.25	1.25	3.02	3.01	2.86	2.89	2.87	2.77	2.76	2.64	2.70	2.65

World History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5					1	89	125	114	111	204	13,506	16,430	17,460	18,994	25,540
4					11	259	354	344	423	607	31,504	39,498	37,745	44,534	59,843
3				1	24	539	722	806	900	851	67,735	78,640	83,601	84,010	80,166
2					21	584	535	646	781	844	69,756	68,632	79,600	82,100	88,971
1					6	302	192	160	337	343	48,159	43,733	47,968	56,523	46,233
Total Exams				1	63	1,773	1,928	2,070	2,552	2,849	230,660	246,933	266,374	286,161	300,753
Mean Score				3.00	2.68	2.58	2.84	2.81	2.68	2.82	2.53	2.66	2.61	2.61	2.77

* The AP Italian Language and Culture Exam was discontinued following the 2009 AP Exam administration and was reinstated in the 2011-12 school year.

* In 2013-14, the AP Spanish Language course and exam title was changed to AP Spanish Language and Culture.

* The AP Physics B Exam was discontinued following the 2014 AP Exam administration.

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AP® Five-Year School Score Summary (2017)

This report shows five years of data at the school, state and global levels. On the first page, a graph illustrates the year-over-year change in the percentage of AP students with scores of 3 or higher, next to a table that provides the overall total exams, total unique students and both the number and percentage of AP students with one or more scores of 3 or higher. On subsequent pages, the report provides subject-specific summary data by year: total exams, total exams by score and mean score.

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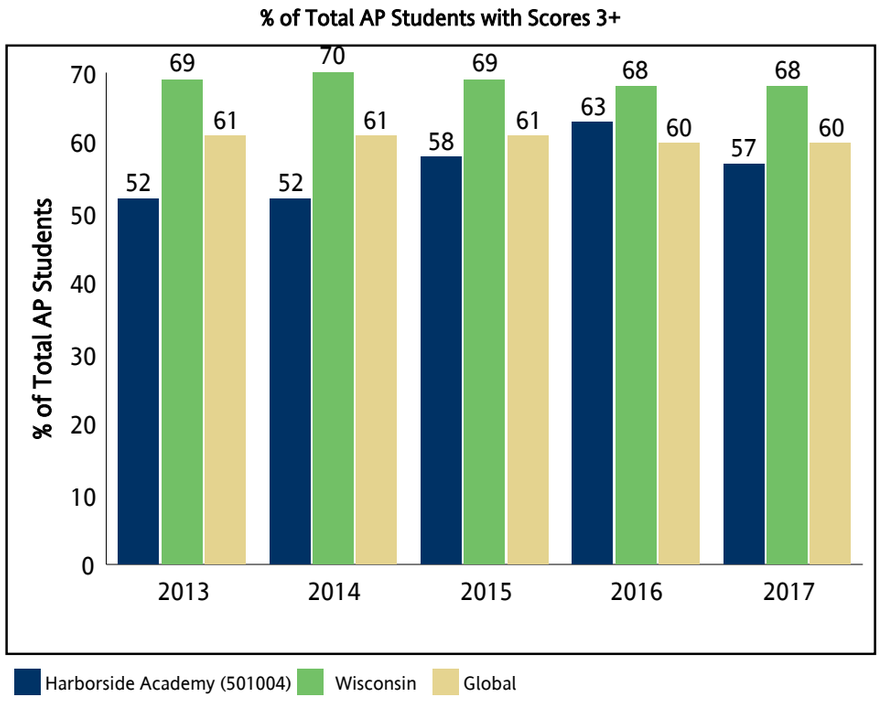
Harborside Academy (501004)



	2013	2014	2015	2016	2017
Harborside Academy (501004)					
Total AP Students	65	46	64	64	67
Number of Exams	90	65	99	95	113
AP Students with Scores 3+	34	24	37	40	38
% of Total AP Students with Scores 3+	52.3	52.2	57.8	62.5	56.7
Wisconsin					
Total AP Students	36,882	38,629	41,489	44,296	47,189
Number of Exams	61,472	64,916	70,246	74,785	80,201
AP Students with Scores 3+	25,501	27,006	28,667	30,088	32,115
% of Total AP Students with Scores 3+	69.1	69.9	69.1	67.9	68.1
Global					
Total AP Students	2,225,625	2,352,026	2,497,164	2,625,319	2,761,755
Number of Exams	3,955,410	4,199,454	4,516,044	4,741,566	5,005,281
AP Students with Scores 3+	1,354,800	1,442,136	1,515,264	1,583,115	1,665,651
% of Total AP Students with Scores 3+	60.9	61.3	60.7	60.3	60.3

"Success" on an AP Exam is defined as an exam score of 3 or higher, which represents the score point that research finds predictive of college success and college graduation. These findings have held consistent across the decades. One example of such a study comes from the National Center for Educational Accountability, which found that an AP Exam score, and a score of 3 or higher in particular, is a strong predictor of a student's ability to persist in college and earn a bachelor's degree.

The data in this report differs from other College Board reports, such as *The AP Cohort Data Report*, which tracks exams taken by seniors throughout their time in high school (cohort-based) and includes public school data only.

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AP® Five-Year School Score Summary (2017)

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Harborside Academy (501004)

	Harborside Academy (501004)					Wisconsin					Global				
Biology	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						206	221	260	257	290	11,188	14,169	14,351	15,738	16,470
4						881	932	1,070	991	1,205	44,035	47,989	49,708	50,161	53,707
3	1					1,532	1,558	1,734	1,666	2,025	73,865	75,312	80,744	80,218	93,869
2						979	881	886	1,051	1,070	59,665	58,024	61,741	68,659	70,367
1						132	141	127	146	138	15,149	18,770	18,384	24,163	21,666
Total Exams	1					3,730	3,733	4,077	4,111	4,728	203,902	214,264	224,928	238,939	256,079
Mean Score	3.00					3.01	3.06	3.11	3.04	3.09	2.88	2.91	2.91	2.85	2.89

Calculus AB	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	3	3	3	2	1	1,293	1,400	1,257	1,389	1,122	67,783	72,511	66,411	76,875	59,587
4	3	2			1	1,126	1,095	1,158	1,104	1,308	51,440	48,984	51,769	53,696	57,081
3	2	1	3	2	3	1,131	1,287	1,337	1,282	1,530	49,101	52,076	56,482	53,743	66,214
2		1		2	2	719	724	660	722	1,501	31,833	31,360	31,371	30,109	69,896
1	3	2	3	1	1	1,271	1,383	1,409	1,538	832	83,261	89,775	98,285	95,103	64,892
Total Exams	11	9	9	7	8	5,540	5,889	5,821	6,035	6,293	283,418	294,706	304,318	309,526	317,670
Mean Score	3.27	3.33	3.00	3.00	2.88	3.08	3.07	3.03	3.01	3.06	2.96	2.94	2.86	2.96	2.93

Chemistry	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						385	225	181	195	185	26,535	15,047	14,178	16,203	16,079
4						600	530	477	473	489	30,081	25,155	24,703	23,994	25,924
3					1	643	849	1,010	905	932	26,318	38,533	43,084	42,332	41,752
2						457	863	838	799	961	20,841	38,359	38,033	38,067	41,811
1						581	503	423	386	431	36,403	31,946	33,277	33,371	34,110
Total Exams					1	2,666	2,970	2,929	2,758	2,998	140,178	149,040	153,275	153,967	159,676
Mean Score					3.00	2.91	2.70	2.71	2.74	2.68	2.93	2.68	2.66	2.69	2.67

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AP® Five-Year School Score Summary (2017)

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Harborside Academy (501004)

	Harborside Academy (501004)					Wisconsin					Global				
English Language and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1		1	2		739	670	714	694	759	48,927	48,497	52,434	58,643	53,195
4	4	3	1	1	1	1,231	1,485	1,696	1,511	1,861	77,548	90,548	97,172	96,625	106,531
3	4	3	6	1	5	2,129	2,255	2,356	2,445	2,886	136,438	143,859	144,613	149,154	161,290
2	6	6	1	3	4	1,596	1,699	1,885	2,356	2,331	142,270	152,507	157,552	176,254	179,108
1	1	1	1		1	378	391	457	400	512	72,552	71,713	78,604	69,453	83,279
Total Exams	16	13	10	7	11	6,073	6,500	7,108	7,406	8,349	477,735	507,124	530,375	550,129	583,403
Mean Score	2.88	2.62	3.00	3.29	2.55	3.06	3.05	3.05	2.97	3.00	2.77	2.79	2.79	2.82	2.77

English Literature and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						452	470	410	460	431	29,387	30,531	30,460	30,224	27,622
4	1					1,376	1,366	1,369	1,410	1,203	72,663	70,802	73,125	72,400	65,346
3			1			2,607	2,399	2,577	2,498	2,426	121,601	118,081	122,631	119,608	120,712
2						2,105	2,140	2,133	2,204	2,222	122,374	131,572	131,534	135,861	137,888
1						299	280	269	348	340	40,506	47,745	45,004	48,942	54,967
Total Exams	1		1			6,839	6,655	6,758	6,920	6,622	386,531	398,731	402,754	407,035	406,535
Mean Score	4.00		3.00			2.94	2.94	2.93	2.92	2.87	2.81	2.76	2.78	2.75	2.69

Environmental Science	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	2			1	1	122	156	155	172	240	9,456	10,883	10,771	11,381	15,154
4	6	5	4	4	3	375	420	486	511	578	27,715	30,922	33,717	34,722	39,327
3	1	2	3	3		228	221	282	293	313	19,934	20,079	21,001	22,065	24,716
2	2	3	7	3	4	307	309	322	380	399	30,016	33,383	35,374	38,580	39,231
1	5		6	4	2	179	189	182	205	229	31,362	35,563	38,583	42,873	41,977
Total Exams	16	10	20	15	10	1,211	1,295	1,427	1,561	1,759	118,483	130,830	139,446	149,621	160,405
Mean Score	2.88	3.20	2.25	2.67	2.70	2.96	3.03	3.08	3.04	3.11	2.61	2.60	2.59	2.55	2.67

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AP® Five-Year School Score Summary (2017)

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Harborside Academy (501004)

	Harborside Academy (501004)					Wisconsin					Global				
French Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						29	23	15	30	26	4,141	4,044	3,899	4,121	3,980
4						50	40	44	49	42	5,580	5,770	5,972	6,224	5,831
3				1		83	82	84	84	114	6,997	7,457	7,916	7,568	7,829
2						44	41	50	51	75	3,775	3,871	4,468	4,359	4,632
1						12	8	7	6	11	1,051	1,162	1,309	1,305	1,302
Total Exams				1		218	194	200	220	268	21,544	22,304	23,564	23,577	23,574
Mean Score				3.00		3.18	3.15	3.05	3.21	2.99	3.37	3.34	3.28	3.32	3.28

Psychology	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			2	6	4	2,103	1,936	2,246	2,298	2,511	50,833	48,766	56,123	56,174	57,973
4			5	5	11	2,537	2,818	2,827	3,143	3,172	63,606	69,937	73,009	76,757	76,236
3			5	8	10	1,841	1,988	1,952	2,067	2,202	46,778	51,953	55,148	56,210	60,629
2			3	6	7	1,019	1,142	1,083	1,337	1,364	31,026	35,206	36,423	41,698	44,382
1			4	3	5	998	1,132	1,183	1,242	1,250	47,277	54,608	57,657	63,881	64,409
Total Exams			19	28	37	8,498	9,016	9,291	10,087	10,499	239,520	260,470	278,360	294,720	303,629
Mean Score			2.89	3.18	3.05	3.44	3.36	3.42	3.39	3.41	3.17	3.09	3.12	3.07	3.06

Spanish Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1	1	1			196	249	262	296	237	34,686	34,303	41,066	45,307	34,410
4		3	2		2	238	411	432	481	515	35,573	48,729	53,023	57,019	61,680
3		1	1	3	2	229	381	438	455	507	27,617	42,264	41,934	44,832	61,133
2						201	112	145	154	211	22,818	13,306	13,548	15,764	18,577
1						168	16	16	17	18	19,014	2,382	2,075	2,528	3,082
Total Exams	1	5	4	3	4	1,032	1,169	1,293	1,403	1,488	139,708	140,984	151,646	165,450	178,882
Mean Score	5.00	4.00	4.00	3.00	3.50	3.09	3.65	3.60	3.63	3.50	3.32	3.70	3.77	3.77	3.59

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Harborside Academy (501004)

	Harborside Academy (501004)					Wisconsin					Global				
Statistics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5					2	397	470	477	555	584	21,678	26,333	26,390	29,674	29,454
4					2	755	840	844	1,067	781	34,573	38,613	37,489	44,966	34,512
3					7	889	1,050	1,133	1,130	1,312	42,148	45,137	49,495	51,457	53,664
2					3	644	663	669	623	926	31,879	32,794	36,556	32,193	43,734
1					5	354	424	453	551	706	39,757	41,746	46,435	48,876	55,477
Total Exams					19	3,039	3,447	3,576	3,926	4,309	170,035	184,623	196,365	207,166	216,841
Mean Score					2.63	3.06	3.08	3.06	3.12	2.91	2.80	2.86	2.80	2.88	2.72

Studio Art: 2-D Design Portfolio	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						37	47	53	58	82	3,411	3,795	4,892	4,542	6,447
4						90	113	114	123	127	7,931	8,055	8,177	10,412	10,363
3						143	149	142	189	166	8,757	9,646	9,200	11,109	11,569
2		2				75	77	65	78	62	4,553	5,039	5,077	4,952	4,423
1						6	6	8	3	1	893	969	1,385	796	707
Total Exams		2				351	392	382	451	438	25,545	27,504	28,731	31,811	33,509
Mean Score		2.00				3.22	3.30	3.36	3.34	3.52	3.33	3.32	3.35	3.41	3.52

United States Government and Politics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	2	1	3	1	1	446	505	452	628	641	28,845	32,336	27,546	36,539	35,692
4	6	2	1	4	1	568	553	651	631	666	36,550	33,898	38,345	40,193	39,911
3	12	7	11	11	4	1,054	1,183	1,099	1,117	1,287	66,864	71,829	70,019	74,014	82,498
2	14	7	8	9	12	862	903	892	971	1,028	63,612	67,126	70,847	71,302	78,989
1	9	9	13	9	5	447	465	545	552	780	60,346	66,996	76,566	74,976	83,884
Total Exams	43	26	36	34	23	3,377	3,609	3,639	3,899	4,402	256,217	272,185	283,323	297,024	320,974
Mean Score	2.49	2.19	2.25	2.38	2.17	2.91	2.93	2.88	2.95	2.85	2.65	2.62	2.54	2.64	2.58

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Harborside Academy (501004)

	Harborside Academy (501004)					Wisconsin					Global				
World History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						89	125	114	111	204	13,506	16,430	17,460	18,994	25,540
4						259	354	344	423	607	31,504	39,498	37,745	44,534	59,843
3						539	722	806	900	851	67,735	78,640	83,601	84,010	80,166
2						584	535	646	781	844	69,756	68,632	79,600	82,100	88,971
1	1					302	192	160	337	343	48,159	43,733	47,968	56,523	46,233
Total Exams	1					1,773	1,928	2,070	2,552	2,849	230,660	246,933	266,374	286,161	300,753
Mean Score	1.00					2.58	2.84	2.81	2.68	2.82	2.53	2.66	2.61	2.61	2.77

* In 2011-12, the AP French Language course and exam title was changed to AP French Language and Culture.

* In 2013-14, the AP Spanish Language course and exam title was changed to AP Spanish Language and Culture.

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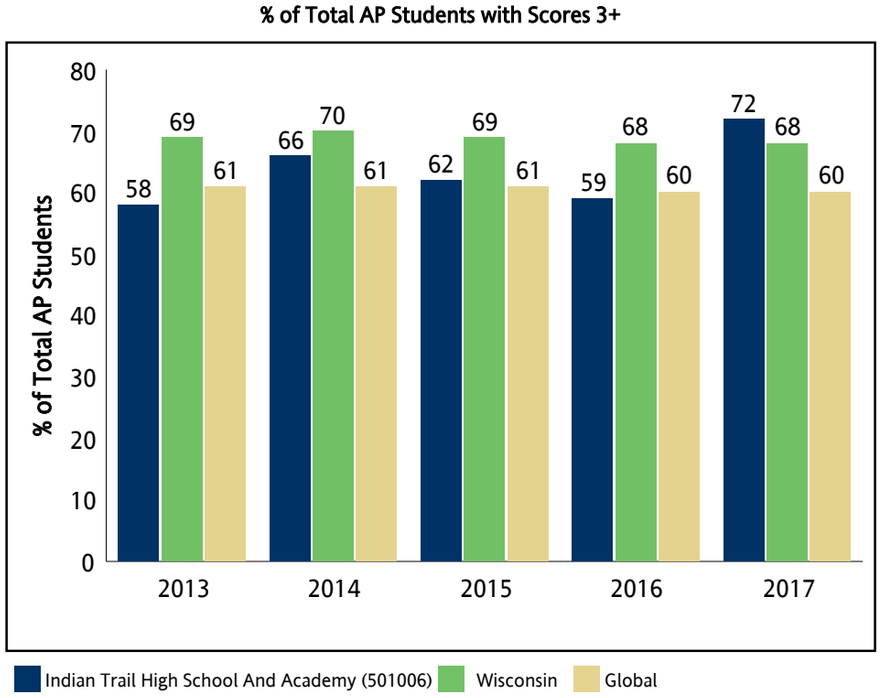
AP® Five-Year School Score Summary (2017)

This report shows five years of data at the school, state and global levels. On the first page, a graph illustrates the year-over-year change in the percentage of AP students with scores of 3 or higher, next to a table that provides the overall total exams, total unique students and both the number and percentage of AP students with one or more scores of 3 or higher. On subsequent pages, the report provides subject-specific summary data by year: total exams, total exams by score and mean score.

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Indian Trail High School And Academy (501006)



	2013	2014	2015	2016	2017
Indian Trail High School And Academy (501006)					
Total AP Students	180	237	252	281	248
Number of Exams	282	356	395	452	380
AP Students with Scores 3+	104	157	155	167	178
% of Total AP Students with Scores 3+	57.8	66.2	61.5	59.4	71.8
Wisconsin					
Total AP Students	36,882	38,629	41,489	44,296	47,189
Number of Exams	61,472	64,916	70,246	74,785	80,201
AP Students with Scores 3+	25,501	27,006	28,667	30,088	32,115
% of Total AP Students with Scores 3+	69.1	69.9	69.1	67.9	68.1
Global					
Total AP Students	2,225,625	2,352,026	2,497,164	2,625,319	2,761,755
Number of Exams	3,955,410	4,199,454	4,516,044	4,741,566	5,005,281
AP Students with Scores 3+	1,354,800	1,442,136	1,515,264	1,583,115	1,665,651
% of Total AP Students with Scores 3+	60.9	61.3	60.7	60.3	60.3

"Success" on an AP Exam is defined as an exam score of 3 or higher, which represents the score point that research finds predictive of college success and college graduation. These findings have held consistent across the decades. One example of such a study comes from the National Center for Educational Accountability, which found that an AP Exam score, and a score of 3 or higher in particular, is a strong predictor of a student's ability to persist in college and earn a bachelor's degree.

The data in this report differs from other College Board reports, such as *The AP Cohort Data Report*, which tracks exams taken by seniors throughout their time in high school (cohort-based) and includes public school data only.

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AP® Five-Year School Score Summary (2017)

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Indian Trail High School And Academy (501006)

	Indian Trail High School And Academy (501006)					Wisconsin					Global				
Biology	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1			1	2	206	221	260	257	290	11,188	14,169	14,351	15,738	16,470
4	3	1	5	8	6	881	932	1,070	991	1,205	44,035	47,989	49,708	50,161	53,707
3	4	6	15	11	10	1,532	1,558	1,734	1,666	2,025	73,865	75,312	80,744	80,218	93,869
2	2	5	8	6		979	881	886	1,051	1,070	59,665	58,024	61,741	68,659	70,367
1			1			132	141	127	146	138	15,149	18,770	18,384	24,163	21,666
Total Exams	10	12	29	26	18	3,730	3,733	4,077	4,111	4,728	203,902	214,264	224,928	238,939	256,079
Mean Score	3.30	2.67	2.83	3.15	3.56	3.01	3.06	3.11	3.04	3.09	2.88	2.91	2.91	2.85	2.89

Calculus AB	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			3	8	5	1,293	1,400	1,257	1,389	1,122	67,783	72,511	66,411	76,875	59,587
4		1	6	5	8	1,126	1,095	1,158	1,104	1,308	51,440	48,984	51,769	53,696	57,081
3			6	11	15	1,131	1,287	1,337	1,282	1,530	49,101	52,076	56,482	53,743	66,214
2		1	8	8	22	719	724	660	722	1,501	31,833	31,360	31,371	30,109	69,896
1			9	31	5	1,271	1,383	1,409	1,538	832	83,261	89,775	98,285	95,103	64,892
Total Exams		2	32	63	55	5,540	5,889	5,821	6,035	6,293	283,418	294,706	304,318	309,526	317,670
Mean Score		3.00	2.56	2.22	2.75	3.08	3.07	3.03	3.01	3.06	2.96	2.94	2.86	2.96	2.93

Calculus BC	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	2	5	1		1	703	832	787	960	858	47,972	54,335	54,148	60,907	56,706
4		1	3			359	385	381	381	477	16,896	18,525	19,551	19,248	24,101
3	2	10	3			395	406	496	492	564	18,762	18,200	21,482	21,481	26,467
2	2	1	1			147	123	159	155	417	5,950	5,966	6,505	7,207	18,746
1	8	10	1			250	269	312	240	92	15,018	15,259	17,725	16,461	7,101
Total Exams	14	27	9		1	1,854	2,015	2,135	2,228	2,408	104,598	112,285	119,411	125,304	133,121
Mean Score	2.00	2.63	3.22		5.00	3.60	3.69	3.55	3.75	3.66	3.73	3.81	3.72	3.81	3.79

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AP® Five-Year School Score Summary (2017)

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Indian Trail High School And Academy (501006)

	Indian Trail High School And Academy (501006)					Wisconsin					Global				
Calculus BC: AB Subscore	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	2	6	2		1	942	988	1,089	1,022	1,027	58,790	61,853	66,942	64,077	64,516
4	1	5	1			427	409	389	568	627	20,792	18,826	19,481	26,201	29,995
3	4	5	5			270	307	356	321	394	11,725	14,440	15,234	16,379	18,773
2	1	3	1			101	134	128	123	270	5,640	7,040	6,555	5,764	13,313
1	6	8				114	177	173	194	90	7,645	10,121	11,194	12,875	6,515
Total Exams	14	27	9		1	1,854	2,015	2,135	2,228	2,408	104,592	112,280	119,406	125,296	133,112
Mean Score	2.43	2.93	3.44		5.00	4.07	3.94	3.98	3.94	3.93	4.12	4.03	4.04	3.98	4.00

Chemistry	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		1				385	225	181	195	185	26,535	15,047	14,178	16,203	16,079
4	2	5	1	1		600	530	477	473	489	30,081	25,155	24,703	23,994	25,924
3		2	1	1		643	849	1,010	905	932	26,318	38,533	43,084	42,332	41,752
2	3	2	2	2		457	863	838	799	961	20,841	38,359	38,033	38,067	41,811
1		2	3	2		581	503	423	386	431	36,403	31,946	33,277	33,371	34,110
Total Exams	5	12	7	6		2,666	2,970	2,929	2,758	2,998	140,178	149,040	153,275	153,967	159,676
Mean Score	2.80	3.08	2.00	2.17		2.91	2.70	2.71	2.74	2.68	2.93	2.68	2.66	2.69	2.67

Chinese Language and Culture	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						39	41	35	28	45	7,462	7,655	8,041	8,261	9,468
4						5	10	9	7	7	1,577	1,634	1,982	2,166	1,638
3						5	2	4	11	8	1,154	1,356	1,477	1,908	1,698
2								1	1	2	245	324	384	348	448
1					1	3	4	3	5	14	321	329	524	508	648
Total Exams					1	52	57	52	52	76	10,759	11,298	12,408	13,191	13,900
Mean Score					1.00	4.48	4.47	4.38	4.00	3.88	4.45	4.41	4.34	4.31	4.35

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AP® Five-Year School Score Summary (2017)

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Indian Trail High School And Academy (501006)

	Indian Trail High School And Academy (501006)					Wisconsin					Global				
English Language and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	6	3	7	3	4	739	670	714	694	759	48,927	48,497	52,434	58,643	53,195
4	14	12	16	11	15	1,231	1,485	1,696	1,511	1,861	77,548	90,548	97,172	96,625	106,531
3	28	19	17	26	29	2,129	2,255	2,356	2,445	2,886	136,438	143,859	144,613	149,154	161,290
2	15	13	28	24	16	1,596	1,699	1,885	2,356	2,331	142,270	152,507	157,552	176,254	179,108
1	3	1		4		378	391	457	400	512	72,552	71,713	78,604	69,453	83,279
Total Exams	66	48	68	68	64	6,073	6,500	7,108	7,406	8,349	477,735	507,124	530,375	550,129	583,403
Mean Score	3.08	3.06	3.03	2.78	3.11	3.06	3.05	3.05	2.97	3.00	2.77	2.79	2.79	2.82	2.77

English Literature and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		3	1	2	2	452	470	410	460	431	29,387	30,531	30,460	30,224	27,622
4		10	9	8	10	1,376	1,366	1,369	1,410	1,203	72,663	70,802	73,125	72,400	65,346
3		28	17	15	12	2,607	2,399	2,577	2,498	2,426	121,601	118,081	122,631	119,608	120,712
2	2	10	13	15	2	2,105	2,140	2,133	2,204	2,222	122,374	131,572	131,534	135,861	137,888
1			1		1	299	280	269	348	340	40,506	47,745	45,004	48,942	54,967
Total Exams	2	51	41	40	27	6,839	6,655	6,758	6,920	6,622	386,531	398,731	402,754	407,035	406,535
Mean Score	2.00	3.12	2.90	2.93	3.37	2.94	2.94	2.93	2.92	2.87	2.81	2.76	2.78	2.75	2.69

Environmental Science	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						122	156	155	172	240	9,456	10,883	10,771	11,381	15,154
4						375	420	486	511	578	27,715	30,922	33,717	34,722	39,327
3	1					228	221	282	293	313	19,934	20,079	21,001	22,065	24,716
2						307	309	322	380	399	30,016	33,383	35,374	38,580	39,231
1						179	189	182	205	229	31,362	35,563	38,583	42,873	41,977
Total Exams	1					1,211	1,295	1,427	1,561	1,759	118,483	130,830	139,446	149,621	160,405
Mean Score	3.00					2.96	3.03	3.08	3.04	3.11	2.61	2.60	2.59	2.55	2.67

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AP® Five-Year School Score Summary (2017)

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Indian Trail High School And Academy (501006)

	Indian Trail High School And Academy (501006)					Wisconsin					Global				
French Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						29	23	15	30	26	4,141	4,044	3,899	4,121	3,980
4						50	40	44	49	42	5,580	5,770	5,972	6,224	5,831
3			1	2		83	82	84	84	114	6,997	7,457	7,916	7,568	7,829
2			2	1	1	44	41	50	51	75	3,775	3,871	4,468	4,359	4,632
1						12	8	7	6	11	1,051	1,162	1,309	1,305	1,302
Total Exams			3	3	1	218	194	200	220	268	21,544	22,304	23,564	23,577	23,574
Mean Score			2.33	2.67	2.00	3.18	3.15	3.05	3.21	2.99	3.37	3.34	3.28	3.32	3.28

Macroeconomics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5				1		227	284	385	433	470	15,878	18,908	19,390	23,694	24,765
4						352	434	530	569	602	25,298	27,343	28,223	31,776	33,127
3						265	292	319	345	388	18,072	21,758	21,685	21,841	24,010
2						241	232	253	300	313	20,745	20,497	21,579	22,957	22,401
1		1				152	144	165	201	198	28,919	29,036	36,195	35,182	37,841
Total Exams		1		1		1,237	1,386	1,652	1,848	1,971	108,912	117,542	127,072	135,450	142,144
Mean Score		1.00		5.00		3.21	3.35	3.43	3.40	3.42	2.80	2.89	2.79	2.90	2.89

Microeconomics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5				6	6	198	205	257	267	444	12,268	11,847	15,129	14,692	20,711
4		1		5	4	375	516	526	563	607	19,330	21,527	22,617	22,796	24,832
3				7	4	279	361	328	483	400	13,524	15,404	15,282	18,204	15,836
2				3	3	190	228	221	258	219	10,079	11,546	10,822	11,278	10,531
1					2	96	121	118	210	175	12,457	14,168	15,048	15,700	16,345
Total Exams		1		21	19	1,138	1,431	1,450	1,781	1,845	67,658	74,492	78,898	82,670	88,255
Mean Score		4.00		3.67	3.47	3.34	3.32	3.40	3.24	3.50	3.13	3.07	3.15	3.11	3.26

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Indian Trail High School And Academy (501006)

	Indian Trail High School And Academy (501006)					Wisconsin					Global				
Music Theory	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			1			43	47	51	29	55	3,469	3,559	3,609	3,517	3,758
4			2			42	53	39	49	43	3,068	3,160	3,267	3,323	3,363
3			1		1	80	82	84	56	67	4,709	4,601	4,681	4,687	4,813
2				1		68	64	79	64	68	4,605	4,370	4,713	5,045	4,806
1						23	23	21	12	31	2,578	2,395	2,706	2,826	2,898
Total Exams			4	1	1	256	269	274	210	264	18,429	18,085	18,976	19,398	19,638
Mean Score			4.00	2.00	3.00	3.05	3.14	3.07	3.09	3.09	3.01	3.06	3.02	2.98	3.01

Music Aural Subscore	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			1			41	55	47	31	53	3,429	3,631	3,602	3,511	3,652
4			3		1	42	50	51	37	49	2,974	3,064	3,378	3,253	3,579
3						78	70	81	59	65	5,035	4,732	4,532	4,524	4,650
2				1		75	73	72	70	71	4,296	4,387	4,820	5,419	4,818
1						19	21	23	13	26	2,692	2,271	2,643	2,690	2,925
Total Exams			4	1	1	255	269	274	210	264	18,426	18,085	18,975	19,397	19,624
Mean Score			4.25	2.00	4.00	3.04	3.17	3.10	3.01	3.12	3.01	3.08	3.03	2.97	3.01

Music Non-Aural Subscore	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						41	45	40	30	46	3,466	3,423	3,551	3,595	3,743
4			1			46	47	58	48	45	2,884	3,278	3,355	3,393	3,226
3			2			76	97	80	59	66	4,704	4,673	4,659	4,411	4,763
2			1	1	1	63	52	76	54	79	4,704	4,396	4,759	5,105	5,055
1						29	28	20	19	28	2,668	2,315	2,651	2,893	2,837
Total Exams			4	1	1	255	269	274	210	264	18,426	18,085	18,975	19,397	19,624
Mean Score			3.00	2.00	2.00	3.03	3.11	3.08	3.08	3.01	2.99	3.06	3.02	2.98	3.00

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AP® Five-Year School Score Summary (2017)

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Indian Trail High School And Academy (501006)

	Indian Trail High School And Academy (501006)					Wisconsin					Global				
Physics 1	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5				1				112	122	133			8,619	7,789	9,300
4				2	2			529	483	487			23,632	23,885	27,711
3				7	1			742	765	669			35,691	36,033	34,761
2				12	8			1,037	925	907			51,239	51,310	49,844
1				6	1			543	541	462			53,337	51,296	49,924
Total Exams				28	12			2,963	2,836	2,658			172,518	170,313	171,540
Mean Score				2.29	2.33			2.54	2.55	2.59			2.32	2.33	2.40

Physics 2	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5								20	30	53			1,767	2,513	3,267
4								66	104	77			2,836	4,507	4,205
3					1			182	285	211			6,938	9,249	8,547
2								180	213	140			7,166	8,086	6,904
1								24	34	37			2,010	2,141	2,229
Total Exams					1			472	666	518			20,717	26,496	25,152
Mean Score					3.00			2.74	2.82	2.94			2.77	2.89	2.98

Psychology	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	4	11	9	8	7	2,103	1,936	2,246	2,298	2,511	50,833	48,766	56,123	56,174	57,973
4	13	20	10	16	16	2,537	2,818	2,827	3,143	3,172	63,606	69,937	73,009	76,757	76,236
3	11	10	14	19	13	1,841	1,988	1,952	2,067	2,202	46,778	51,953	55,148	56,210	60,629
2	9	12	12	5	7	1,019	1,142	1,083	1,337	1,364	31,026	35,206	36,423	41,698	44,382
1	12	10	21	10	7	998	1,132	1,183	1,242	1,250	47,277	54,608	57,657	63,881	64,409
Total Exams	49	63	66	58	50	8,498	9,016	9,291	10,087	10,499	239,520	260,470	278,360	294,720	303,629
Mean Score	2.76	3.16	2.61	3.12	3.18	3.44	3.36	3.42	3.39	3.41	3.17	3.09	3.12	3.07	3.06

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AP® Five-Year School Score Summary (2017)

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Indian Trail High School And Academy (501006)

	Indian Trail High School And Academy (501006)					Wisconsin					Global				
Spanish Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		3	2	5	3	196	249	262	296	237	34,686	34,303	41,066	45,307	34,410
4		5	7	4	7	238	411	432	481	515	35,573	48,729	53,023	57,019	61,680
3		3	5	4	6	229	381	438	455	507	27,617	42,264	41,934	44,832	61,133
2		1	2	3	1	201	112	145	154	211	22,818	13,306	13,548	15,764	18,577
1						168	16	16	17	18	19,014	2,382	2,075	2,528	3,082
Total Exams		12	16	16	17	1,032	1,169	1,293	1,403	1,488	139,708	140,984	151,646	165,450	178,882
Mean Score		3.83	3.56	3.69	3.71	3.09	3.65	3.60	3.63	3.50	3.32	3.70	3.77	3.77	3.59

Statistics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5				2	1	397	470	477	555	584	21,678	26,333	26,390	29,674	29,454
4		1	2	3	1	755	840	844	1,067	781	34,573	38,613	37,489	44,966	34,512
3	1	5	6	1	7	889	1,050	1,133	1,130	1,312	42,148	45,137	49,495	51,457	53,664
2	3	7	2	3	7	644	663	669	623	926	31,879	32,794	36,556	32,193	43,734
1		8	1	1	5	354	424	453	551	706	39,757	41,746	46,435	48,876	55,477
Total Exams	4	21	11	10	21	3,039	3,447	3,576	3,926	4,309	170,035	184,623	196,365	207,166	216,841
Mean Score	2.25	1.95	2.82	3.20	2.33	3.06	3.08	3.06	3.12	2.91	2.80	2.86	2.80	2.88	2.72

Studio Art: 2-D Design Portfolio	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						37	47	53	58	82	3,411	3,795	4,892	4,542	6,447
4			2	1	2	90	113	114	123	127	7,931	8,055	8,177	10,412	10,363
3		3	7	2	1	143	149	142	189	166	8,757	9,646	9,200	11,109	11,569
2		1	4	1		75	77	65	78	62	4,553	5,039	5,077	4,952	4,423
1			1			6	6	8	3	1	893	969	1,385	796	707
Total Exams		4	14	4	3	351	392	382	451	438	25,545	27,504	28,731	31,811	33,509
Mean Score		2.75	2.71	3.00	3.67	3.22	3.30	3.36	3.34	3.52	3.33	3.32	3.35	3.41	3.52

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Indian Trail High School And Academy (501006)

	Indian Trail High School And Academy (501006)					Wisconsin					Global				
Studio Art: 3-D Design Portfolio	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						7	11	16	14	12	459	471	567	668	672
4				1		13	12	13	19	13	813	837	1,087	1,305	1,227
3		1		1	1	28	22	31	30	30	1,574	1,569	1,657	1,820	2,093
2						18	19	17	15	16	1,093	1,199	1,136	1,133	1,404
1						4	1				246	204	151	155	179
Total Exams		1		2	1	70	65	77	78	71	4,185	4,280	4,598	5,081	5,575
Mean Score		3.00		3.50	3.00	3.01	3.20	3.36	3.41	3.30	3.03	3.04	3.17	3.24	3.15

Studio Art: Drawing Portfolio	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5				1		36	39	41	40	52	2,576	2,749	2,872	3,196	4,472
4				1	1	41	47	52	91	74	3,451	3,611	4,100	5,100	5,634
3	1	1	3	2	1	104	106	113	130	112	7,242	7,007	7,470	7,310	7,302
2	3	1	2			40	50	46	31	28	3,226	3,316	3,466	2,779	2,653
1						1	6	1	5	3	518	679	732	536	387
Total Exams	4	2	5	4	2	222	248	253	297	269	17,013	17,362	18,640	18,921	20,448
Mean Score	2.25	2.50	2.60	3.75	3.50	3.32	3.25	3.34	3.44	3.54	3.26	3.26	3.26	3.40	3.55

United States Government and Politics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	9	1	4	7	1	446	505	452	628	641	28,845	32,336	27,546	36,539	35,692
4	10	4	6	3	4	568	553	651	631	666	36,550	33,898	38,345	40,193	39,911
3	18	5	9	12	5	1,054	1,183	1,099	1,117	1,287	66,864	71,829	70,019	74,014	82,498
2	13	3	2	5	5	862	903	892	971	1,028	63,612	67,126	70,847	71,302	78,989
1	8	1	2	1	2	447	465	545	552	780	60,346	66,996	76,566	74,976	83,884
Total Exams	58	14	23	28	17	3,377	3,609	3,639	3,899	4,402	256,217	272,185	283,323	297,024	320,974
Mean Score	2.98	3.07	3.35	3.36	2.82	2.91	2.93	2.88	2.95	2.85	2.65	2.62	2.54	2.64	2.58

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AP® Five-Year School Score Summary (2017)

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Indian Trail High School And Academy (501006)

	Indian Trail High School And Academy (501006)					Wisconsin					Global				
United States History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	2	4	4	2	3	734	761	677	899	865	47,306	50,976	44,897	59,029	54,962
4	7	10	1	2	2	1,785	1,740	1,498	1,467	1,543	95,758	98,927	85,806	88,709	90,210
3	5	6	6	4	5	1,687	1,635	1,839	1,794	1,845	96,020	93,548	112,701	111,449	113,675
2	7	5	8	1	4	1,750	1,758	1,635	1,709	1,680	120,095	130,143	118,045	114,930	119,562
1	1		6	1	2	671	718	1,079	1,175	1,261	85,449	91,384	115,077	120,395	130,552
Total Exams	22	25	25	10	16	6,627	6,612	6,728	7,044	7,194	444,628	464,978	476,526	494,512	508,961
Mean Score	3.09	3.52	2.56	3.30	3.00	3.02	3.01	2.86	2.89	2.87	2.77	2.76	2.64	2.70	2.65

World History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		1			5	89	125	114	111	204	13,506	16,430	17,460	18,994	25,540
4	3	6	4		14	259	354	344	423	607	31,504	39,498	37,745	44,534	59,843
3	12	18	16	21	20	539	722	806	900	851	67,735	78,640	83,601	84,010	80,166
2	22	26	20	32	12	584	535	646	781	844	69,756	68,632	79,600	82,100	88,971
1	10	9	2	10	2	302	192	160	337	343	48,159	43,733	47,968	56,523	46,233
Total Exams	47	60	42	63	53	1,773	1,928	2,070	2,552	2,849	230,660	246,933	266,374	286,161	300,753
Mean Score	2.17	2.40	2.52	2.17	3.15	2.58	2.84	2.81	2.68	2.82	2.53	2.66	2.61	2.61	2.77

* In 2011-12, the AP French Language course and exam title was changed to AP French Language and Culture.

* In 2013-14, the AP Spanish Language course and exam title was changed to AP Spanish Language and Culture.

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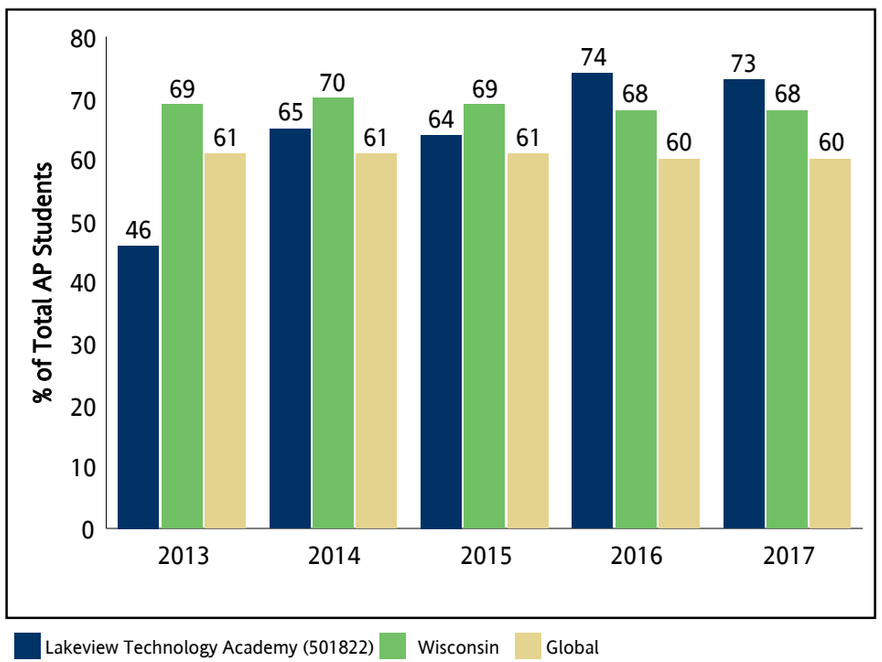
AP® Five-Year School Score Summary (2017)

This report shows five years of data at the school, state and global levels. On the first page, a graph illustrates the year-over-year change in the percentage of AP students with scores of 3 or higher, next to a table that provides the overall total exams, total unique students and both the number and percentage of AP students with one or more scores of 3 or higher. On subsequent pages, the report provides subject-specific summary data by year: total exams, total exams by score and mean score.

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Lakeview Technology Academy (501822)

% of Total AP Students with Scores 3+



	2013	2014	2015	2016	2017
Lakeview Technology Academy (501822)					
Total AP Students	54	62	89	93	94
Number of Exams	91	123	162	161	143
AP Students with Scores 3+	25	40	57	69	69
% of Total AP Students with Scores 3+	46.3	64.5	64.0	74.2	73.4
Wisconsin					
Total AP Students	36,882	38,629	41,489	44,296	47,189
Number of Exams	61,472	64,916	70,246	74,785	80,201
AP Students with Scores 3+	25,501	27,006	28,667	30,088	32,115
% of Total AP Students with Scores 3+	69.1	69.9	69.1	67.9	68.1
Global					
Total AP Students	2,225,625	2,352,026	2,497,164	2,625,319	2,761,755
Number of Exams	3,955,410	4,199,454	4,516,044	4,741,566	5,005,281
AP Students with Scores 3+	1,354,800	1,442,136	1,515,264	1,583,115	1,665,651
% of Total AP Students with Scores 3+	60.9	61.3	60.7	60.3	60.3

"Success" on an AP Exam is defined as an exam score of 3 or higher, which represents the score point that research finds predictive of college success and college graduation. These findings have held consistent across the decades. One example of such a study comes from the National Center for Educational Accountability, which found that an AP Exam score, and a score of 3 or higher in particular, is a strong predictor of a student's ability to persist in college and earn a bachelor's degree.

The data in this report differs from other College Board reports, such as *The AP Cohort Data Report*, which tracks exams taken by seniors throughout their time in high school (cohort-based) and includes public school data only.

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Lakeview Technology Academy (501822)

	Lakeview Technology Academy (501822)					Wisconsin					Global				
Biology	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						206	221	260	257	290	11,188	14,169	14,351	15,738	16,470
4				4	4	881	932	1,070	991	1,205	44,035	47,989	49,708	50,161	53,707
3				6	3	1,532	1,558	1,734	1,666	2,025	73,865	75,312	80,744	80,218	93,869
2				3	2	979	881	886	1,051	1,070	59,665	58,024	61,741	68,659	70,367
1				1		132	141	127	146	138	15,149	18,770	18,384	24,163	21,666
Total Exams				14	9	3,730	3,733	4,077	4,111	4,728	203,902	214,264	224,928	238,939	256,079
Mean Score				2.93	3.22	3.01	3.06	3.11	3.04	3.09	2.88	2.91	2.91	2.85	2.89

Calculus AB	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	4	4	3		6	1,293	1,400	1,257	1,389	1,122	67,783	72,511	66,411	76,875	59,587
4	2	3	3	2	5	1,126	1,095	1,158	1,104	1,308	51,440	48,984	51,769	53,696	57,081
3	3	6	7	2	8	1,131	1,287	1,337	1,282	1,530	49,101	52,076	56,482	53,743	66,214
2	3		1	2	5	719	724	660	722	1,501	31,833	31,360	31,371	30,109	69,896
1	7	4	7	3		1,271	1,383	1,409	1,538	832	83,261	89,775	98,285	95,103	64,892
Total Exams	19	17	21	9	24	5,540	5,889	5,821	6,035	6,293	283,418	294,706	304,318	309,526	317,670
Mean Score	2.63	3.18	2.71	2.33	3.50	3.08	3.07	3.03	3.01	3.06	2.96	2.94	2.86	2.96	2.93

Calculus BC	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		1		9		703	832	787	960	858	47,972	54,335	54,148	60,907	56,706
4				4		359	385	381	381	477	16,896	18,525	19,551	19,248	24,101
3				3		395	406	496	492	564	18,762	18,200	21,482	21,481	26,467
2				2		147	123	159	155	417	5,950	5,966	6,505	7,207	18,746
1	1					250	269	312	240	92	15,018	15,259	17,725	16,461	7,101
Total Exams	1	1		18		1,854	2,015	2,135	2,228	2,408	104,598	112,285	119,411	125,304	133,121
Mean Score	1.00	5.00		4.11		3.60	3.69	3.55	3.75	3.66	3.73	3.81	3.72	3.81	3.79

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Lakeview Technology Academy (501822)

	Lakeview Technology Academy (501822)					Wisconsin					Global				
Calculus BC: AB Subscore	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		1		9		942	988	1,089	1,022	1,027	58,790	61,853	66,942	64,077	64,516
4				6		427	409	389	568	627	20,792	18,826	19,481	26,201	29,995
3	1			3		270	307	356	321	394	11,725	14,440	15,234	16,379	18,773
2						101	134	128	123	270	5,640	7,040	6,555	5,764	13,313
1						114	177	173	194	90	7,645	10,121	11,194	12,875	6,515
Total Exams	1	1		18		1,854	2,015	2,135	2,228	2,408	104,592	112,280	119,406	125,296	133,112
Mean Score	3.00	5.00		4.33		4.07	3.94	3.98	3.94	3.93	4.12	4.03	4.04	3.98	4.00

Chemistry	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						385	225	181	195	185	26,535	15,047	14,178	16,203	16,079
4					1	600	530	477	473	489	30,081	25,155	24,703	23,994	25,924
3				4	5	643	849	1,010	905	932	26,318	38,533	43,084	42,332	41,752
2				3	4	457	863	838	799	961	20,841	38,359	38,033	38,067	41,811
1				3		581	503	423	386	431	36,403	31,946	33,277	33,371	34,110
Total Exams				10	10	2,666	2,970	2,929	2,758	2,998	140,178	149,040	153,275	153,967	159,676
Mean Score				2.10	2.70	2.91	2.70	2.71	2.74	2.68	2.93	2.68	2.66	2.69	2.67

Chinese Language and Culture	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5				1		39	41	35	28	45	7,462	7,655	8,041	8,261	9,468
4						5	10	9	7	7	1,577	1,634	1,982	2,166	1,638
3						5	2	4	11	8	1,154	1,356	1,477	1,908	1,698
2								1	1	2	245	324	384	348	448
1						3	4	3	5	14	321	329	524	508	648
Total Exams				1		52	57	52	52	76	10,759	11,298	12,408	13,191	13,900
Mean Score				5.00		4.48	4.47	4.38	4.00	3.88	4.45	4.41	4.34	4.31	4.35

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Lakeview Technology Academy (501822)

	Lakeview Technology Academy (501822)					Wisconsin					Global				
Computer Science A	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5				1		78	66	96	113	148	8,285	8,397	12,015	12,117	14,779
4				2	1	99	96	147	127	145	8,295	9,122	12,135	11,951	12,753
3				5	2	51	78	90	169	158	4,353	6,588	7,505	13,439	13,328
2				7		23	23	39	76	62	2,160	3,007	3,529	7,208	6,972
1				1	1	58	80	94	106	74	8,042	12,205	14,018	13,419	13,045
Total Exams				16	4	309	343	466	591	587	31,135	39,319	49,202	58,134	60,877
Mean Score				2.69	2.75	3.38	3.13	3.24	3.11	3.39	3.21	2.96	3.09	3.04	3.15

Computer Science Principles	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5										77					6,185
4					3					134					9,741
3					6					217					17,946
2										47					9,418
1										8					6,204
Total Exams					9					483					49,494
Mean Score					3.33					3.47					3.01

English Language and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		2			2	739	670	714	694	759	48,927	48,497	52,434	58,643	53,195
4		7	7	3	4	1,231	1,485	1,696	1,511	1,861	77,548	90,548	97,172	96,625	106,531
3		22	16	9	9	2,129	2,255	2,356	2,445	2,886	136,438	143,859	144,613	149,154	161,290
2	1	16	16	4	8	1,596	1,699	1,885	2,356	2,331	142,270	152,507	157,552	176,254	179,108
1		2	8			378	391	457	400	512	72,552	71,713	78,604	69,453	83,279
Total Exams	1	49	47	16	23	6,073	6,500	7,108	7,406	8,349	477,735	507,124	530,375	550,129	583,403
Mean Score	2.00	2.82	2.47	2.94	3.00	3.06	3.05	3.05	2.97	3.00	2.77	2.79	2.79	2.82	2.77

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Lakeview Technology Academy (501822)

	Lakeview Technology Academy (501822)					Wisconsin					Global				
English Literature and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			2			452	470	410	460	431	29,387	30,531	30,460	30,224	27,622
4	2		3	6		1,376	1,366	1,369	1,410	1,203	72,663	70,802	73,125	72,400	65,346
3	12		5	3	2	2,607	2,399	2,577	2,498	2,426	121,601	118,081	122,631	119,608	120,712
2	24		3	11	3	2,105	2,140	2,133	2,204	2,222	122,374	131,572	131,534	135,861	137,888
1	4			1		299	280	269	348	340	40,506	47,745	45,004	48,942	54,967
Total Exams	42		13	21	5	6,839	6,655	6,758	6,920	6,622	386,531	398,731	402,754	407,035	406,535
Mean Score	2.29		3.31	2.67	2.40	2.94	2.94	2.93	2.92	2.87	2.81	2.76	2.78	2.75	2.69

French Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						29	23	15	30	26	4,141	4,044	3,899	4,121	3,980
4						50	40	44	49	42	5,580	5,770	5,972	6,224	5,831
3				1		83	82	84	84	114	6,997	7,457	7,916	7,568	7,829
2						44	41	50	51	75	3,775	3,871	4,468	4,359	4,632
1	1					12	8	7	6	11	1,051	1,162	1,309	1,305	1,302
Total Exams	1			1		218	194	200	220	268	21,544	22,304	23,564	23,577	23,574
Mean Score	1.00			3.00		3.18	3.15	3.05	3.21	2.99	3.37	3.34	3.28	3.32	3.28

Macroeconomics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			2			227	284	385	433	470	15,878	18,908	19,390	23,694	24,765
4			1			352	434	530	569	602	25,298	27,343	28,223	31,776	33,127
3						265	292	319	345	388	18,072	21,758	21,685	21,841	24,010
2						241	232	253	300	313	20,745	20,497	21,579	22,957	22,401
1						152	144	165	201	198	28,919	29,036	36,195	35,182	37,841
Total Exams			3			1,237	1,386	1,652	1,848	1,971	108,912	117,542	127,072	135,450	142,144
Mean Score			4.67			3.21	3.35	3.43	3.40	3.42	2.80	2.89	2.79	2.90	2.89

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Lakeview Technology Academy (501822)

	Lakeview Technology Academy (501822)					Wisconsin					Global				
Microeconomics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						198	205	257	267	444	12,268	11,847	15,129	14,692	20,711
4			2			375	516	526	563	607	19,330	21,527	22,617	22,796	24,832
3						279	361	328	483	400	13,524	15,404	15,282	18,204	15,836
2						190	228	221	258	219	10,079	11,546	10,822	11,278	10,531
1				1		96	121	118	210	175	12,457	14,168	15,048	15,700	16,345
Total Exams			2	1		1,138	1,431	1,450	1,781	1,845	67,658	74,492	78,898	82,670	88,255
Mean Score			4.00	1.00		3.34	3.32	3.40	3.24	3.50	3.13	3.07	3.15	3.11	3.26

Physics C: Mechanics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			1			125	162	153	136	183	12,230	15,297	15,910	17,189	20,082
4			1			126	194	197	157	213	11,145	12,055	14,754	14,371	14,936
3		4	2			100	141	161	102	106	8,648	8,782	10,582	9,594	8,712
2		1	1	1		85	65	66	64	65	6,081	5,960	6,138	6,965	6,851
1		4	1	1		46	27	29	30	22	4,793	4,995	5,530	5,053	4,462
Total Exams		9	6	2		482	589	606	489	589	42,897	47,089	52,914	53,172	55,043
Mean Score		2.00	3.00	1.50		3.41	3.68	3.63	3.62	3.80	3.46	3.57	3.56	3.60	3.71

Psychology	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			5	2		2,103	1,936	2,246	2,298	2,511	50,833	48,766	56,123	56,174	57,973
4		6	5	4		2,537	2,818	2,827	3,143	3,172	63,606	69,937	73,009	76,757	76,236
3		4	4	5		1,841	1,988	1,952	2,067	2,202	46,778	51,953	55,148	56,210	60,629
2		6	8	2		1,019	1,142	1,083	1,337	1,364	31,026	35,206	36,423	41,698	44,382
1		4	10	1		998	1,132	1,183	1,242	1,250	47,277	54,608	57,657	63,881	64,409
Total Exams		20	32	14		8,498	9,016	9,291	10,087	10,499	239,520	260,470	278,360	294,720	303,629
Mean Score		2.60	2.59	3.29		3.44	3.36	3.42	3.39	3.41	3.17	3.09	3.12	3.07	3.06

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Lakeview Technology Academy (501822)

Spanish Language and Culture *	Lakeview Technology Academy (501822)					Wisconsin					Global				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5						196	249	262	296	237	34,686	34,303	41,066	45,307	34,410
4				1		238	411	432	481	515	35,573	48,729	53,023	57,019	61,680
3						229	381	438	455	507	27,617	42,264	41,934	44,832	61,133
2						201	112	145	154	211	22,818	13,306	13,548	15,764	18,577
1						168	16	16	17	18	19,014	2,382	2,075	2,528	3,082
Total Exams				1		1,032	1,169	1,293	1,403	1,488	139,708	140,984	151,646	165,450	178,882
Mean Score				4.00		3.09	3.65	3.60	3.63	3.50	3.32	3.70	3.77	3.77	3.59

Statistics	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5					2	397	470	477	555	584	21,678	26,333	26,390	29,674	29,454
4				5	1	755	840	844	1,067	781	34,573	38,613	37,489	44,966	34,512
3				1	5	889	1,050	1,133	1,130	1,312	42,148	45,137	49,495	51,457	53,664
2					4	644	663	669	623	926	31,879	32,794	36,556	32,193	43,734
1					2	354	424	453	551	706	39,757	41,746	46,435	48,876	55,477
Total Exams				6	14	3,039	3,447	3,576	3,926	4,309	170,035	184,623	196,365	207,166	216,841
Mean Score				3.83	2.79	3.06	3.08	3.06	3.12	2.91	2.80	2.86	2.80	2.88	2.72

United States Government and Politics	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5	1	2	5	1	5	446	505	452	628	641	28,845	32,336	27,546	36,539	35,692
4	1	4	2	3	3	568	553	651	631	666	36,550	33,898	38,345	40,193	39,911
3	7	5	3	7	7	1,054	1,183	1,099	1,117	1,287	66,864	71,829	70,019	74,014	82,498
2	12	10	5	7	7	862	903	892	971	1,028	63,612	67,126	70,847	71,302	78,989
1	6	6	4	1	2	447	465	545	552	780	60,346	66,996	76,566	74,976	83,884
Total Exams	27	27	19	19	24	3,377	3,609	3,639	3,899	4,402	256,217	272,185	283,323	297,024	320,974
Mean Score	2.22	2.48	2.95	2.79	3.08	2.91	2.93	2.88	2.95	2.85	2.65	2.62	2.54	2.64	2.58

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Lakeview Technology Academy (501822)

	Lakeview Technology Academy (501822)					Wisconsin					Global				
United States History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						734	761	677	899	865	47,306	50,976	44,897	59,029	54,962
4						1,785	1,740	1,498	1,467	1,543	95,758	98,927	85,806	88,709	90,210
3					1	1,687	1,635	1,839	1,794	1,845	96,020	93,548	112,701	111,449	113,675
2						1,750	1,758	1,635	1,709	1,680	120,095	130,143	118,045	114,930	119,562
1						671	718	1,079	1,175	1,261	85,449	91,384	115,077	120,395	130,552
Total Exams					1	6,627	6,612	6,728	7,044	7,194	444,628	464,978	476,526	494,512	508,961
Mean Score					3.00	3.02	3.01	2.86	2.89	2.87	2.77	2.76	2.64	2.70	2.65

World History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			1	2	4	89	125	114	111	204	13,506	16,430	17,460	18,994	25,540
4			3	4	8	259	354	344	423	607	31,504	39,498	37,745	44,534	59,843
3			12	4	6	539	722	806	900	851	67,735	78,640	83,601	84,010	80,166
2			3	2	2	584	535	646	781	844	69,756	68,632	79,600	82,100	88,971
1						302	192	160	337	343	48,159	43,733	47,968	56,523	46,233
Total Exams			19	12	20	1,773	1,928	2,070	2,552	2,849	230,660	246,933	266,374	286,161	300,753
Mean Score			3.11	3.50	3.70	2.58	2.84	2.81	2.68	2.82	2.53	2.66	2.61	2.61	2.77

* In 2011-12, the AP French Language course and exam title was changed to AP French Language and Culture.

* In 2013-14, the AP Spanish Language course and exam title was changed to AP Spanish Language and Culture.

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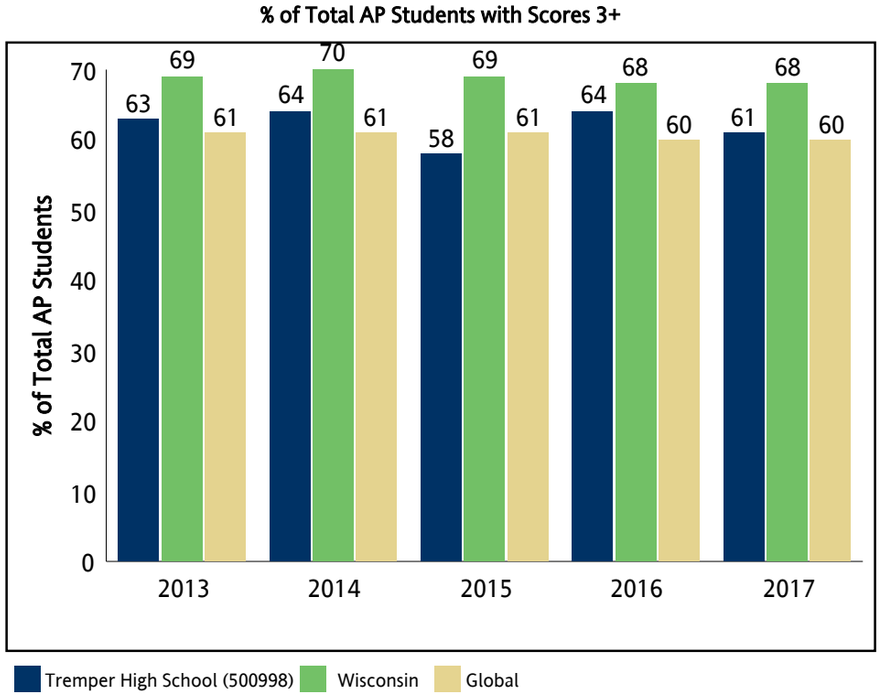
AP® Five-Year School Score Summary (2017)

This report shows five years of data at the school, state and global levels. On the first page, a graph illustrates the year-over-year change in the percentage of AP students with scores of 3 or higher, next to a table that provides the overall total exams, total unique students and both the number and percentage of AP students with one or more scores of 3 or higher. On subsequent pages, the report provides subject-specific summary data by year: total exams, total exams by score and mean score.

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Tremper High School (500998)



	2013	2014	2015	2016	2017
Tremper High School (500998)					
Total AP Students	314	247	232	240	332
Number of Exams	565	499	403	439	562
AP Students with Scores 3+	199	157	134	154	203
% of Total AP Students with Scores 3+	63.4	63.6	57.8	64.2	61.1
Wisconsin					
Total AP Students	36,882	38,629	41,489	44,296	47,189
Number of Exams	61,472	64,916	70,246	74,785	80,201
AP Students with Scores 3+	25,501	27,006	28,667	30,088	32,115
% of Total AP Students with Scores 3+	69.1	69.9	69.1	67.9	68.1
Global					
Total AP Students	2,225,625	2,352,026	2,497,164	2,625,319	2,761,755
Number of Exams	3,955,410	4,199,454	4,516,044	4,741,566	5,005,281
AP Students with Scores 3+	1,354,800	1,442,136	1,515,264	1,583,115	1,665,651
% of Total AP Students with Scores 3+	60.9	61.3	60.7	60.3	60.3

"Success" on an AP Exam is defined as an exam score of 3 or higher, which represents the score point that research finds predictive of college success and college graduation. These findings have held consistent across the decades. One example of such a study comes from the National Center for Educational Accountability, which found that an AP Exam score, and a score of 3 or higher in particular, is a strong predictor of a student's ability to persist in college and earn a bachelor's degree.

The data in this report differs from other College Board reports, such as *The AP Cohort Data Report*, which tracks exams taken by seniors throughout their time in high school (cohort-based) and includes public school data only.

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AP® Five-Year School Score Summary (2017)

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Tremper High School (500998)

Biology	Tremper High School (500998)					Wisconsin					Global				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5	3	2	1	2		206	221	260	257	290	11,188	14,169	14,351	15,738	16,470
4	11	11	1	6	10	881	932	1,070	991	1,205	44,035	47,989	49,708	50,161	53,707
3	2	4	10	7	21	1,532	1,558	1,734	1,666	2,025	73,865	75,312	80,744	80,218	93,869
2	1	2		2	8	979	881	886	1,051	1,070	59,665	58,024	61,741	68,659	70,367
1						132	141	127	146	138	15,149	18,770	18,384	24,163	21,666
Total Exams	17	19	12	17	39	3,730	3,733	4,077	4,111	4,728	203,902	214,264	224,928	238,939	256,079
Mean Score	3.94	3.68	3.25	3.47	3.05	3.01	3.06	3.11	3.04	3.09	2.88	2.91	2.91	2.85	2.89

Calculus AB	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5				1		1,293	1,400	1,257	1,389	1,122	67,783	72,511	66,411	76,875	59,587
4	1					1,126	1,095	1,158	1,104	1,308	51,440	48,984	51,769	53,696	57,081
3					1	1,131	1,287	1,337	1,282	1,530	49,101	52,076	56,482	53,743	66,214
2					1	719	724	660	722	1,501	31,833	31,360	31,371	30,109	69,896
1						1,271	1,383	1,409	1,538	832	83,261	89,775	98,285	95,103	64,892
Total Exams	1			1	2	5,540	5,889	5,821	6,035	6,293	283,418	294,706	304,318	309,526	317,670
Mean Score	4.00			5.00	2.50	3.08	3.07	3.03	3.01	3.06	2.96	2.94	2.86	2.96	2.93

Calculus BC	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5	14	14	16	5	12	703	832	787	960	858	47,972	54,335	54,148	60,907	56,706
4	14	17	8	6	7	359	385	381	381	477	16,896	18,525	19,551	19,248	24,101
3	10	10	10	5	4	395	406	496	492	564	18,762	18,200	21,482	21,481	26,467
2	4	5	4	1	5	147	123	159	155	417	5,950	5,966	6,505	7,207	18,746
1	7	1	2	1	3	250	269	312	240	92	15,018	15,259	17,725	16,461	7,101
Total Exams	49	47	40	18	31	1,854	2,015	2,135	2,228	2,408	104,598	112,285	119,411	125,304	133,121
Mean Score	3.49	3.81	3.80	3.72	3.65	3.60	3.69	3.55	3.75	3.66	3.73	3.81	3.72	3.81	3.79

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AP® Five-Year School Score Summary (2017)

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Tremper High School (500998)

	Tremper High School (500998)					Wisconsin					Global				
Calculus BC: AB Subscore	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	25	20	18	8	13	942	988	1,089	1,022	1,027	58,790	61,853	66,942	64,077	64,516
4	10	15	7	6	7	427	409	389	568	627	20,792	18,826	19,481	26,201	29,995
3	10	11	11	3	3	270	307	356	321	394	11,725	14,440	15,234	16,379	18,773
2	3	1	3		6	101	134	128	123	270	5,640	7,040	6,555	5,764	13,313
1	1		1	1	2	114	177	173	194	90	7,645	10,121	11,194	12,875	6,515
Total Exams	49	47	40	18	31	1,854	2,015	2,135	2,228	2,408	104,592	112,280	119,406	125,296	133,112
Mean Score	4.12	4.15	3.95	4.11	3.74	4.07	3.94	3.98	3.94	3.93	4.12	4.03	4.04	3.98	4.00

Chemistry	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	2	1				385	225	181	195	185	26,535	15,047	14,178	16,203	16,079
4	3	3	1		2	600	530	477	473	489	30,081	25,155	24,703	23,994	25,924
3	6	11	6	2	6	643	849	1,010	905	932	26,318	38,533	43,084	42,332	41,752
2	3	19	7	10	9	457	863	838	799	961	20,841	38,359	38,033	38,067	41,811
1	8	5	3	2	5	581	503	423	386	431	36,403	31,946	33,277	33,371	34,110
Total Exams	22	39	17	14	22	2,666	2,970	2,929	2,758	2,998	140,178	149,040	153,275	153,967	159,676
Mean Score	2.45	2.38	2.29	2.00	2.23	2.91	2.70	2.71	2.74	2.68	2.93	2.68	2.66	2.69	2.67

Comparative Government and Politics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						39	61	59	99	94	3,847	4,018	3,239	4,536	5,225
4						41	63	69	76	90	4,315	4,841	4,262	4,676	5,494
3			1			40	42	66	45	70	4,011	3,822	4,666	4,499	4,582
2						53	41	59	35	58	4,648	4,502	4,892	4,730	4,011
1						21	15	32	14	40	3,550	3,304	4,395	3,614	3,171
Total Exams			1			194	222	285	269	352	20,371	20,487	21,454	22,055	22,483
Mean Score			3.00			3.12	3.51	3.22	3.78	3.40	3.01	3.09	2.86	3.08	3.25

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Tremper High School (500998)

	Tremper High School (500998)					Wisconsin					Global				
English Language and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	6	5	1	2	6	739	670	714	694	759	48,927	48,497	52,434	58,643	53,195
4	8	14	9	9	10	1,231	1,485	1,696	1,511	1,861	77,548	90,548	97,172	96,625	106,531
3	35	21	21	21	18	2,129	2,255	2,356	2,445	2,886	136,438	143,859	144,613	149,154	161,290
2	47	30	42	31	31	1,596	1,699	1,885	2,356	2,331	142,270	152,507	157,552	176,254	179,108
1	2	4	8	6	5	378	391	457	400	512	72,552	71,713	78,604	69,453	83,279
Total Exams	98	74	81	69	70	6,073	6,500	7,108	7,406	8,349	477,735	507,124	530,375	550,129	583,403
Mean Score	2.68	2.81	2.42	2.57	2.73	3.06	3.05	3.05	2.97	3.00	2.77	2.79	2.79	2.82	2.77

English Literature and Composition	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	4			3	1	452	470	410	460	431	29,387	30,531	30,460	30,224	27,622
4	15	8	7	7	6	1,376	1,366	1,369	1,410	1,203	72,663	70,802	73,125	72,400	65,346
3	19	23	12	4	12	2,607	2,399	2,577	2,498	2,426	121,601	118,081	122,631	119,608	120,712
2	11	18	9	3	9	2,105	2,140	2,133	2,204	2,222	122,374	131,572	131,534	135,861	137,888
1						299	280	269	348	340	40,506	47,745	45,004	48,942	54,967
Total Exams	49	49	28	17	28	6,839	6,655	6,758	6,920	6,622	386,531	398,731	402,754	407,035	406,535
Mean Score	3.24	2.80	2.93	3.59	2.96	2.94	2.94	2.93	2.92	2.87	2.81	2.76	2.78	2.75	2.69

French Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						29	23	15	30	26	4,141	4,044	3,899	4,121	3,980
4						50	40	44	49	42	5,580	5,770	5,972	6,224	5,831
3						83	82	84	84	114	6,997	7,457	7,916	7,568	7,829
2			1	1	1	44	41	50	51	75	3,775	3,871	4,468	4,359	4,632
1		1				12	8	7	6	11	1,051	1,162	1,309	1,305	1,302
Total Exams		1	1	1	1	218	194	200	220	268	21,544	22,304	23,564	23,577	23,574
Mean Score		1.00	2.00	2.00	2.00	3.18	3.15	3.05	3.21	2.99	3.37	3.34	3.28	3.32	3.28

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Tremper High School (500998)

	Tremper High School (500998)					Wisconsin					Global				
German Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1	1				27	24	14	17	20	1,313	1,203	1,296	1,139	1,209
4	1					32	29	40	34	41	1,193	1,201	1,267	1,207	1,277
3						56	57	51	60	47	1,445	1,425	1,494	1,416	1,493
2						35	49	36	43	20	836	976	884	1,087	914
1						3	19	7	3	4	319	449	359	466	380
Total Exams	2	1				153	178	148	157	132	5,106	5,254	5,300	5,315	5,273
Mean Score	4.50	5.00				3.29	2.94	3.12	3.12	3.40	3.46	3.33	3.43	3.28	3.38

Human Geography	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			3		9	155	159	338	385	441	13,750	15,033	19,526	22,231	21,365
4			5	5	12	274	312	522	714	744	23,284	27,297	32,770	37,398	34,714
3			3	4	11	238	307	458	610	803	23,736	28,787	33,768	36,743	42,008
2			3	1	7	124	198	340	477	581	21,338	25,204	26,752	35,511	34,348
1			3	5	5	85	184	489	609	809	32,467	40,705	47,285	53,878	68,163
Total Exams			17	15	44	876	1,160	2,147	2,795	3,378	114,575	137,026	160,101	185,761	200,598
Mean Score			3.12	2.60	3.30	3.33	3.06	2.94	2.92	2.83	2.69	2.64	2.69	2.67	2.54

Macroeconomics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						227	284	385	433	470	15,878	18,908	19,390	23,694	24,765
4						352	434	530	569	602	25,298	27,343	28,223	31,776	33,127
3						265	292	319	345	388	18,072	21,758	21,685	21,841	24,010
2						241	232	253	300	313	20,745	20,497	21,579	22,957	22,401
1	1					152	144	165	201	198	28,919	29,036	36,195	35,182	37,841
Total Exams	1					1,237	1,386	1,652	1,848	1,971	108,912	117,542	127,072	135,450	142,144
Mean Score	1.00					3.21	3.35	3.43	3.40	3.42	2.80	2.89	2.79	2.90	2.89

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AP® Five-Year School Score Summary (2017)

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Tremper High School (500998)

	Tremper High School (500998)					Wisconsin					Global				
Microeconomics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						198	205	257	267	444	12,268	11,847	15,129	14,692	20,711
4						375	516	526	563	607	19,330	21,527	22,617	22,796	24,832
3						279	361	328	483	400	13,524	15,404	15,282	18,204	15,836
2	1			1		190	228	221	258	219	10,079	11,546	10,822	11,278	10,531
1	1					96	121	118	210	175	12,457	14,168	15,048	15,700	16,345
Total Exams	2			1		1,138	1,431	1,450	1,781	1,845	67,658	74,492	78,898	82,670	88,255
Mean Score	1.50			2.00		3.34	3.32	3.40	3.24	3.50	3.13	3.07	3.15	3.11	3.26

Music Theory	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	1		1	1	2	43	47	51	29	55	3,469	3,559	3,609	3,517	3,758
4	3	2	1		1	42	53	39	49	43	3,068	3,160	3,267	3,323	3,363
3	4	3	3	3	1	80	82	84	56	67	4,709	4,601	4,681	4,687	4,813
2	13	3		4		68	64	79	64	68	4,605	4,370	4,713	5,045	4,806
1	5				1	23	23	21	12	31	2,578	2,395	2,706	2,826	2,898
Total Exams	26	8	5	8	5	256	269	274	210	264	18,429	18,085	18,976	19,398	19,638
Mean Score	2.31	2.88	3.60	2.75	3.60	3.05	3.14	3.07	3.09	3.09	3.01	3.06	3.02	2.98	3.01

Music Aural Subscore	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	2		1		2	41	55	47	31	53	3,429	3,631	3,602	3,511	3,652
4	4	4	1	1	1	42	50	51	37	49	2,974	3,064	3,378	3,253	3,579
3	7	1	3	1	1	78	70	81	59	65	5,035	4,732	4,532	4,524	4,650
2	12	2		5		75	73	72	70	71	4,296	4,387	4,820	5,419	4,818
1	1	1		1	1	19	21	23	13	26	2,692	2,271	2,643	2,690	2,925
Total Exams	26	8	5	8	5	255	269	274	210	264	18,426	18,085	18,975	19,397	19,624
Mean Score	2.77	3.00	3.60	2.25	3.60	3.04	3.17	3.10	3.01	3.12	3.01	3.08	3.03	2.97	3.01

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Tremper High School (500998)

Music Non-Aural Subscore	Tremper High School (500998)					Wisconsin					Global				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5			1		2	41	45	40	30	46	3,466	3,423	3,551	3,595	3,743
4	3		2	2	1	46	47	58	48	45	2,884	3,278	3,355	3,393	3,226
3	5	4	2	4	1	76	97	80	59	66	4,704	4,673	4,659	4,411	4,763
2	11	4		2	1	63	52	76	54	79	4,704	4,396	4,759	5,105	5,055
1	7					29	28	20	19	28	2,668	2,315	2,651	2,893	2,837
Total Exams	26	8	5	8	5	255	269	274	210	264	18,426	18,085	18,975	19,397	19,624
Mean Score	2.15	2.50	3.80	3.00	3.80	3.03	3.11	3.08	3.08	3.01	2.99	3.06	3.02	2.98	3.00

Physics 1	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5								112	122	133			8,619	7,789	9,300
4				2	2			529	483	487			23,632	23,885	27,711
3			4	5	4			742	765	669			35,691	36,033	34,761
2			8	13	11			1,037	925	907			51,239	51,310	49,844
1			12	10	2			543	541	462			53,337	51,296	49,924
Total Exams			24	30	19			2,963	2,836	2,658			172,518	170,313	171,540
Mean Score			1.67	1.97	2.32			2.54	2.55	2.59			2.32	2.33	2.40

Psychology	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5	14	7	11	10	8	2,103	1,936	2,246	2,298	2,511	50,833	48,766	56,123	56,174	57,973
4	35	27	14	35	19	2,537	2,818	2,827	3,143	3,172	63,606	69,937	73,009	76,757	76,236
3	27	25	16	35	25	1,841	1,988	1,952	2,067	2,202	46,778	51,953	55,148	56,210	60,629
2	22	17	11	32	23	1,019	1,142	1,083	1,337	1,364	31,026	35,206	36,423	41,698	44,382
1	28	25	9	23	27	998	1,132	1,183	1,242	1,250	47,277	54,608	57,657	63,881	64,409
Total Exams	126	101	61	135	102	8,498	9,016	9,291	10,087	10,499	239,520	260,470	278,360	294,720	303,629
Mean Score	2.88	2.74	3.11	2.83	2.59	3.44	3.36	3.42	3.39	3.41	3.17	3.09	3.12	3.07	3.06

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Tremper High School (500998)

	Tremper High School (500998)					Wisconsin					Global				
Spanish Language and Culture *	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5			3	2		196	249	262	296	237	34,686	34,303	41,066	45,307	34,410
4		1	3	2	4	238	411	432	481	515	35,573	48,729	53,023	57,019	61,680
3		4	5	4	8	229	381	438	455	507	27,617	42,264	41,934	44,832	61,133
2	2	5	4	9	17	201	112	145	154	211	22,818	13,306	13,548	15,764	18,577
1				3		168	16	16	17	18	19,014	2,382	2,075	2,528	3,082
Total Exams	2	10	15	20	29	1,032	1,169	1,293	1,403	1,488	139,708	140,984	151,646	165,450	178,882
Mean Score	2.00	2.60	3.33	2.55	2.55	3.09	3.65	3.60	3.63	3.50	3.32	3.70	3.77	3.77	3.59

Statistics	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5				2	3	397	470	477	555	584	21,678	26,333	26,390	29,674	29,454
4	4			3	1	755	840	844	1,067	781	34,573	38,613	37,489	44,966	34,512
3	3				5	889	1,050	1,133	1,130	1,312	42,148	45,137	49,495	51,457	53,664
2	3				6	644	663	669	623	926	31,879	32,794	36,556	32,193	43,734
1					1	354	424	453	551	706	39,757	41,746	46,435	48,876	55,477
Total Exams	10			5	16	3,039	3,447	3,576	3,926	4,309	170,035	184,623	196,365	207,166	216,841
Mean Score	3.10			4.40	2.94	3.06	3.08	3.06	3.12	2.91	2.80	2.86	2.80	2.88	2.72

Studio Art: 2-D Design Portfolio	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5						37	47	53	58	82	3,411	3,795	4,892	4,542	6,447
4	1	2	1	3	7	90	113	114	123	127	7,931	8,055	8,177	10,412	10,363
3	1	2	1	4	1	143	149	142	189	166	8,757	9,646	9,200	11,109	11,569
2		1				75	77	65	78	62	4,553	5,039	5,077	4,952	4,423
1						6	6	8	3	1	893	969	1,385	796	707
Total Exams	2	5	2	7	8	351	392	382	451	438	25,545	27,504	28,731	31,811	33,509
Mean Score	3.50	3.20	3.50	3.43	3.88	3.22	3.30	3.36	3.34	3.52	3.33	3.32	3.35	3.41	3.52

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Tremper High School (500998)

Studio Art: 3-D Design Portfolio	Tremper High School (500998)					Wisconsin					Global				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5		1				7	11	16	14	12	459	471	567	668	672
4	1		1			13	12	13	19	13	813	837	1,087	1,305	1,227
3		1	3			28	22	31	30	30	1,574	1,569	1,657	1,820	2,093
2	1		1			18	19	17	15	16	1,093	1,199	1,136	1,133	1,404
1						4	1				246	204	151	155	179
Total Exams	2	2	5			70	65	77	78	71	4,185	4,280	4,598	5,081	5,575
Mean Score	3.00	4.00	3.00			3.01	3.20	3.36	3.41	3.30	3.03	3.04	3.17	3.24	3.15

Studio Art: Drawing Portfolio	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5			2	1	1	36	39	41	40	52	2,576	2,749	2,872	3,196	4,472
4	2	1		2	1	41	47	52	91	74	3,451	3,611	4,100	5,100	5,634
3	3	3	2	4	2	104	106	113	130	112	7,242	7,007	7,470	7,310	7,302
2	1					40	50	46	31	28	3,226	3,316	3,466	2,779	2,653
1				1		1	6	1	5	3	518	679	732	536	387
Total Exams	6	4	4	8	4	222	248	253	297	269	17,013	17,362	18,640	18,921	20,448
Mean Score	3.17	3.25	4.00	3.25	3.75	3.32	3.25	3.34	3.44	3.54	3.26	3.26	3.26	3.40	3.55

United States Government and Politics	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
5	5	7	3	3	5	446	505	452	628	641	28,845	32,336	27,546	36,539	35,692
4	7	11	6	5	4	568	553	651	631	666	36,550	33,898	38,345	40,193	39,911
3	20	25	7	11	16	1,054	1,183	1,099	1,117	1,287	66,864	71,829	70,019	74,014	82,498
2	26	22	16	23	19	862	903	892	971	1,028	63,612	67,126	70,847	71,302	78,989
1	23	19	9	11	19	447	465	545	552	780	60,346	66,996	76,566	74,976	83,884
Total Exams	81	84	41	53	63	3,377	3,609	3,639	3,899	4,402	256,217	272,185	283,323	297,024	320,974
Mean Score	2.32	2.58	2.46	2.36	2.32	2.91	2.93	2.88	2.95	2.85	2.65	2.62	2.54	2.64	2.58

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AP® Five-Year School Score Summary (2017)

Data Updated Oct 13, 2017, Report Run Oct 16, 2017

Tremper High School (500998)

	Tremper High School (500998)					Wisconsin					Global				
United States History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5	3	1	1			734	761	677	899	865	47,306	50,976	44,897	59,029	54,962
4	13	2				1,785	1,740	1,498	1,467	1,543	95,758	98,927	85,806	88,709	90,210
3	7	7	1		1	1,687	1,635	1,839	1,794	1,845	96,020	93,548	112,701	111,449	113,675
2	8	16	16			1,750	1,758	1,635	1,709	1,680	120,095	130,143	118,045	114,930	119,562
1	6	8	10		1	671	718	1,079	1,175	1,261	85,449	91,384	115,077	120,395	130,552
Total Exams	37	34	28		2	6,627	6,612	6,728	7,044	7,194	444,628	464,978	476,526	494,512	508,961
Mean Score	2.97	2.18	1.79		2.00	3.02	3.01	2.86	2.89	2.87	2.77	2.76	2.64	2.70	2.65

World History	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**	**2013**	**2014**	**2015**	**2016**	**2017**
5		1	1	2	2	89	125	114	111	204	13,506	16,430	17,460	18,994	25,540
4	1	5	1	2	14	259	354	344	423	607	31,504	39,498	37,745	44,534	59,843
3	15	11	8	8	28	539	722	806	900	851	67,735	78,640	83,601	84,010	80,166
2	14	3	10	7	27	584	535	646	781	844	69,756	68,632	79,600	82,100	88,971
1	2	1	1	1	6	302	192	160	337	343	48,159	43,733	47,968	56,523	46,233
Total Exams	32	21	21	20	77	1,773	1,928	2,070	2,552	2,849	230,660	246,933	266,374	286,161	300,753
Mean Score	2.47	3.10	2.57	2.85	2.73	2.58	2.84	2.81	2.68	2.82	2.53	2.66	2.61	2.61	2.77

* In 2011-12, the AP French Language course and exam title was changed to AP French Language and Culture.

* In 2013-14, the AP Spanish Language course and exam title was changed to AP Spanish Language and Culture.

* In 2011-12, the AP German Language course and exam title was changed to AP German Language and Culture.

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APPENDIX H
REVISED

2016-17 ADVANCED PLACEMENT SCHOLARS

SCHOOL	AP SCHOLARS	AP SCHOLARS WITH HONOR	AP SCHOLARS WITH DISTINCTION	NATIONAL AP SCHOLAR
Bradford	22	5	7	0
Harborside	9	2	2	0
Indian Trail	22	9	12	0
LakeView	15	6	1	0
Tremper	32	10	13	1
Total	**100**	**32**	**35**	**1**

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Kenosha Unified School District
Kenosha, Wisconsin

November 28, 2017

NEW COURSE PROPOSAL: CAREER AND TECHNICAL EDUCATION

Background

This is a new course proposal to add an Introduction to Tech Ed course to provide students of all grade levels the opportunity to explore, develop knowledge, and build upon the skills of a variety of the tech ed courses.

The Introduction to Tech Ed course will eliminate a gap in course planning that has occurred for students who have not taken a tech ed course in middle school.

Tremper has specifically requested this course; however, the course may be offered at any of the high schools pending their specific need in the career and technical education field of course study.

Courses

COURSE	SCHOOL	APPENDIX
Introduction to Tech Ed	Bradford, Indian Trail and Tremper	A

Recommendation

Administration recommends that the School Board approve the proposal to add Introduction to Tech Ed to the course catalogue.

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

Mrs. Julie Housaman
Chief Academic Officer

Mr. Steven Knecht
Principal, Tremper High School

Mrs. Cheryl Kothe
Coordinator of Career and Technical Education

Kenosha Unified School District
ACADEMICS. OPPORTUNITY. SUCCESS.

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: 9/26/17 Administrator Name: Cheryl Kothe

Department and School: Tech Ed - Tremper

Course Name: Introduction to Tech Ed

Request: ☒ New Course ☐ New Course Name ☐ Course Revision ☐ Remove Course

Credits: 1/2 *Check if honors:* ☐

Recommended Prerequisites (if any): None

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

To provide students an opportunity to sample the courses offered in the Tech Ed Department.

Proposed Course Description: In three or four sentences, write a course overview.

This course will provide students of all grade levels the opportunity to explore, develop knowledge, and build upon the skills of a variety of the Tech Ed courses. Students will work individually and in groups while learning aspects of Home Maintenance, Woodworking, Manufacturing, Automotive Maintenance, Small Engines, Collision Repair, Technical Drawing, Coding, and Engineering Design Process. Students will use these base skills to define the course pathways which interest them.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

See attached document, content areas included are Architecture and Construction, Manufacturing, Transportation, Broad Based, and Engineering.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction.

The scope will be broken up into the three main discipline areas – Automotive, Construction, and Engineering. Each discipline will contain three subject areas (see attached document).

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: $0

C. Supplementary: $50 per student for project supplies (School discretionary budget)

D. Facilities/Space: $0

E. Professional Learning: $0

Intro to Tech

Course Standards

Semester (½ credit)

This course is composed of the following nine career and technical education areas:

Home Maintenance	Automotive Maintenance	Drafting - Technical Drawing
Woodworking	Small Engines	Robotics - Coding
Wood Manufacturing	Collision	Engineering Design Process

Home Maintenance and Woodworking: Content Area Architecture and Construction

AC1.a Analyze construction requirements, materials, structures, techniques and maintenance.

AC1.b Apply measurement systems in the planning and layout process used in the residential construction industry.

AC1.c Demonstrate the safe and appropriate use of hand tools common to the residential and commercial construction industry.

AC1.d Demonstrate the safe and appropriate use of portable power tools that are common to the residential and are appropriate to the individual student's level.

AC1.e Demonstrate project management procedures and processes as they occur in a construction project.

AC1.f Demonstrate the value and necessity of practicing occupational safety in the construction industry facility and job site.

AC1.g Demonstrate the variety of building phases, systems and techniques used in architecture and construction.

AC1.h Demonstrate the impact of financial, technical environmental, political, societal, and labor trends on the past and future of the construction industry.

Manufacturing

MNF1.a Identify, select and safely use tools, machines, products and systems for specific tasks.

MNF1.b Create and communicate alternative solutions

MNF1.c Demonstrate cooperation with others in ways to exhibit respect for individual and cultural differences and for the attitudes and feelings of others.

MNF1.d Select, use and identify manufacture processes such as casting, forming, machining, joining, rapid manufacturing (CNC) and treating/coating.

MNF1.e Select, use and identify manufacturing systems.

MNF1.f Select and use manufacturing technologies.

MNF1.g Analyze and use GMAW, GTAW, and SMAW and oxy-acetylene welding.

MNF1.h Analyze and use metal and manufacturing cutting operations.

Automotive Maintenance: Content Area-Transportation

TR1.a Analyze and explain transportation systems.

TR1.b Analyzed and explain how transportation vehicles and transportation vehicle systems work.

TR1.c Develop the skill set necessary to diagnose, problem solve, and repair transportation vehicles.

Small Engines: Content Area-Transportation

TR1.a Analyze and explain transportation systems.

TR1.b Analyzed and explain how transportation vehicles and transportation vehicle systems work.

TR1.c Develop the skill set necessary to diagnose, problem solve, and repair transportation vehicles.

Collision: Content Area-Transportation

TR1.a Analyze and explain transportation systems.

TR1.b Analyzed and explain how transportation vehicles and transportation vehicle systems work.

TR1.c Develop the skill set necessary to diagnose, problem solve, and repair transportation vehicles.

Drafting: Content Area- Content area-Architecture and Construction AC1.b and ????

AC1.b Apply measurement systems in the planning and layout process used in the residential construction industry.

MNF1.b Create and communicate alternative solutions

ENG2a Analyze the attributes of engineering design.

ENG2b Describe and apply engineering design.

ENG4a Research the background information of a proposed design.

Robotics: Content Area- Broad Based and Engineering

BB1.a Analyze and use technological systems.

BB1.b Analyze and use tools and materials.

BB1.c Analyze and use mechanisms.

BB1.d Analyze and use electricity and electronic systems.

BB1.e Analyze, explain and use systems.

BB1.f Identify and analyze structures.

Design Process:

ENG1a Analyze engineering design theory.

ENG2a Analyze the attributes of engineering design.

ENG2b Describe and apply engineering design.

ENG3a Discuss the importance of the problem solving process.

ENG3b Analyze the procedures for innovation and invention.

ENG4a Research the background information of a proposed design.
ENG4b Design solutions based on gathered information.
ENG4c Evaluate completed solutions and provide feedback.

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Kenosha Unified School District
Kenosha, Wisconsin

November 28, 2017

NEW COURSE PROPOSAL: SUPERMILEAGE VEHICLE

Background

The LakeView Technology Academy Supermileage Vehicle (SMV) team has become an unofficial capstone for LakeView's engineering courses as it encompasses and reinforces the multifaceted lessons learned throughout the students' course completion in science, mathematics, and engineering technologies.

Course Request Proposal

LakeView Technology Academy requests the addition of SMV as an elective course in order to increase the opportunity for student participation so that many, if not all, students completing the engineering pathway will have the opportunity to participate in this capstone activity. LakeView is requesting approval to add this elective course beginning January 22, 2018, (second semester of the 2017-18 school year). Students enrolled in the second semester course would earn .5 elective credit for the 2017-18 school year.

Course

COURSE	SCHOOL	ACTION	APPENDIX
Supermileage Vehicle	LakeView	Add	A

Recommendation

Administration recommends that the school board approve LakeView Technology Academy's proposal for the addition of the Supermileage Vehicle course beginning in the second semester of 2017-18.

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

Dr. Bethany Ormseth
Principal of LakeView Technology Academy

Mrs. Julie Housaman
Chief Academic Officer

APPENDIX A

Kenosha Unified School District
ACADEMICS. OPPORTUNITY. SUCCESS.

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: September 29, 2017 Administrator's Name: Bethany Ormseth

Department and School: LakeView Technology Academy

Course Name: Supermileage Vehicle

Request: ☒ New Course ☐ New Course Name ☐ Course Revision ☐ Remove Course

Credits: 1 *Check if honors:* ☐

Recommended Prerequisites (if any): Introduction Design Engineer—Tech, Drafting/Electronics/Machining

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Since its inception in 2010, the LakeView Supermileage Vehicle (SMV) team has become an unofficial capstone for LakeView's engineering courses as it encompasses and reinforces the multifaceted lessons learned throughout the students' time at LakeView in the subjects of science, mathematics, and engineering technologies. This course is being proposed in an effort to bring a club into the classroom so that more students will have access to its benefits.

Proposed Course Description: In three or four sentences, write a course overview.

SMV is an engineering course that challenges students to design, fabricate, and test an energy efficient vehicle. The course exposes students to digital design, metal fabrication, welding, and electronics. Throughout the duration of the class, students will be learning about vehicle efficiency design systems. Students will design a chassis, drive train, and steering and braking systems. At the completion of the class, students will test their vehicles at various challenges across the state.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

See Appendix A-1.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

See Appendix A-2.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $ .14 FTE from LakeView staffing allocation

B. Textbooks/Kits: $0

C. Supplementary: $0

D. Facilities/Space: $0

E. Professional Learning: $0

SUPERMILEAGE VEHICLE SYLLABUS

TOPIC	GLOBAL FUEL USAGE	TEAMWORK AND ENGINEERING DESIGN THEORY
Lesson Plan	https://goo.gl/lSaJxS	
Essential Question	Week 1	Week 2
Objectives and Standards	Analyze current transportation fuel usage patterns locally and globally and their relation to social and economic dynamics. HS-ETS1-1 HSS.IC.B.5 HSS.IC.A.2 EHS1.a.9.h Calculate a given increase in global fuel efficiency in relation to the general population and demand. HS-ETS1-1 HSS.IC.B.5 GCA1.b.7.h Evaluate the local and global impacts of a given increase in global fuel efficiency. HS-ETS1-1 HSS.IC.A.2 HSS.MD.B.7 EHS1.a.10.h Formulate a student plan of action contract to track the effectiveness of efficient fuel usage techniques. EHS1.a.12,13.h	Employ the characteristics of a great team. LE1.b Develop leadership skills to match the individual's role within team. LE1.a Assemble a team of diverse individuals using an interview process. MATH.PRACTICE.MP3 GCA2.b.8.h Analyze the design process to agree upon common elements so as to act as a guide during the planning of each system. ENG1.a.11.h
Concepts	Current and possible future fuel consumption trend analysis Global impact of a fuel consumption change	Team versus group Communication within a team
Facts		
Skills		
Vocabulary		
Culminating Performance Task	Presentation	
Common Assessment	Rubric	
Suggested Activities	Global Fuel Addiction Report	Job Application

TOPIC	FRAME	STEERING
Lesson Plan		**https://goo.gl/T6ASwz**
Essential Question	Weeks 3-5	Week 6
Objectives and Standards	Examine materials for beneficial qualities for frame design. HS-PS2-6 HSS.MD.B.7 BB1.f.6.h Design a frame that will meet the general vehicle configurations. HSG.SRT.C.8 HS-ETS1-3 Develop a crash protection and roll cage system to protect the driver. HSG.SRT.C.8 HS-ETS1-4, HS-PS2-3 Analyze the vehicle structure using torque and 3-D modeling. HS-ETS1-4 HSS.IC.A.2 HSS.MD.B.7 BB1.f.5.h Fabricate a prototype using the developed models. HSG.SRT.C.6 HSS.MD.B.7 HS-ETS1-3 ENG2.b.4.h	Compare various two-wheel steering designs Calculate steering radius needed for optimal handling at a given speed. HSG.SRT.C.8 HSS.MD.B.7 Design the kingpin and spindle setup. HS-ETS1-3 HSG.SRT.C.8 Develop a system to reduce the amount of rolling friction using steering design principles. HSG.C.A.2 HSS.MD.B.7 HS-ETS1-2 Fabricate a scaled prototype using the developed models. HSG.SRT.C.6 PRACTICE.MP4 HS-ETS1-3 ENG2.b.4.h
Concepts	Problem solving Material stress analysis	Steering principles
Facts		
Skills	Application of statics and its relation to frame design	Steering principles relating to the Ackerman Angle, toe in/out, camber, caster
Vocabulary		
Culminating Performance Task	PVC frame CAD frame design	Steering model Working steering prototype
Common Assessment		
Suggested Activities	Frame portfolio	Steering portfolio

TOPIC	DRIVE	BODY
Lesson Plan	**https://goo.gl/8adx18**	

TOPIC	DRIVE	BODY
Essential Question	Weeks 7-9	Weeks 10-12
Objectives and Standards	Analyze the course elevations to calculate torque on drive wheel. HS-PS3-3 HS-PS2-1 BB1.c.5.h Relate angular/linear velocities with different sized gears. HSG.C.B.5 HS-ETS1-2 Compare different drive train orientations. HSF.LE.A.1.B HSS.IC.B.5 MATH.PRACTICE.MP3 Compare gears to the give and take of torque and linear speed. HSA.CED.A.3 HSS.MD.B.7 MATH.PRACTICE.MP3 Build scaled down model using "K'NEX" or other common building form. HS-ETS1-2 BB1.c.4.h Draw scaled specifications. HSG.SRT.C.6 MATH.PRACTICE.MP6	Test various shapes using a 3-D modeling software to determine the least possible air resistance. HSS.IC.B.5 HSS.MD.B.7 HS-ETS1-4 Develop a 3-D model of the final body design to determine aerodynamic drag. HS-ETS1-4 ENG4.b.4.h Apply the tested aerodynamic models to the proposed frame design prototype to decrease aerodynamic drag. HS-ETS1-4 HSS.MD.B.7
Concepts	Apply Mechanical Advantage to a chosen designed drivetrain	Application of aerodynamic shapes How shape can affect fuel efficiency
Facts		
Skills	Calculate torque. Calculate angular/linear velocities. Relate angular/linear velocities. Compare gears to the give and take of torque and linear speed. Build scaled down model using "K'NEX." Draw scaled specifications.	Design a shape that is the result of form and function. Calculate the effectiveness of the designed shape.
Vocabulary		

TOPIC	DRIVE	BODY
Culminating Performance Task	Drivetrain design	Fuselage 3-D model Fuselage prototype
Common Assessment		
Suggested Activities	Sprocket Design Video No. 1—Gear Ratio—https://www.youtube.com/watch?v=D_i3PJIYtuY Video No. 2—Gear Ratio—https://www.youtube.com/watch?v=nYXCMs4a4BY	

TOPIC	PROJECT MANAGEMENT	BUILD, TEST, AND REDESIGN
Lesson Plan	Weeks 12-13	Weeks 14-16
Essential Question	Pitch final ideas for approval and objective analysis. IMT1.b.7.h IMT1.c.5,6.h ENG4.c.6.h Redesign systems so all solutions are congruent. ENG1.a.9,10,12.h Develop successful project management procedures. MATH.PRACTICE.MP3 ENG5.a.7.h	Construct the agreed upon vehicle design within the given timeline. BB1.b.6.h Formulate testing procedures for all systems guided by the Challenge Wisconsin rule book. HSG.GPE.B.7 PRACTICE.MP4 HS-ETS1-3 HS-ETS1-2 ENG4.c.6.h Apply safe working attitudes and procedures in a lab setting. MATH.PRACTICE.MP5 MNF1.a.7.h
Objectives and Standards	Machine technology Fabrication	
Concepts		
Facts		Display proper use and inspection of personal protection equipment Maintain a proper work area. Demonstrate safe operation in a hazard zone.

TOPIC	PROJECT MANAGEMENT	BUILD, TEST, AND REDESIGN
		Operate power and hand tools according to manufacturer's and instructors recommendations
Skills		
Vocabulary	Develop illustrations and specifications that accurately define the dimensions, configuration, and design features for a prototype super mileage vehicle.	Student demonstration for safety Evaluated per task and process
Culminating Performance Task		
Common Assessment	Project charter Material and cost analysis chart Gantt Chart Influence Maps Project Dashboard Scrum Meetings	Demonstrations Tutorials as needed per machine Student trials
Suggested Activities		

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Kenosha Unified School District
Kenosha, Wisconsin

November 28, 2017

COURSE CHANGE PROPOSALS: FAMILY AND CONSUMER SCIENCE

Background

Five Course Change Proposals are being submitted to update the names of five courses in the family and consumer science area to more appropriately represent the courses. The course name changes will align with academic career planning pathways that prepare students for career readiness in the culinary and hospital fields (Appendix A).

Course Name Change Requests

CURRENT COURSE NAME	NEW COURSE TITLE	SCHOOLS	APPENDIX
Family Clothing: Clothing 1	Clothing Textile and Apparel	Tremper, Bradford, Indian Trail, Reuther	B
Family Clothing: Clothing 2	Advanced Clothing Textile and Apparel	Tremper, Bradford, Indian Trail, Reuther	C
Food and Nutrition	Culinary Basics	Tremper, Bradford, Indian Trail, Reuther	D
Child Development 1	Developing Child	Tremper, Bradford, Indian Trail, Reuther	E
Child Development 2	Early Childhood Education	Tremper, Bradford, Indian Trail, Reuther	F

Recommendation

Course name changes were needed within Kenosha Unified School District's family and consumer science curriculum such that the administration recommends the following:

CURRENT COURSE NAME	NEW COURSE TITLE
Family Clothing: Clothing 1	Clothing Textile and Apparel
Family Clothing: Clothing 2	Advanced Clothing Textile and Apparel
Food and Nutrition	Culinary Basics

CURRENT COURSE NAME	NEW COURSE TITLE
Child Development 1	Developing Child
Child Development 2	Early Childhood Education

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

Ms. Julie Housaman
Chief Academic Officer

Ms. Cheryl Kothe
Coordinator of Career and Technical Education

2018-19 COURSE CHANGE PROPOSALS

Career Clusters and Pathways in Family and Consumer Science

Food Classes

Culinary Basics - New Name

Career Cluster: Hospitality & Tourism
Pathway: Restaurant and Food/ Beverage Services
Food Production and Processing System

Culinary Skills

(Transcripted)
(70% or higher to advance)
Cluster: Hospitality & Tourism
Pathway: Restaurant and Food/ Beverage Services

Career Foods

(Transcripted)
Cluster: Hospitality & Tourism
Pathway: Restaurant and Food/ Beverage Services

Human Services

Developing Child - New Name

Cluster: Human Services

Pathway: Early Childhood Development and Services

Early Childhood Education - New Name

(Transcripted)

Cluster: Human Services

Pathway: Early Childhood Development and Services

Arts, Audio Visual, Technology and Communication

Cluster: Arts, A/V Technology and Communication

Pathway: Visual Arts

Clothing, Textile, and Apparel - New Name

Advanced Clothing, Textile, and Apparel - New Name

APPENDIX B

Kenosha Unified School District
ACADEMICS. OPPORTUNITY. SUCCESS.

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: 8/1/2017 Administrator Name: Cheryl Kothe

Department and School: Family and consumer science—Tremper, Bradford, Indian Trail, Reuther

Course Name: Clothing Textile and Apparel (formerly Family Clothing: Clothing 1)

Request: ☐ New Course ☒ New Course Name ☐ Course Revision ☐ Remove Course

Credits: Semester ½ credit *Check if honors:* ☐

Recommended Prerequisites (if any):

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course is the introduction to the Advanced Clothing Textile and Apparel career pathway. This course name will better fit career and college preparatory goals.

Proposed Course Description: In three or four sentences, write a course overview.

Students will have an opportunity to improve their basic sewing skills and knowledge of clothing construction, including use of a pattern. Sewing machines are to complete individual clothing projects. Students must purchase their own materials and supplies.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

TFA1.d: Demonstrate skills needed to produce, alter or repair fashion, apparel and textile products.
TFA1.c: Demonstrate fashion, apparel and textile design skills.
TFA1.d: Demonstrate skills needed to produce, alter or repair fashion, apparel and textile products.
TFA1.c: Demonstrate fashion, apparel and textile design skills.
TFA1.a: Evaluate fiber and textile products and materials
TFA1.c: Demonstrate fashion, apparel and textile design skills

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

In process through collaboration with Gateway Technical College.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: $0

C. Supplementary: $0

D. Facilities/Space: $0

E. Professional Learning: $0

APPENDIX C

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: 8/1/2017 Administrator Name: Cheryl Kothe

Department and School: Family and consumer science—Tremper, Bradford, Indian Trail, Reuther

Course Name: Advanced Clothing Textile and Apparel (formerly Family Clothing: Clothing 2)

Request: ☐ New Course ☒ New Course Name ☐ Course Revision ☐ Remove Course

Credits: Semester ½ credit *Check if honors:* ☐

Recommended Prerequisites (if any**):** Clothing Textile and Apparel

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course is the second course to the Advanced Clothing Textile and Apprarel career pathway. This course name will better fit career and college preparatory goals.

Proposed Course Description: In three or four sentences, write a course overview.

The focus of this course is the world of fashion with an exploration of career options in the clothing industry. Students will Kenosha Unified School District 25 High School Course Catalog 2017-18 further develop their sewing skills by constructing advanced projects, including use of patterns and supplies purchased from a store. Students must provide supplies necessary to complete individual sewing projects.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

TFA1 Students will integrate knowledge, skills and practices required for careers in textiles and apparel.
TFA1.d: Demonstrate skills needed to produce, alter or repair fashion, apparel and textile products.
TFA1.a: Analyze career paths within textile apparel and design industries
TFA1.g: Demonstrate general operational procedures required for business profitability and career success.
TFA1.c: Demonstrate fashion, apparel and textile design skills
TFA1.e: Evaluate elements of textile, apparel and fashion merchandising
TFA1.F: Evaluate the components of customer service.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

In process through collaboration with Gateway Technical College.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: $0

C. Supplementary: $0

D. Facilities/Space: $0

E. Professional Learning: $0

APPENDIX D

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: 8/1/2017 Administrator Name: Cheryl Kothe

Department and School: Family and consumer science—Tremper, Bradford, Indian Trail, Reuther

Course Name: Culinary Basics (formerly Food & Nutrition)

Request: ☐ New Course ☒ New Course Name ☐ Course Revision ☐ Remove Course

Credits: Quarter, Semester ½ credit *Check if honors:* ☐

Recommended Prerequisites (if any):

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

Culinary basics is the foundation course for all other culinary, baking, and hospitality classes. The course name is being changed to align with the Gateway Technical College course program so that students are able to earn transcripted credits from Gateway.

Proposed Course Description: In three or four sentences, write a course overview.

Culinary Basics is a study of nutrition and food needs for all age groups. Students will study the effect of technology on food, current health problems related to diet, and the social and cultural influence on food and resources. Preparation of food to meet dietary requirements while managing resources is basic to the course.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

FPS1.b. Demonstrate food safety and sanitation procedures.
FSDN1.b. Apply Risk management procedures to food safety, food testing and sanitation.
FSDN1: Evaluate nutrition principles, food plans, preparing techniques, and specialized dietary plans.
FSDN1.e: Demonstrate use of current technology in food product development and marketing.
FPS1.d: Demonstrate menu planning principles and techniques based on standardized recipes to meet customer needs.
FSDN1.d: Apply basic concepts of nutrition and nutritional therapy in a variety of settings.
FPS1.e: Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs
NW1.a: Analyze factors that influence nutrition and wellness practices across the lifespan.
NW1.e: Evaluate the influence of science and technology on food composition, safety and other issues.
NW1.c: Demonstrate ability to acquire, handle and use foods to meet nutrition and wellness needs of individuals and families across the life span.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

In process through collaboration with Gateway Technical College.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: $0

C. Supplementary: $0

D. Facilities/Space: $0

E. Professional Learning: $0

APPENDIX E

Kenosha Unified School District
ACADEMICS. OPPORTUNITY. SUCCESS.

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: 8/1/2017 Administrator Name: Cheryl Kothe

Department and School: Family and consumer science—Tremper, Bradford, Indian Trail, Reuther

Course Name: Developing Child (formerly Child Development 1)

Request: ☐ New Course ☒ New Course Name ☐ Course Revision ☐ Remove Course

Credits: Quarter, Semester ½ credit *Check if honors:* ☐

Recommended Prerequisites (if any):

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course is the beginning introduction to the human services career cluster and the early childhood development and services career pathway. This course name will better fit career and college preparatory goals.

Proposed Course Description: In three or four sentences, write a course overview.

This course is designed to help the student understand the developing child. Students will explore the effect of heredity and environment on the developing child. The physical, social, emotional, and intellectual wellbeing of children and their various growth and development patterns will also be studied. Students interested in a career involving children will find this course useful.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

P1.d: Analyze factors related to preparing for parenthood.
HD1: Students will analyze factors that influence human growth and development.
P1.b Evaluate parenting practices that maximize human growth and development.
EC1.c Cultivate positive relationships with children in a child care setting
EC1.d Guide children in appropriate behaviors
EC1.g Adhere to current United States Department of Agriculture Dietary Guidelines and Wisconsin State Licensing Regulations.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

In process through collaboration with Gateway Technical College.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: $0

C. Supplementary: $0

D. Facilities/Space: $0

E. Professional Learning: $0

APPENDIX F

Kenosha Unified School District
ACADEMICS. OPPORTUNITY. SUCCESS.

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: 8/1/2017 Administrator Name: Cheryl Kothe

Department and School: Family and consumer science—Tremper, Bradford, Indian Trail, Reuther

Course Name: Early Childhood Education (formerly Child Development 2)

Request: ☐ New Course ☒ New Course Name ☐ Course Revision ☐ Remove Course

Credits: Quarter, Semester ½ credit *Check if honors:* ☐

Recommended Prerequisites (if any): Developing Child

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This is the second and the capstone class in the series of classes in the early childhood development and services career pathway. This course will also allow students to earn a transcript credit from Gateway Technical College. The name change will align with the Gateway Technical College program in Early Childhood Education.

Proposed Course Description: In three or four sentences, write a course overview.

This course has heavy emphasis on becoming a childcare professional. This includes planning a safe early childhood environment and creating and implementing curriculum.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

EC1.a: Investigate the necessity for and purpose of quality group care for young children.
EC1.b: Apply theories of developmentally appropriate practice to classroom situations.
ECa.d: Guide children in appropriate behaviors.
EC1.e: Create and facilitate developmentally appropriate activity for a variety of child care curricular areas.
EC1.h: Create a physically safe and emotionally secure environment for children both inside and out of the center according to the licensing regulations.
Ec1.i: Implement modifications to accommodate special needs.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

In process through collaboration with Gateway Technical College.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: $0

C. Supplementary: $No change

D. Facilities/Space: $0

E. Professional Learning: $0

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Kenosha Unified School District
Kenosha, Wisconsin

November 28, 2017

COURSE CHANGE PROPOSALS: INDIAN TRAIL BUSINESS ACADEMY

Background

Three Course Change Proposals involving one course revision that includes a name change and two new courses are being submitted in the area of career and technology education for the business academy at Indian Trail Academy and High School. The course revision and name change will better describe the current standards and extend the course from one semester to a year providing students the opportunity to obtain college credit through Gateway. The two new course requests will create two specific pathways of finance and marketing in the Business Academy.

Courses

CURRENT COURSE NAME	PROPOSED COURSE NAME	SCHOOL	APPENDIX
Business and the Economy	Introduction to Business	Indian Trail Academy and High School *Business Academy Only*	A

COURSE	SCHOOL	ACTION	APPENDIX
The Millionaire's Club	Indian Trail Academy and High School *Business Academy Only*	Add	B
Social Media	Indian Trail Academy and High School *Business Academy Only*	Add	C

Recommendation

Administration recommends that the School Board approve the proposals for new course name and the two course additions in the Business Academy at Indian Trail Academy and High School.

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

Mrs. Julie Housaman
Chief Academic Officer

Ms. Cheryl Kothe
Coordinator of Fine Arts

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: 9/24/17 Administrator Name: Maria Kotz/Cheryl Kothe

Department and School: Business Department, Indian Trail H.S. & Academy – Business Academy

Course Name: Current: Business & the Economy Proposed: Introduction to Business

Request: ☐ New Course ☐ New Course Name ☐ **Course Revision** ☐ Remove Course

Credits: Current: 1.0 Proposed: 0.50 *Check if honors:* ☐

Recommended Prerequisites (if any): n/a

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The proposal includes a change of name for this course from "Business & the Economy" to "Introduction to Business." The proposed name would better describe the course standards and goals.

The proposal also includes changing the course from a full year to semester long course. By doing this, we will be able to offer a wider variety of specialized courses to our Business Academy Freshmen. We have modified some of the standards to align with Gateway Technical College competencies so that students may have the opportunity to earn college credit for this course.

Proposed Course Description: In three or four sentences, write a course overview.

Business is the core of our economic system and every responsible citizen should have basic business knowledge. In this course, students will gain the basic understanding of the different types of businesses, business management and ownership, our government's role in business as well as learn what it takes to start their own business.

This course can be taken for Gateway Technical College Credit
Indian Trail Business Academy Only

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Standard: BIT.EC2: Students will analyze how an economy functions.
Standard: BIT.BLE5: Students will communicate how ethical issues impact the business environment.
BLE5.a: Summarize the importance of social responsibility in all areas of business.
BLE5.b: Explain and relate the function of a code of ethics in business.
Standard: BIT.GB1.a: Analyze the role of international business and trade.
Standard: BIT.AF1.a: Identify current structures and regulations affecting accounting principles and their effects on businesses.
AF2. b: Assess the financial condition and operating results of a company while interpreting financial statements.

AF2.a.2.h: Discuss the forms of ownership.
AF2.a.3.h: Use real-life examples to demonstrate the various types of ownership.
Standard BIT.EN2.c.3.h: Distinguish between debt and equity financing for venture creation
EN2.c.4.h: Describe processes used to acquire adequate financial resources for venture creation and startup
Standard: BIT.MK1: Students will analyze the elements of the marketing mix, the interrelationships and how they affect sales and business processes.
Standard: BIT.MG1.a: Evaluate the development of management's role of leadership and organization in a business

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction.

See attached document.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0.00

B. Textbooks/Kits: $100.00/book x 30 students = $3000.00 (Perkins Grant)

C. Supplementary: 40 hrs. curriculum planning time: $748.80 (Perkins Grant)

D. Facilities/Space: $0.00

E. Professional Learning: $0.00

Introduction to Business

Scope and Sequence/Year at a Glance				
Quarter 1		**Quarter 2**		
Unit 1	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 5**
The Business Environment	**Creating a Business**	**Financing a Business**	**Marketing a Business**	**Managing a Business**
5 Weeks	**3 Weeks**	**2 Weeks**	**3 Weeks**	**3 Weeks**
Standard: BIT.EC2: Students will analyze how an economy functions. **Standard: BIT.BLE5:** Students will communicate how ethical issues impact the business environment. **Standard: BLE5.a**: Summarize the importance of social responsibility in all areas of business. **Standard: BLE5.b:** Explain and relate the function of a code of ethics in business **Standard: BIT.GB1.a:** Analyze the role of international business and trade.	**Standard: BIT.AF2.a.2.h:** Discuss the forms of ownership. **Standard: AF2.a.3.h:** Use real-life examples to demonstrate the various types of ownership.	**Standard: BIT.AF1.a:** Identify current structures and regulations affecting accounting principles and their effects on businesses. **Standard: BIT.AF2.b:** Assess the financial condition and operating results of a company while interpreting financial statements. **Standard: BIT.EN2.c.3.h:** Distinguish between debt and equity financing for venture creation **Standard: BIT.2.c.4.h:** Describe processes used to acquire adequate financial resources for venture creation and startup.	**Standard: BIT.MK1:** Students will analyze the elements of the marketing mix, the interrelationships and how they affect sales and business processes.	**Standard: BIT.MG1.a:** Evaluate the development of management's role of leadership and organization in a business.

COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by October 1 to be considered for board approval.

Date Initiated: 9/24/17 Administrator Name: Maria Kotz/Cheryl Kothe

Department and School: Business Department, Indian Trail H.S. & Academy – Business Academy

Course Name: Investing: The Millionaire's Club

Request: ☒ **New Course** ☐ New Course Name ☐ Course Revision ☐ Remove Course

Credits: Current: 0.50 *Check if honors:* ☐

Recommended Prerequisites (if any): Introduction to Business

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)
In an effort to create two specific pathways of Finance and Marketing in the Business Academy, we are adding courses that we feel will be beneficial to students of each chosen pathway. This course will be for students choosing the finance pathway. A comprehensive understanding of investing and managing investments is key to students continuing in the field of finance.

Proposed Course Description: In three or four sentences, write a course overview
Investing is a course that allows students to engage in an examination of securities, markets, investment opportunities and techniques for individuals. Topics include stocks, bonds, options, mutual funds, insurance, real estate, and portfolio management. This course will use online trading software to emphasize "real world" investment situations for student analysis and decision-making strategies.
Indian Trail Business Academy Only

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Standard: BIT.PF3: Students will evaluate savings and investment options and implement a diversified investing strategy that is compatible with personal goals.
Standard: BIT.PF3.a: Apply strategies and evaluate financial information when creating wealth/building assets.
Standard: BIT.PF3.a:13.h: Identify and assess various means of building wealth

Standard: BIT.PF3.b: Describe the relationship between saving and investing.
Standard: BIT.PF.b.7.h: Explain the role of revenue-generating assets in building wealth.
Standard: BIT.PF3.b.8.h Explain how government agencies regulate financial markets.
Standard: BIT.PF3.b.9.h: Compare and contrast the risk, return and liquidity of various saving and investment alternatives
Standard: BIT.PF3.c: Demonstrate ability to use decision making processes in making financial decisions related to planning, saving and investing.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction.

(See attached document.)

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0.00

B. Textbooks/Kits: $1,000.00 on-line subscription (Credit Union Sponsorship or Perkins Grant)

C. Supplementary: 40hrs. curriculum planning time: $748.80 (Perkins Grant)

D. Facilities/Space: $0.00

E. Professional Learning: $0.00

Investing: The Millionaire's Club

Scope and Sequence Year at a Glance					
Quarter 1			**Quarter 2**		
Unit 1	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 5**	**Unit 6**
Wealth Building	**Markets and Types of Investments**	**Phases of the Markets**	**Stocks**	**Risk vs. Return**	**Buying & Selling**
3 Weeks	**3 Weeks**	**3 Weeks**	**3 Weeks**	**2 Weeks**	**2 Weeks**
Standard: BIT.PF3: Students will evaluate savings and investment options and implement a diversified investing strategy that is compatible with personal goals. BIT.PF3.a.13.h: Identify and assess various means of building wealth BIT.PF.b.7.h: Explain the role of revenue-generating assets in building wealth.	BIT.PF3. b.8.h Explain how government agencies regulate financial markets. BIT.PF3.b.9.h: Compare and contrast the risk, return and liquidity of various saving and investment alternatives	BIT.PF3. b.8.h Explain how government agencies regulate financial markets. BIT.PF3.b.9.h: Compare and contrast the risk, return and liquidity of various saving and investment alternatives	BIT.PF3.c.4.h: Develop and justify the best investment options to achieve particular goals. BIT.PF3.b.9.h: Compare and contrast the risk, return and liquidity of various saving and investment alternatives	BIT.PF3.b.9.h: Compare and contrast the risk, return and liquidity of various saving and investment alternatives	BIT.PF3.b.9.h: Compare and contrast the risk, return and liquidity of various saving and investment alternatives

COURSE CHANGE PROPOSAL

Completed forms must be returned to the chief academic officer by October 1 to be considered for board approval.

Date Initiated: 9/24/17 Administrator Name: Maria Kotz/Cheryl Kothe

Department and School: Business Department, Indian Trail H.S. & Academy – Business Academy

Course Name: Social Media

Request: ☒ **New Course** ☐ New Course Name ☐ Course Revision ☐ Remove Course

Credits: Current: 0.50 *Check if honors:* ☐

Recommended Prerequisites (if any): Introduction to Business

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)
In an effort to create two specific pathways of Finance and Marketing in the Business Academy, we are adding courses that we feel will be beneficial to students of each chosen pathway. This course will be for students choosing the marketing pathway. Social media is the future of marketing and, therefore an essential component of a marketing pathway program.

Proposed Course Description: In three or four sentences, write a course overview
In this course students will learn the what, the how and the whys of social media marketing. Social media has become a central component of marketing, one that the next generation of business leaders will need to be adept at in order to survive in the business world. Students will gain an understanding if the ins ad outs of social media platforms such as Facebook, Twitter, Pinterest, SnapChat, Instagram, Blogs, LinkedIn, YouTube, Google+ and more.
Indian Trail Business Academy Only

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

Standard: MME.MF1: Describe marketing's role and function in business to facilitate economic exchanges with customers.
Standard: MME.MF1.b: Identify what motivates decision making through interpretation of customer, client or business behavior.
Standard: MME.MC7.c: Describe promotional channels set to communicate with targeted audiences.
Standard: MME.MC7.h.13.h: Analyze and determine the effectiveness of social media strategies
Standard: MME.MC7.i.5.h: Select placement of advertisements.
Standard: MME.MC7.i.13.h: Choose appropriate media outlets.
Standard: BIT.BLE5.b.7.h: Compare and contrast the impact of false advertising methods and the importance of Truth and Packaging in Selling.
Standard: BIT.BLE5.b.10.h: Communicate the impact of unethical marketing practices on society.
Standard: BIT.BLE5.d.8.h: Outline the degree of influence media has on ethical behavior.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction.

(See attached document.)

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0.00

B. Textbooks/Kits: $1,000.00 digital content (Perkins Grant)

C. Supplementary: 40hrs. curriculum planning time: $748.80 (Perkins Grant)

D. Facilities/Space: $0.00

E. Professional Learning: $0.00

Social Media

Scope and Sequence -Year at a Glance					
Quarter 1			**Quarter 2**		
Unit 1	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 5**	**Unit 6**
Target Markets, Consumer Behavior & Promotion	**Categories/Platforms of Social Media**	**Social Media Business Strategy**	**Social Media Campaign Development**	**Converting Site Visitors into Leads.**	**Media Policy, Law and Ethics**
3 Weeks	**4 Weeks**	**3 Weeks**	**3 Weeks**	**2 Weeks**	**1 Week**
Standard: MME.MF1: Describe marketing's role and function in business to facilitate economic exchanges with customers. Standard: MME.MF1.b: Identify what motivates decision making through interpretation of customer, client or business behavior.	Standard:MME.MC7.h.13.h: Analyze and determine the effectiveness of social media strategies - Facebook - Twitter - LinkedIn - SnapChat - Pinterest - Instagram - Blogging - YouTube - Google+	Standard:MME.MC7.h.13.h: Analyze and determine the effectiveness of social media strategies	Standard:MME.MC7.h.13.h: Analyze and determine the effectiveness of social media strategies Standard: MME.MC7.i.5.h: Select placement of advertisements. Standard: MME.MC7.i.13.h: Choose appropriate media outlets.	Standard:MME.MC7.h.13.h: Analyze and determine the effectiveness of social media strategies	Standard: BIT.BLE5.b.7.h: Compare and contrast the impact of false advertising methods and the importance of Truth and Packaging in Selling. Standard: BIT.BLE5.b.10.h: Communicate the impact of unethical marketing practices on society. Standard: BIT.BLE5.d.8.h: Outline the degree of influence media has on ethical behavior.

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Kenosha Unified School District
Kenosha, Wisconsin

November 28, 2017

COURSE CHANGE PROPOSALS: FINE ARTS

Background

Six Course Change Proposals involving new course names are being submitted in the area of fine arts for the communication academy at Indian Trail Academy and High School. The courses are now based on the International Society for Technology in Education Standards, which make the existing course names misleading to students, parents, and staff. The proposed course names exemplify the new age of digital communication.

Courses

CURRENT COURSE NAME	PROPOSED COURSE NAME	SCHOOL	APPENDIX
Multi-Media 1	Digital Productions 1	Indian Trail Academy and High School	A
Multi-Media 2	Digital Productions 2	Indian Trail Academy and High School	B
Correlations of Design and Graphics	Integrated Digital Productions	Indian Trail Academy and High School	C
Foundations of Design and Drawing	Intro to Digital Graphics	Indian Trail Academy and High School	D
Graphic Design Illustration 1	Advanced Digital Graphics	Indian Trail Academy and High School	E
Graphic Design and Illustration 2	Digital/Illustration Media Concepts	Indian Trail Academy and High School	F

Recommendation

Administration recommends that the School Board approve the proposals for new course names for the six fine arts courses in the Communications Academy at Indian Trail Academy and High School.

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

Mrs. Julie Housaman
Chief Academic Officer

Mr. Scott Plank
Coordinator of Fine Arts

APPENDIX A

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: September 28, 2017 Administrator Name: Maria Kotz/Scott Plank

Department and School: Communications Academy

Course Name: Digital Productions 1 (*formerly* Multi-Media 1)

Request: ☐ New Course X New Course Name X Course Revision ☐ Remove Course

Credits: 1 *Check if honors:* ☐

Recommended Prerequisites (if any): None

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The world of digital communication has expanded well beyond websites, film, radio, and animation. The description must be updated to match industry and digital media standards. The current curriculum is based upon the International Society for Technology in Education standards.

Proposed Course Description: In three or four sentences, write a course overview.

This is an introductory course designed to teach students the fundamental principles of video production. Focus will be in story structure, the production process, cinematography, and editing. Students will generate original projects and focus on the principal media and modes of digital communication. Industry standards will be emphasized.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

(ISTE) 2C, 6A, 6B, 6D, 7C,
English RL St.5

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Unit 1: Story	Unit 2: Production	Unit 3: Cinematography & Editing
4 weeks **(English) RL St.5 (Gr. 9-10)** Analyze how a text uses structure to emphasize key points or advance an explanation or analysis. **(ISTE) 6a** - Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication. **(ISTE) 2c** - Demonstrate and understanding of and respect for the rights and obligations of using and	9 weeks **(ISTE) 2c** - Demonstrate and understanding of and respect for the rights and obligations of using and sharing intellectual property. **(ISTE) 7c** - Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal. **(ISTE) 6b** - Create original works or responsibly repurpose or remix digital resources into new creations.	26 weeks **(English) RL St.5 (Gr. 9-10)** Analyze how a text uses structure to emphasize key points or advance an explanation or analysis. **(ISTE) 2c** - Demonstrate and understanding of and respect for the rights and obligations of using and sharing intellectual property. **(ISTE) 6b** - Create original works or responsibly repurpose or remix digital resources into new creations.

Teaching and Learning

sharing intellectual property.	**(ISTE) 6d** - Publish or present content that customizes the message and medium for their intended audiences.	**(ISTE) 7c** - Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal. **(ISTE) 6a** - Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: $0

C. Supplementary: $0

D. Facilities/Space: $0

E. Professional Learning: $0

APPENDIX B

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: September 28, 2017 Administrator Name: Maria Kotz/Scott Plank

Department and School: Communications Academy

Course Name: Digital Productions 2 (*formerly* Multi Media 2)

Request: ☐ New Course X New Course Name X Course Revision ☐ Remove Course

Credits: 1 *Check if honors:* ☐

Recommended Prerequisites (if any): Digital Productions 1

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course description needs to be updated to include all modes of digital media and meet the fundamentals industry requires. The current curriculum is based upon the International Society for Technology in Education standards.

Proposed Course Description: In three or four sentences, write a course overview.

Available for Communications students grade 11 or 12, this will build upon the knowledge and experience gained from Digital Productions 1 and integrate advanced cinematography techniques into the principle modes and media within digital communication. Students will develop their own capacities for reflection, critical analysis, and expression by solving a variety of communication problems.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

(ISTE) 2C, 6A, 6B, 6D, 7C, English RL St.5

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Unit 1: Camera Angles	Unit 2: Continuity & Close ups	Unit 3: Cutting & Composition
8 Weeks **(English) RL St.5 (Gr. 9-10)** Analyze how a text uses structure to emphasize key points or advance an explanation or analysis. **(ISTE) 6a** - Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication. **(ISTE) 2c** - Demonstrate and understanding of and respect for the rights and obligations of using and	8 Weeks **(ISTE) 7c** - Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal. **(ISTE) 6b** - Create original works or responsibly repurpose or remix digital resources into new creations. **(ISTE) 6d** - Publish or present content that customizes the message and medium for their intended audiences. **(ISTE) 6a** - Choose the appropriate	23 Weeks **(English) RL St.5 (Gr. 9-10)** Analyze how a text uses structure to emphasize key points or advance an explanation or analysis. **(ISTE) 2c** - Demonstrate and understanding of and respect for the rights and obligations of using and sharing intellectual property. **(ISTE) 6b** - Create original works or responsibly repurpose or remix digital resources into new creations.

Teaching and Learning

sharing intellectual property.	platforms and tools for meeting the desired objectives of their creation or communication.	**(ISTE) 6d** - Publish or present content that customizes the message and medium for their intended audiences.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: $0

C. Supplementary: $0

D. Facilities/Space: $0

E. Professional Learning: $0

APPENDIX C

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: September 28, 2017 Administrator Name: Maria Kotz/Scott Plank

Department and School: Communications Academy

Course Name: Integrated Digital Productions (*formerly* Correlations of Design and Graphics)

Request: ☐ New Course X New Course Name X Course Revision ☐ Remove Course

Credits: 1 *Check if honors:* ☐

Recommended Prerequisites (if any): Communications Academy student; Graphic Design 2 or Digital Productions 2

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

The original course was designed upon traditional art element and principles, where the current curriculum is based upon digital technology integration. The curriculum is based upon the International Society for Technology in Education standards.

Proposed Course Description: In three or four sentences, write a course overview.

Available for grade 12, this course will build upon the knowledge and experience gained within all communications core classes. Students will focus on developing their own capacities for reflection, critical analysis, and expression by setting personal goals and solving a variety of communication problems. Projects will focus on digital integration, include multiple media, audience participation, interaction, or collaboration specific to their goals and be presented for portfolio review.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

(ISTE) 1A, 3A, 6A, 4B, 7B, 4C, and 6D

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Unit 1: Communication	Unit 2: Information Technology	Unit 3: Digital Design	Unit 4: Portfolio
4 Weeks **(ISTE) 1A** Articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.	9 Weeks **(ISTE) 4C** Develop, test and refine prototypes as a part of cyclical design process. **(ISTE) 6D** Publish or present content that customizes the message and medium for their intended audiences.	12 Weeks **(ISTE) 7B** - Use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.	12 Weeks **(ISTE) 7B** - Use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

Teaching and Learning

(ISTE) 6D Publish or present content that customizes the message and medium for their intended audiences. **(ISTE) 6A** Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	**(ISTE) 6A** Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication. **(ISTE) 4B** - Select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.	**(ISTE) 4B** - Select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.	**(ISTE) 4C** Develop, test and refine prototypes as a part of cyclical design process. **(ISTE) 4C** Develop, test and refine prototypes as a part of cyclical design process. **(ISTE) 6D** Publish or present content that customizes the message and medium for their intended audiences. **(ISTE) 6A** Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: $0

C. Supplementary: $0

D. Facilities/Space: $0

E. Professional Learning: $0

APPENDIX D

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated**:** 9/20/2017 Administrator Name: Maria Kotz/Scott Plank

Department and School: Art Department/Communications Academy ITHSA

Course Name: Intro to *Digital Graphics (formerly Foundations of Design and Drawing)*

Request: ☐ New Course ☒ New Course Name ☐ Course Revision ☐ Remove Course

Credits: 1 *Check if honors:* ☐

Recommended Prerequisites (if any): Communications Academy Freshman

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course originated in the Communications House at Indian Trail Academy in 1997. Computer graphics programs and Indian Trail's instructional technology department have grown by leaps and bounds since the initial curriculum layout. This freshmen course titled, Foundations of Design and Drawing, was based on traditional art elements and principles.

Curriculum is now based on the International Society for Technology in Education (ISTE) Standards. The old name is misleading to students, parents, and staff. The new name, Intro to Digital Graphics, exemplifies the new age of digital communication.

Proposed Course Description: In three or four sentences, write a course overview.

This course will introduce the freshman student to the visual language of art as a form of communication found in personal art expression, graphic design, and digital arts. Students will learn to be proficient in multi-media materials based on ISTE technology education standards. This course is the first step taken by the Communications Academy program to build competency in digital design and transmedia presentations. Art exhibits and digital portfolio development will begin in this course and build with each successive digital course. MacBook Pro Laptop computers, Adobe Creative Suite programs, Google Suite apps and Wacom Intuos tablets will facilitate that learning through integrated technology projects.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

ISTE Standards for Students: https://goo.gl/g2q7vg

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

(See attached document.)

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $**0**

B. Textbooks/Kits: $**0**

C. Supplementary: $**0**

D. Facilities/Space: $**0**

E. Professional Learning: $**0**

Intro to Digital Graphics

Scope and Sequence Year at a Glance			
Quarter 1			
Unit 1	**Unit 2**	**Unit 3**	**Unit 4**
Art Elements - Media Tool	**Digital Organization**	**Digital Research**	**Digital Graphics Adobe Ps**
3 weeks	**2 Weeks**	**1 Weeks**	**3 Weeks**
Generate and conceptualize artistic ideas and work. (1) • Creativity and innovative thinking are essential life skills that can be developed. • Artists and designer shape artistic investigations, following or breaking with traditions in pursuit of creative artmaking goals. **Line:** • Understand and use **contour** and/or **blind contour** techniques **Shape/Form/Values:** • Generate additional dimension in a 3D shape by adding **value** (**gradation**) **Color:** • Understand and use **basic complementary colors** - Red/green, Blue/orange, Yellow/purple **Texture:** • Identify and use **actual/real** textures within objects in the environment, and recreate them visually **Space/Balance:** Understand and use **asymmetry**	1 Empowered Learner Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. **1d** Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.	3 Knowledge Constructor Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. **3a** Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.	4 Innovative Designer Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. **4b** Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

Scope and Sequence/Year at a Glance	
Quarter 2	
Unit 5	**Unit 6**
Digital Composition – Intro Typography	**Digital Presentation**
5 weeks	**4weeks**
5 ## Computational Thinker Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. **5b** Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.	6 ## Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. **6c** Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

Scope and Sequence Year at a Glance			
Quarter 3		**Quarter 4**	
Unit 7	**Unit 8**	**Unit 9**	**Unit 10**
Digital Integration	**Digital Editing**	**Digital innovations**	**Digital Portfolio**
4 weeks	**5 weeks**	**6 weeks**	**2 weeks**
7 ## Global Collaborator Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. **7a** Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.	6 ## Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. **6b** Students create original works or responsibly repurpose or remix digital resources into new creations.	6 ## Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. **6d** Students publish or present content that customizes the message and medium for their intended audiences.	2 ## Digital Citizen Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical. **2d** Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

APPENDIX E

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: 9/20/2017 Administrator Name: Maria Kotz/Scott Plank

Department and School: Art Department/Communications Academy ITHSA

Course Name: Advanced Digital Graphics (*formerly* Graphic Design Illustration 1)

Request: ☐ New Course ☒ New Course Name ☐ Course Revision ☐ Remove Course

Credits: 1 *Check if honors:* ☐

Recommended Prerequisites (if any): Communications Academy Sophomore—Intro to Digital Graphics

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course originated in the Communications House at Indian Trail Academy in 1997. Computer graphics programs and Indian Trail's instructional technology department have grown by leaps and bounds since the initial curriculum layout. This freshman course titled, Graphic Design Illustration 1, was based on traditional art elements and principles.

Curriculum is now based on the International Society for Technology Education (ITSE) standards. The old name is misleading to students, parents, and staff**.** The new name, Advanced Digital Graphics, exemplifies the new age of digital communication.

Proposed Course Description: In three or four sentences, write a course overview.

This course will build on the freshman foundations curriculum. Students will continue using the visual language of art as a form of communication found in personal art expression, advertising, typography, and graphic arts. Students will learn to be proficient in multimedia materials while applying the graphic design elements and principles with technology literacy tools. This course is the second step in the communications program to build competency in the seven essentials of graphic design and visual presentation. Advanced drawing techniques will be practiced to create realistic images with advanced color theory. Adobe Illustrator will be used to manipulate text and imagery with vector quality in contrast to the Photoshop raster program imagery. Integrated projects with core classes will provide a broad understanding of how design can be used as a vehicle to demonstrate understanding. Art exhibits and portfolio development will continue in this course and be building blocks for the students' Senior Showcase community event.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

ISTE Standards for Students: https://goo.gl/g2q7vg

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

(See attached documents.)

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $**0**

B. Textbooks/Kits: $**0**

C. Supplementary: $**0**

D. Facilities/Space: $**0**

E. Professional Learning: $**0**

Advanced Digital Graphics

Scope and Sequence /Year at a Glance		
Quarter 1		
Unit 1	**Unit 2**	**Unit 3**
Advanced Drawing	**Digital Organization - Review**	**Digital Communication Advanced Ps tutorials**
3 weeks	**2 Weeks**	**4 Weeks**
Generate and conceptualize artistic ideas and work. (1) • Creativity and innovative thinking are essential life skills that can be developed. • Artists and designer shape artistic investigations, following or breaking with traditions in pursuit of creative artmaking goals. **Line:** • Understand and use **contour** and/or **blind contour** techniques **Shape/Form/Values:** • Generate additional dimension in a 3D shape by adding **value** (**gradation**) **Color:** • Understand and use **basic complementary colors** - Red/green, Blue/orange, Yellow/purple **Texture:** • Identify and use **actual/real** textures within objects in the environment, and recreate them visually **Space/Balance:** Understand and use **asymmetry**	1 Empowered Learner Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. **1d** Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.	1 Empowered Learner Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. **1a** Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes. **1b**

		Students build networks and customize their learning environments in ways that support the learning process. **1C** Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.

Scope and Sequence/Year at a Glance	
Quarter 2	
Unit 5	**Unit 6**
Advanced Digital Composition Ps – 7 Design Principles	**Advanced Digital Typography – Core Curriculum Connections**
5 weeks	**4weeks**
4 ## Innovative Designer Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. **4a** Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems. 5 ## Computational Thinker Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test	6 ## Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. **6c** Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. 4 ## Innovative Designer Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.

solutions. **5a** Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.	**4c** Students develop, test and refine prototypes as part of a cyclical design process.

Scope and Sequence /Year at a Glance			
Quarter 3		**Quarter 4**	
Unit 7	**Unit 8**	**Unit 9**	**Unit 10**
Digital Painting	**Digital Vector Imaging - Intro**	**Digital Vector Imaging Advertising**	**Digital Portfolio**
5 weeks	**4 weeks**	**5 weeks**	**4 weeks**
4 ## Innovative Designer Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. **4c** Students develop, test and refine prototypes as part of a cyclical design process.	4 ## Innovative Designer Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. **4d** Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.	6 ## Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. **6c** Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. **6d** Students publish or present content	2 ## Digital Citizen Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical. **2a** Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.

		that customizes the message and medium for their intended audiences.	**2d** Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

APPENDIX F

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: 9/20/2017 Administrator Name: Maria Kotz/Scott Plank

Department and School: Art Department/Communications Academy ITHSA

Course Name: Digital/Illustration Media Concepts (*formerly* Graphic Design and Illustration 2)

Request: ☐ New Course ☒ New Course Name ☐ Course Revision ☐ Remove Course

Credits: 1 *Check if honors:* ☐

Recommended Prerequisites (if any): Intro to Digital Graphics, Advanced Digital Graphics, Communications Academy Junior

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course originated in the Communications House at Indian Trail Academy in 1997. Computer graphics programs and Indian Trail's instructional technology department have grown by leaps and bounds since the initial curriculum layout. This junior level course titled, Graphic Design and Illustration 2, is now based on the International Society for Technology Education (ITSE) Standards along with the Gateway Technical College three-credit transcript course curriculum. The old name is misleading to students, parents, and staff. The new name, Digital/Illustration Media Concepts, exemplifies the new age of digital communication.

Proposed Course Description: In three or four sentences, write a course overview.

This course guides students through an organized experimentation of traditional art media to create images that convey specific messages to viewers. A variety of media is used including: watercolor, acrylic, charcoal, inks, dyes, collage, sculpture, and computers. Good composition, visual organization, development of creative thinking, and visual problem solving will be emphasized. Formative sketchbook projects will build explora-tion of various concepts. This course will include a study of perspective, light, shade, and color theory. Current design and color trends will be explored.

The following competencies are promoted and assessed in this course:

- Examine the elements and principles of design.
- Demonstrate creative style through drawing exercises.
- Solve visual problems.
- Create a variety of drawing styles.
- Examine the drawing process.
- Create images using various drawing and design media.
- Explore the design process.
- Explore the creative process using digital media.
- Revise design based on constructive criticism.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

ISTE Standards for Students: https://goo.gl/g2q7vg

National Art Standards: http://www.nationalartsstandards.org/

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

(See attached document.)

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $**0**

B. Textbooks/Kits: $**0**

C. Supplementary: $**0**

D. Facilities/Space: $**0**

E. Professional Learning: $**0**

Digital Illustration Media Concepts

Scope and Sequence/ Year at a Glance	
Quarter 1	
Unit 1	**Unit 2**
Advanced Drawing Media – Art Elements	**Digital Drawing - Connections**
7 weeks	**2 Weeks**
ELEMENTS/PRINCIPLES **MEDIA EXPLORATION/INVESTIGATION** **TECHNIQUES** **Generate and conceptualize artistic ideas and work. (1)** • Creativity and innovative thinking are essential life skills that can be developed. • Artists and designer shape artistic investigations, following or breaking with traditions in pursuit of creative artmaking goals. **Line:** • Understand and use **contour** and/or **blind contour** techniques **Shape/Form/Values:** • Generate additional dimension in a 3D shape by adding **value** (**gradation**) **Color:** • Understand and use **basic complementary colors** - Red/green, Blue/orange, Yellow/purple **Texture:** • Identify and use **actual/real** textures within objects in the environment, and recreate them visually **Space/Balance:** Understand and use **asymmetry**	1 Empowered Learner Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. **1a** Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes. **1b** Students build networks and customize their learning environments in ways that support the learning process. **1d** Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current

	technologies and are able to transfer their knowledge to explore emerging technologies.

Scope and Sequence/Year at a Glance	
Quarter 2	
Unit 5	**Unit 6**
Wet Media Exploration- Mixed Media Solutions	**Digital Painting Connections**
6 weeks	**3 weeks**
ELEMENTS/PRINCIPLES **MEDIA EXPLORATION/INVESTIGATION** **TECHNIQUES** **Generate and conceptualize artistic ideas and work. (1)** • Creativity and innovative thinking are essential life skills that can be developed. • Artists and designer shape artistic investigations, following or breaking with traditions in pursuit of creative artmaking goals. **Line:** • Understand and use **contour** and/or **blind contour** techniques **Shape/Form/Values:** • Generate additional dimension in a 3D shape by adding **value** (**gradation**) **Color:** • Understand and use **basic complementary colors** - Red/green, Blue/orange, Yellow/purple **Texture:** • Identify and use **actual/real** textures within objects in the environment, and recreate them visually **Space/Balance:** Understand and use **asymmetry**	6 Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. **6b** Students create original works or responsibly repurpose or remix digital resources into new creations. **6c** Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. 5 Computational Thinker Students develop and employ strategies for understanding and solving problems in

	ways that leverage the power of technological methods to develop and test solutions. **5c** Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving. **5d** Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

Scope and Sequence /Year at a Glance			
Quarter 3		**Quarter 4**	
Unit 7	**Unit 8**	**Unit 9**	**Unit 10**
Dimensional Media Exploration	**Digital Principles Dimensional Imagery**	**Advanced Digital Ps and Vector**	**Traditional-Sketchbook and Digital Portfolio**
6 weeks	**3 weeks**	**6 weeks**	**3 weeks**
ELEMENTS/PRINCIPLES **MEDIA EXPLORATION/INVESTIGATION** **TECHNIQUES** **Generate and conceptualize artistic ideas and work. (1)** • Creativity and innovative thinking are essential life skills that can be developed. • Artists and designer shape artistic investigations, following or breaking with traditions in pursuit of creative artmaking goals. **Line:** • Understand and use **contour** and/or **blind contour** techniques **Shape/Form/Values:** • Generate additional dimension in a 3D shape by adding **value** (**gradation**) **Color:** • Understand and use **basic complementary colors** - Red/green, Blue/orange, Yellow/purple **Texture:**	4 Innovative Designer Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. **4b** Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks. **4c** Students develop, test and refine prototypes as part of a cyclical design process.	6 Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. **6c** Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. **6d** Students publish or present content	7 Global Collaborator Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. **7a** Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.

• Identify and use **actual/real** textures within objects in the environment, and recreate them visually **Space/Balance:** Understand and use **asymmetry**	**4d** Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.	that customizes the message and medium for their intended audiences.	**7b** Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints. 2 ## Digital Citizen Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical. **2a** Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.

			2d Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

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Kenosha Unified School District
Kenosha, Wisconsin

November 28, 2017

COURSE CHANGE PROPOSALS: SCIENCE

Background

Two Course Change Proposals are being submitted in the area of science. The proposals are related to one another in that the requests are for one course to be removed and a new course added to replace it. This change will establish a course pathway that provides students access to biology, matter and energy and earth science thus encompassing all of the Next Generation Science Standards (NGSS). Additionally this change ensures the broadest coverage of standards that are addressed on high stakes tests. Appendix A provides an overview of the science pathway options that are available to students.

Courses

COURSE	SCHOOL	ACTION	APPENDIX
Geology	All high schools	Remove all schools	B
Earth Science	All high schools	Add at Bradford, Indian Trail, Reuther, Tremper	C

Recommendation

Administration recommends that the School Board approve the proposal to remove Geology and add Earth Science at the November 28, 2017 meeting.

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

Mrs. Julie Housaman
Chief Academic Officer

Mrs. Christine Pratt
Coordinator of Science

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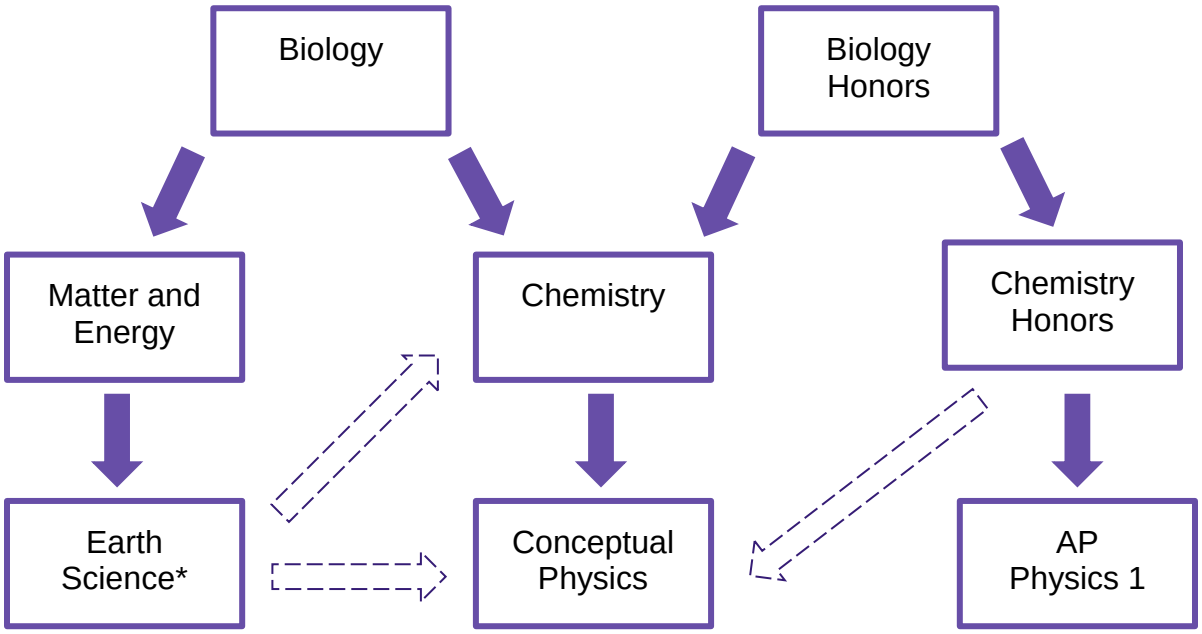
Recommended Science Course Pathways

- Students must earn three credits of science to graduate.
- Incoming freshmen begin in Biology or Biology Honors.
- These course pathways maximize student access to all of the high school science standards.
- Following a pathway is the best way for students to prepare for the ACT administered in grade 11.
- Dotted arrows show some examples of possible crossover among pathways. There may be others based on student need.



*Earth Science will replace Geology in the 2018-2019 school year.

Options for a Fourth Science Course
Anatomy & Physiology Honors, Human Biology, Astronomy, Geology Honors, Ecology, Forensics (0.5 credit course)
AP Biology ● *College Board recommended prerequisites: biology and chemistry.* ● KUSD recommended prerequisites: biology honors and chemistry honors. ● Concurrent or previous enrollment in AP Statistics enhances the AP Biology experience. AP Chemistry ● *College Board recommended prerequisites: chemistry and algebra 2* ● KUSD recommended prerequisites: chemistry honors and algebra 2 AP Physics 1 ● *College Board and KUSD recommended prerequisites: geometry and concurrent enrollment in algebra 2* AP Physics 2 ● *College Board and KUSD prerequisite: AP Physics 1* AP Environmental Science ● *College Board and KUSD recommended prerequisites: biology, chemistry, algebra 1*

Teaching and Learning, August 2017

APPENDIX B

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: August 30, 2017 Administrator Name: Christine Pratt

Department and School: All high school science departments

Course Name: Geology

Request: ☐ New Course ☐ New Course Name ☐ Course Revision X Remove Course

Credits: 1 *Check if honors:* ☐

Recommended Prerequisites (if any): NA

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course is being replaced with a new course titled Earth Science that better aligns with the district high school science standards.

Proposed Course Description: In three or four sentences, write a course overview.

NA

Content Standards and Benchmarks:

NA

Scope and Sequence:

NA

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $NA

B. Textbooks/Kits: $NA

C. Supplementary: $NA

D. Facilities/Space: $NA

E. Professional Learning: $NA

APPENDIX C

COURSE CHANGE PROPOSAL

*Completed forms must be returned to the chief academic officer by **October 1** to be considered for board approval.*

Date Initiated: August 30, 2017 Administrator Name: Christine Pratt

Department and School: All high school science departments

Course Name: Earth Science

Request: X New Course ☐ New Course Name ☐ Course Revision ☐ Remove Course

Credits: 1 *Check if honors:* ☐

Recommended Prerequisites (if any): Matter and Energy

Rationale: Explain why this course is needed. (If this is a course removal or name change, only fill out this section.)

This course is needed to complete a science course pathway that provides students access to all of the district science standards. This is the third course in the pathway and is to be taken after Biology and Matter and Energy.

Proposed Course Description: In three or four sentences, write a course overview.

Earth Science addresses three main ideas from the district science standards: Earth's place in the universe, Earth's systems, and Earth and human activity. Students will use science and engineering practices in the context of Earth science content and explore concepts that cut across all disciplines of science. Students will understand Earth's place in the universe by studying three subideas: the universe and its stars, Earth and the solar system, and the history of planet Earth. The topic of Earth systems is broken into five subideas: Earth materials and systems, plate tectonics, the roles of water on Earth, weather and climate, and biogeology. The study of Earth and human activity involves four subideas: natural resources, natural hazards, human use of resources, and the impacts of human activity.

Content Standards and Benchmarks: List the primary content standards and benchmarks students will be expected to understand and be able to apply as a result of taking this course. (Attach additional documents as needed.)

See attached standards.

Scope and Sequence: Outline the planned structure for the course, including a tentative timeline for instruction. (Attach additional documents as needed.)

Tentative unit documents are attached.

Cost Associated with the Course: Estimate the costs involved in offering this course. List desired texts and materials on a separate sheet. Also list and explain other needs.

A. Teaching Staff: $0

B. Textbooks/Kits: approximately $150,000 (part of curriculum adoption cycle).

C. Supplementary: $0

D. Facilities/Space: $0

E. Professional Learning: $1800.00 (T&L budget).

Kenosha Unified School District
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Earth Science

Year at a Glance

SEMESTER 1

Unit 1: Structure of Earth

DISCIPLINARY CORE IDEAS

ESS2.A: Earth Materials and Systems

- Earth's systems, being dynamic and interacting, cause feedback effects that can increase or decrease the original changes. (HS-ESS2-1),(HS-ESS2-2)
- Evidence from deep probes and seismic waves, reconstructions of historical changes in Earth's surface and its magnetic field, and an understanding of physical and chemical processes lead to a model of Earth with a hot but solid inner core, a liquid outer core, a solid mantle and crust. Motions of the mantle and its plates occur primarily through thermal convection, which involves the cycling of matter due to the outward flow of energy from Earth's interior and gravitational movement of denser materials toward the interior. (HS-ESS2-3)

ESS2.C: The Roles of Water in Earth's Surface Processes

- The abundance of liquid water on Earth's surface and its unique combination of physical and chemical properties are central to the planet's dynamics. These properties include water's exceptional capacity to absorb, store, and release large amounts of energy, transmit sunlight, expand upon freezing, dissolve and transport materials, and lower the viscosities and melting points of rocks. (HS-ESS2-5)

PERFORMANCE EXPECTATIONS

HS-ESS2-2: Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.

- Clarification Statement: Examples should include climate feedbacks, such as how an increase in greenhouse gases causes a rise in global temperatures that melts glacial ice, which reduces the amount of sunlight reflected from Earth's surface, increasing surface temperatures and further reducing the amount of ice. Examples could also be taken from other system interactions, such as how the loss of ground vegetation causes an increase in water runoff and soil erosion; how dammed rivers increase groundwater recharge, decrease sediment transport, and increase coastal erosion; or how the loss of wetlands causes a decrease in local humidity that further reduces the wetland extent.]

Unit 2: Plate Tectonics and Earth History

DISCIPLINARY CORE IDEAS

ESS2.B: Plate Tectonics and Large-Scale System Interactions

- The radioactive decay of unstable isotopes continually generates new energy within Earth's crust and mantle, providing the primary source of the heat that drives mantle convection. Plate tectonics can be viewed as the surface expression of mantle convection. (HS-ESS2-3)
- Plate tectonics is the unifying theory that explains the past and current movements of the rocks at Earth's surface and provides a framework for understanding its geologic history. Plate movements are responsible for most continental and ocean-floor features and for the distribution of most rocks and minerals within Earth's crust. (HS-ESS2-1)

ESS2.A: Earth Materials and Systems

- The geological record shows that changes to global and regional climate can be caused by interactions among changes in the sun's energy output or Earth's orbit, tectonic events, ocean circulation, volcanic activity, glaciers, vegetation, and human activities. These changes can occur on a variety of time scales from sudden (e.g., volcanic ash clouds) to intermediate (ice ages) to very long-term tectonic cycles. (HS-ESS2-4)

ESS2.D: Weather and Climate

- Gradual atmospheric changes were due to plants and other organisms that captured carbon dioxide and released oxygen. (HS-ESS2-6),(HS-ESS2-7)

ESS2.E Biogeology

- The many dynamic and delicate feedbacks between the biosphere and other Earth systems cause a continual co-evolution of Earth's surface and the life that exists on it. (HS-ESS2-7)

ESS1.C: The History of Planet Earth

- Continental rocks, which can be older than 4 billion years, are generally much older than the rocks of the ocean floor, which are less than 200 million years old. (HS-ESS1-5)
- Although active geologic processes, such as plate tectonics and erosion, have destroyed or altered most of the very early rock record on Earth, other objects in the solar system, such as lunar rocks, asteroids, and meteorites, have changed little over billions of years. Studying these objects can provide information about Earth's formation and early history. (HS-ESS1-6)

PERFORMANCE EXPECTATIONS

HS-ESS2-1: Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.

- Clarification Statement: Emphasis is on how the appearance of land features (such as mountains, valleys, and plateaus) and sea-floor features (such as trenches, ridges, and seamounts) are a result of both constructive forces (such as volcanism, tectonic uplift, and orogeny) and destructive mechanisms (such as weathering, mass wasting, and coastal erosion).
- Assessment Boundary: Assessment does not include memorization of the details of the formation of specific geographic features of Earth's surface.

HS-ESS2-3: Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection.

- Clarification Statement: Emphasis is on both a one-dimensional model of Earth, with radial layers determined by density, and a three-dimensional model, which is controlled by mantle convection and the resulting plate tectonics. Examples of evidence include maps of Earth's three-dimensional structure obtained from seismic waves, records of the rate of change of Earth's magnetic field (as constraints on convection in the outer core), and identification of the composition of Earth's layers from high-pressure laboratory experiments.

HS-ESS1-5: Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks.

- Clarification Statement: Emphasis is on the ability of plate tectonics to explain the ages of crustal rocks. Examples include evidence of the ages of oceanic crust increasing with distance from mid-ocean ridges (a result of plate spreading) and the ages of North American continental crust decreasing with distance away from a central ancient core of the continental plate (a result of past plate interactions).

Unit 3: Natural Resources and Hazards

DISCIPLINARY CORE IDEAS

ESS3.A: Natural Resources

- Resource availability has guided the development of human society. (HS-ESS3-1)
- All forms of energy production and other resource extraction have associated economic, social, environmental, and geopolitical costs and risks as well as benefits. New technologies and social regulations can change the balance of these factors. (HS-ESS3-2)

ESS3.B: Natural Hazards

- Natural hazards and other geologic events have shaped the course of human history; [they] have significantly altered the sizes of human populations and have driven human migrations. (HS-ESS3-1)

ESS2.A: Earth Materials and Systems

- The geological record shows that changes to global and regional climate can be caused by interactions among changes in the sun's energy output or Earth's orbit, tectonic events, ocean circulation, volcanic activity, glaciers, vegetation, and human activities. These changes can occur on a variety of time scales from sudden (e.g., volcanic ash clouds) to intermediate (ice ages) to very long-term tectonic cycles. (HS-ESS2-4)

ESS3.C: Human Impacts on Earth Systems

- Scientists and engineers can make major contributions by developing technologies that produce less pollution and waste and that preclude ecosystem degradation. (HS-ESS3-4)

PERFORMANCE EXPECTATIONS

HS-ESS3-1: Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.

- Clarification Statement: Examples of key natural resources include access to fresh water (such as rivers, lakes, and groundwater), regions of fertile soils such as river deltas, and high concentrations of minerals and fossil fuels. Examples of natural hazards can be from interior processes (such as volcanic eruptions and earthquakes), surface processes (such as tsunamis, mass wasting and soil erosion), and severe weather (such as hurricanes, floods, and droughts). Examples of the results of changes in climate that can affect populations or drive mass migrations include changes to sea level, regional patterns of temperature and precipitation, and the types of crops and livestock that can be raised.

HS-ESS3-2: Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.*

- Clarification Statement: Emphasis is on the conservation, recycling, and reuse of resources (such as minerals and metals) where possible, and on minimizing impacts where it is not. Examples include developing best practices for agricultural soil use, mining (for coal, tar sands, and oil shales), and pumping (for petroleum and natural gas). Science knowledge indicates what can happen in natural systems—not what should happen.]

Unit 4: Climate

DISCIPLINARY CORE IDEAS

ESS2.D: Weather and Climate

- The foundation for Earth's global climate systems is the electromagnetic radiation from the sun, as well as its reflection, absorption, storage, and redistribution among the atmosphere, ocean, and land systems, and this energy's re-radiation into space. (HS-ESS2-2)(HS-ESS2-4)
- Gradual atmospheric changes were due to plants and other organisms that captured carbon dioxide and released oxygen. (HS-ESS2-6),(HS-ESS2-7)
- Current models predict that, although future regional climate changes will be complex and varied, average global temperatures will continue to rise. The outcomes predicted by global climate models strongly depend on the amounts of human-generated greenhouse gases added to the atmosphere each year and by the ways in which these gases are absorbed by the ocean and biosphere. *(secondary to HS-ESS3-6)*

ESS2.C: The Roles of Water in Earth's Surface Processes

- The abundance of liquid water on Earth's surface and its unique combination of physical and chemical properties are central to the planet's dynamics. These properties include water's exceptional capacity to absorb, store, and release large amounts of energy, transmit sunlight, expand upon freezing, dissolve and transport materials, and lower the viscosities and melting points of rocks. (HS-ESS2-5)

PERFORMANCE EXPECTATIONS

HS-ESS2-5: Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.

- Clarification Statement: Emphasis is on mechanical and chemical investigations with water and a variety of solid materials to provide the evidence for connections between the hydrologic cycle and system interactions commonly known as the rock cycle. Examples of mechanical investigations include stream transportation and deposition using a stream table, erosion using variations in soil moisture content, or frost wedging by the expansion of water as it freezes. Examples of chemical investigations include chemical weathering and recrystallization (by testing the solubility of different materials) or melt generation (by examining how water lowers the melting temperature of most solids).

HS-ESS2-7: Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.

- Clarification Statement: Emphasis is on the dynamic causes, effects, and feedbacks between the biosphere and Earth's other systems, whereby geoscience factors control the evolution of life, which in turn continuously alters Earth's surface. Examples include how photosynthetic life altered the atmosphere through the production of oxygen, which in turn increased weathering rates and allowed for the evolution of animal life; how microbial life on land increased the formation of soil, which in turn allowed for the evolution of land plants; or how the evolution of corals created reefs that altered patterns of erosion and deposition along coastlines and provided habitats for the evolution of new life forms.
- Assessment Boundary: Assessment does not include a comprehensive understanding of the mechanisms of how the biosphere interacts with all of Earth's other systems.

SEMESTER 2

Unit 5: Human Impact

DISCIPLINARY CORE IDEAS

ESS2.D: Weather and Climate

- Changes in the atmosphere due to human activity have increased carbon dioxide concentrations and thus affect climate. (HS-ESS2-6),(HS-ESS2-4)
- Current models predict that, although future regional climate changes will be complex and varied, average global temperatures will continue to rise. The outcomes predicted by global climate models strongly depend on the amounts of human-generated greenhouse gases added to the atmosphere each year and by the ways in which these gases are absorbed by the ocean and biosphere. *(secondary to HS-ESS3-6)*

ESS3.D: Global Climate Change

- Though the magnitudes of human impacts are greater than they have ever been, so too are human abilities to model, predict, and manage current and future impacts. (HS-ESS3-5)
- Through computer simulations and other studies, important discoveries are still being made about how the ocean, the atmosphere, and the biosphere interact and are modified in response to human activities. (HS-ESS3-6)

ESS3.C: Human Impacts on Earth Systems

- The sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources. (HS-ESS3-3)
- Scientists and engineers can make major contributions by developing technologies that produce less pollution and waste and that preclude ecosystem degradation. (HS-ESS3-4)

ESS1.B: Earth and the Solar System

- Cyclical changes in the shape of Earth's orbit around the sun, together with changes in the tilt of the planet's axis of rotation, both occurring over hundreds of thousands of years, have altered the intensity and distribution of sunlight falling on the earth. These phenomena cause a cycle of ice ages and other gradual climate changes. *(secondary to HS-ESS2-4)*

PERFORMANCE EXPECTATIONS

HS-ESS2-4: Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.

- Clarification Statement: Examples of the causes of climate change differ by timescale, over 1-10 years: large volcanic eruption, ocean circulation; 10-100s of years: changes in human activity, ocean circulation, solar output; 10-100s of thousands of years: changes to Earth's orbit and the orientation of its axis; and 10-100s of millions of years: long-term changes in atmospheric composition.
- Assessment Boundary: Assessment of the results of changes in climate is limited to changes in surface temperatures, precipitation patterns, glacial ice volumes, sea levels, and biosphere distribution.

HS-ESS2-6: Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.

- Clarification Statement: Emphasis is on modeling biogeochemical cycles that include the cycling of carbon through the ocean, atmosphere, soil, and biosphere (including humans), providing the foundation for living organisms.

HS-ESS3-3: Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.

- Clarification Statement: Examples of factors that affect the management of natural resources include costs of resource extraction and waste management, per-capita consumption, and the development of new technologies. Examples of factors that affect human sustainability include agricultural efficiency, levels of conservation, and urban planning.
- Assessment Boundary: Assessment for computational simulations is limited to using provided multi-parameter programs or constructing simplified spreadsheet calculations.]

HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.*

- Clarification Statement: Examples of data on the impacts of human activities could include the quantities and types of pollutants released, changes to biomass and species diversity, or areal changes in land surface use (such as for urban development, agriculture and livestock, or surface mining). Examples for limiting future impacts could range from local efforts (such as reducing, reusing, and recycling resources) to large-scale geoengineering design solutions (such as altering global temperatures by making large changes to the atmosphere or ocean).

HS-ESS3-5: Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.

- Clarification Statement: Examples of evidence, for both data and climate model outputs, are for climate changes (such as precipitation and temperature) and their associated impacts (such as on sea level, glacial ice volumes, or atmosphere and ocean composition).
- Assessment Boundary: Assessment is limited to one example of a climate change and its associated impacts.

HS-ESS3-6: Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

- Clarification Statement: Examples of Earth systems to be considered are the hydrosphere, atmosphere, cryosphere, geosphere, and/or biosphere. An example of the far-reaching impacts from a human activity is how an increase in atmospheric carbon dioxide results in an increase in photosynthetic biomass on land and an increase in ocean acidification, with resulting impacts on sea organism health and marine populations.

- Assessment Boundary: Assessment does not include running computational representations but is limited to using the published results of scientific computational models.

Unit 6: Earth's Movement in the Solar System

DISCIPLINARY CORE IDEAS

ESS1.B: Earth and the Solar System

- Kepler's laws describe common features of the motions of orbiting objects, including their elliptical paths around the sun. Orbits may change due to the gravitational effects from, or collisions with, other objects in the solar system. (HS-ESS1-4)
- Cyclical changes in the shape of Earth's orbit around the sun, together with changes in the tilt of the planet's axis of rotation, both occurring over hundreds of thousands of years, have altered the intensity and distribution of sunlight falling on the earth. These phenomena cause a cycle of ice ages and other gradual climate changes. *(secondary to HS-ESS2-4)*

ESS1.C: The History of Planet Earth

- Although active geologic processes, such as plate tectonics and erosion, have destroyed or altered most of the very early rock record on Earth, other objects in the solar system, such as lunar rocks, asteroids, and meteorites, have changed little over billions of years. Studying these objects can provide information about Earth's formation and early history. (HS-ESS1-6)

PERFORMANCE EXPECTATIONS

HS-ESS1-4: Use mathematical or computational representations to predict the motion of orbiting objects in the solar system.

- Clarification Statement: Emphasis is on Newtonian gravitational laws governing orbital motions, which apply to human-made satellites as well as planets and moons.]
- Assessment Boundary: Mathematical representations for the gravitational attraction of bodies and Kepler's laws of orbital motions should not deal with more than two bodies, nor involve calculus.

HS-ESS1-6: Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history.

- Clarification Statement: Emphasis is on using available evidence within the solar system to reconstruct the early history of Earth, which formed along with the rest of the solar system 4.6 billion years ago. Examples of evidence include the absolute ages of ancient materials (obtained by radiometric dating of meteorites, moon rocks, and Earth's oldest minerals), the sizes and compositions of solar system objects, and the impact cratering record of planetary surfaces.

Unit 7: Stars

DISCIPLINARY CORE IDEAS

ESS1.A: The Universe and Its Stars

- The star called the sun is changing and will burn out over a lifespan of approximately 10 billion years. (HS-ESS1-1)
- The study of stars' light spectra and brightness is used to identify compositional elements of stars, their movements, and their distances from Earth. (HS-ESS1-2),(HS-ESS1-3)
- Other than the hydrogen and helium formed at the time of the Big Bang, nuclear fusion within stars produces all atomic nuclei lighter than and including iron, and the process releases electromagnetic energy. Heavier elements are produced when certain massive stars achieve a supernova stage and explode. (HS-ESS1-2),(HS-ESS1-3)

PERFORMANCE EXPECTATIONS

HS-ESS1-1: Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy in the form of radiation.

- Clarification Statement: Emphasis is on the energy transfer mechanisms that allow energy from nuclear fusion in the sun's core to reach Earth. Examples of evidence for the model include observations of the masses and lifetimes of other stars, as well as the ways that the sun's radiation varies due to sudden solar flares ("space weather"), the 11-year sunspot cycle, and non-cyclic variations over centuries.
- Assessment Boundary: Assessment does not include details of the atomic and sub-atomic processes involved with the sun's nuclear fusion.

Unit 8: The Universe

DISCIPLINARY CORE IDEAS

ESS1.A: The Universe and Its Stars

- (Cont. from Unit 7) The study of stars' light spectra and brightness is used to identify compositional elements of stars, their movements, and their distances from Earth. (HS-ESS1-2),(HS-ESS1-3)
- The Big Bang theory is supported by observations of distant galaxies receding from our own, of the measured composition of stars and non-stellar gases, and of the maps of spectra of the primordial radiation (cosmic microwave background) that still fills the universe. (HS-ESS1-2)

PERFORMANCE EXPECTATIONS

HS-ESS1-2: Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.

- Clarification Statement: Emphasis is on the astronomical evidence of the red-shift of light from galaxies as an indication that the universe is currently expanding, the cosmic microwave background as the remnant radiation from the Big Bang, and the observed composition of ordinary matter of the universe, primarily found in stars and interstellar gases (from the spectra of electromagnetic radiation from stars), which matches that predicted by the Big Bang theory (3/4 hydrogen and 1/4 helium).

HS-ESS1-3: Communicate scientific ideas about the way stars, over their life cycle, produce elements.

- Clarification Statement: Emphasis is on the way nucleosynthesis, and therefore the different elements created, varies as a function of the mass of a star and the stage of its lifetime.
- Assessment Boundary: Details of the many different nucleosynthesis pathways for stars of differing masses are not assessed.

Engineering Standards Throughout the Course

CORE IDEAS:

ETS1.A: Defining and Delimiting Engineering Problems (Units 3, 5)

- Criteria and constraints also include satisfying any requirements set by society, such as taking issues of risk mitigation into account, and they should be quantified to the extent possible and stated in such a way that one can tell if a given design meets them. (HS-ETS1-1)
- Humanity faces major global challenges today, such as the need for supplies of clean water and food or for energy sources that minimize pollution, which can be addressed through engineering. These global challenges also may have manifestations in local communities. (HS-ETS1-1)

ETS1.B: Developing Possible Solutions (Units 1, 3, 4, 5, 6, 7, 8)

- When evaluating solutions, it is important to take into account a range of constraints, including cost, safety, reliability, and aesthetics, and to consider social, cultural, and environmental impacts. (HS-ETS1-3)

- Both physical models and computers can be used in various ways to aid in the engineering design process. Computers are useful for a variety of purposes, such as running simulations to test different ways of solving a problem or to see which one is most efficient or economical; and in making a persuasive presentation to a client about how a given design will meet his or her needs. (HS-ETS1-4)

ETS1.C: Optimizing the Design Solution (Units 3, 5)

- Criteria may need to be broken down into simpler ones that can be approached systematically, and decisions about the priority of certain criteria over others (trade-offs) may be needed. (HS-ETS1-2)

ENGINEERING PERFORMANCE EXPECTATIONS:

HS-ETS1-1: Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.

HS-ETS1-2: Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.

HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.

HS-ETS1-4: Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.

HS-ETS1 Engineering Design

HS-ETS1 Engineering Design

Students who demonstrate understanding can:

HS-ETS1-1. Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.

HS-ETS1-2. Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.

HS-ETS1-3. Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.

HS-ETS1-4. Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.

The performance expectations above were developed using the following elements from the NRC document *A Framework for K-12 Science Education*:

Science and Engineering Practices

Asking Questions and Defining Problems

Asking questions and defining problems in 9–12 builds on K–8 experiences and progresses to formulating, refining, and evaluating empirically testable questions and design problems using models and simulations.

- Analyze complex real-world problems by specifying criteria and constraints for successful solutions. (HS-ETS1-1)

Using Mathematics and Computational Thinking

Mathematical and computational thinking in 9-12 builds on K-8 experiences and progresses to using algebraic thinking and analysis, a range of linear and nonlinear functions including trigonometric functions, exponentials and logarithms, and computational tools for statistical analysis to analyze, represent, and model data. Simple computational simulations are created and used based on mathematical models of basic assumptions.

- Use mathematical models and/or computer simulations to predict the effects of a design solution on systems and/or the interactions between systems. (HS-ETS1-4)

Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in 9–12 builds on K–8 experiences and progresses to explanations and designs that are supported by multiple and independent student-generated sources of evidence consistent with scientific ideas, principles and theories.

- Design a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, prioritized criteria, and tradeoff considerations. (HS-ETS1-2)
- Evaluate a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, prioritized criteria, and tradeoff considerations. (HS-ETS1-3)

Disciplinary Core Ideas

ETS1.A: Defining and Delimiting Engineering Problems

- Criteria and constraints also include satisfying any requirements set by society, such as taking issues of risk mitigation into account, and they should be quantified to the extent possible and stated in such a way that one can tell if a given design meets them. (HS-ETS1-1)
- Humanity faces major global challenges today, such as the need for supplies of clean water and food or for energy sources that minimize pollution, which can be addressed through engineering. These global challenges also may have manifestations in local communities. (HS-ETS1-1)

ETS1.B: Developing Possible Solutions

- When evaluating solutions, it is important to take into account a range of constraints, including cost, safety, reliability, and aesthetics, and to consider social, cultural, and environmental impacts. (HS-ETS1-3)
- Both physical models and computers can be used in various ways to aid in the engineering design process. Computers are useful for a variety of purposes, such as running simulations to test different ways of solving a problem or to see which one is most efficient or economical; and in making a persuasive presentation to a client about how a given design will meet his or her needs. (HS-ETS1-4)

ETS1.C: Optimizing the Design Solution

- Criteria may need to be broken down into simpler ones that can be approached systematically, and decisions about the priority of certain criteria over others (trade-offs) may be needed. (HS-ETS1-2)

Crosscutting Concepts

Systems and System Models

- Models (e.g., physical, mathematical, computer models) can be used to simulate systems and interactions—including energy, matter, and information flows—within and between systems at different scales. (HS-ETS1-4)

Connections to Engineering, Technology, and Applications of Science

Influence of Science, Engineering, and Technology on Society and the Natural World

- New technologies can have deep impacts on society and the environment, including some that were not anticipated. Analysis of costs and benefits is a critical aspect of decisions about technology. (HS-ETS1-1) (HS-ETS1-3)

Connections to HS-ETS1.A: Defining and Delimiting Engineering Problems include:
Physical Science: HS-PS2-3, HS-PS3-3

Connections to HS-ETS1.B: Designing Solutions to Engineering Problems include:
Earth and Space Science: HS-ESS3-2, HS-ESS3-4, **Life Science:** HS-LS2-7, HS-LS4-6

Connections to HS-ETS1.C: Optimizing the Design Solution include:
Physical Science: HS-PS1-6, HS-PS2-3

Articulation of DCIs across grade-bands: **MS.ETS1.A** (HS-ETS1-1),(HS-ETS1-2),(HS-ETS1-3),(HS-ETS1-4); **MS.ETS1.B** (HS-ETS1-2),(HS-ETS1-3),(HS-ETS1-4); **MS.ETS1.C** (HS-ETS1-2),(HS-ETS1-4)

Common Core State Standards Connections:

ELA/Literacy –

RST.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem. (HS-ETS1-1),*(HS-ETS1-3)*
RST.11-12.8	Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. *(HS-ETS1-1),*(HS-ETS1-3)
RST.11-12.9	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible. (HS-ETS1-1),*(HS-ETS1-3)*

Mathematics –

MP.2	Reason abstractly and quantitatively. (HS-ETS1-1),*(HS-ETS1-3),(HS-ETS1-4)*
MP.4	Model with mathematics. (HS-ETS1-1),(HS-ETS1-2),(HS-ETS1-3),(HS-ETS1-4)

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HS-ESS3 Earth and Human Activity

HS-ESS3 Earth and Human Activity

Students who demonstrate understanding can:

HS-ESS3-1. **Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.** [Clarification Statement: Examples of key natural resources include access to fresh water (such as rivers, lakes, and groundwater), regions of fertile soils such as river deltas, and high concentrations of minerals and fossil fuels. Examples of natural hazards can be from interior processes (such as volcanic eruptions and earthquakes), surface processes (such as tsunamis, mass wasting and soil erosion), and severe weather (such as hurricanes, floods, and droughts). Examples of the results of changes in climate that can affect populations or drive mass migrations include changes to sea level, regional patterns of temperature and precipitation, and the types of crops and livestock that can be raised.]

HS-ESS3-2. **Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.*** [Clarification Statement: Emphasis is on the conservation, recycling, and reuse of resources (such as minerals and metals) where possible, and on minimizing impacts where it is not. Examples include developing best practices for agricultural soil use, mining (for coal, tar sands, and oil shales), and pumping (for petroleum and natural gas). Science knowledge indicates what can happen in natural systems—not what should happen.]

HS-ESS3-3. **Create a computational simulation to illustrate the relationships among the management of natural resources, sustainability of human populations, and biodiversity.** [Clarification Statement: Examples of factors that affect the management of natural resources include costs of resource extraction and waste management, per-capita consumption, and the development of new technologies. Examples of factors that affect human sustainability include agricultural efficiency, levels of conservation, and urban planning.] [Assessment Boundary: Assessment for computational simulations is limited to using provided multi-parameter programs or constructing simplified spreadsheet calculations.]

HS-ESS3-4. **Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.*** [Clarification Statement: Examples of data on the impacts of human activities could include the quantities and types of pollutants released, changes to biomass and species diversity, or areal changes in land surface use (such as for urban development, agriculture and livestock, or surface mining). Examples for limiting future impacts could range from local efforts (such as reducing, reusing, and recycling resources) to large-scale geoengineering design solutions (such as altering global temperatures by making large changes to the atmosphere or ocean).]

HS-ESS3-5. **Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.** [Clarification Statement: Examples of evidence, for both data and climate model outputs, are for climate changes (such as precipitation and temperature) and their associated impacts (such as on sea level, glacial ice volumes, or atmosphere and ocean composition).] [Assessment Boundary: Assessment is limited to one example of a climate change and its associated impacts.]

HS-ESS3-6. **Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.** [Clarification Statement: Examples of Earth systems to be considered are the hydrosphere, atmosphere, cryosphere, geosphere, and/or biosphere. An example of the far-reaching impacts from a human activity is how an increase in atmospheric carbon dioxide results in an increase in photosynthetic biomass on land and an increase in ocean acidification, with resulting impacts on sea organism health and marine populations.] [Assessment Boundary: Assessment does not include running computational representations but is limited to using the published results of scientific computational models.]

The performance expectations above were developed using the following elements from the NRC document *A Framework for K-12 Science Education*:

Science and Engineering Practices

Analyzing and Interpreting Data

Analyzing data in 9–12 builds on K–8 experiences and progresses to introducing more detailed statistical analysis, the comparison of data sets for consistency, and the use of models to generate and analyze data.

- Analyze data using computational models in order to make valid and reliable scientific claims. (HS-ESS3-5)

Using Mathematics and Computational Thinking

Mathematical and computational thinking in 9-12 builds on K-8 experiences and progresses to using algebraic thinking and analysis, a range of linear and nonlinear functions including trigonometric functions, exponentials and logarithms, and computational tools for statistical analysis to analyze, represent, and model data. Simple computational simulations are created and used based on mathematical models of basic assumptions.

- Create a computational model or simulation of a phenomenon, designed device, process, or system. (HS-ESS3-3)
- Use a computational representation of phenomena or design solutions to describe and/or support claims and/or explanations. (HS-ESS3-6)

Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in 9–12 builds on K–8 experiences and progresses to explanations and designs that are supported by multiple and independent student-generated sources of evidence consistent with scientific knowledge, principles, and theories.

- Construct an explanation based on valid and reliable evidence obtained from a variety of sources (including students' own investigations, models, theories, simulations, peer review) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future. (HS-ESS3-1)
- Design or refine a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, prioritized criteria, and tradeoff considerations. (HS-ESS3-4)

Engaging in Argument from Evidence

Engaging in argument from evidence in 9–12 builds on K–8

Disciplinary Core Ideas

ESS2.D: Weather and Climate

- Current models predict that, although future regional climate changes will be complex and varied, average global temperatures will continue to rise. The outcomes predicted by global climate models strongly depend on the amounts of human-generated greenhouse gases added to the atmosphere each year and by the ways in which these gases are absorbed by the ocean and biosphere. *(secondary to HS-ESS3-6)*

ESS3.A: Natural Resources

- Resource availability has guided the development of human society. (HS-ESS3-1)
- All forms of energy production and other resource extraction have associated economic, social, environmental, and geopolitical costs and risks as well as benefits. New technologies and social regulations can change the balance of these factors. (HS-ESS3-2)

ESS3.B: Natural Hazards

- Natural hazards and other geologic events have shaped the course of human history; [they] have significantly altered the sizes of human populations and have driven human migrations. (HS-ESS3-1)

ESS3.C: Human Impacts on Earth Systems

- The sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources. (HS-ESS3-3)
- Scientists and engineers can make major contributions by developing technologies that produce less pollution and waste and that preclude ecosystem degradation. (HS-ESS3-4)

ESS3.D: Global Climate Change

- Though the magnitudes of human impacts are greater than they have ever been, so too are human abilities to model, predict, and manage current and future impacts. (HS-ESS3-5)
- Through computer simulations and other studies, important discoveries are still being made about how the ocean, the atmosphere, and the biosphere interact and are modified in response to human activities. (HS-ESS3-6)

ETS1.B: Developing Possible Solutions

- When evaluating solutions, it is important to take into

Crosscutting Concepts

Cause and Effect

- Empirical evidence is required to differentiate between cause and correlation and make claims about specific causes and effects. (HS-ESS3-1)

Systems and System Models

- When investigating or describing a system, the boundaries and initial conditions of the system need to be defined and their inputs and outputs analyzed and described using models. (HS-ESS3-6)

Stability and Change

- Change and rates of change can be quantified and modeled over very short or very long periods of time. Some system changes are irreversible. (HS-ESS3-3),(HS-ESS3-5)
- Feedback (negative or positive) can stabilize or destabilize a system. (HS-ESS3-4)

Connections to Engineering, Technology, and Applications of Science

Influence of Engineering, Technology, and Science on Society and the Natural World

- Modern civilization depends on major technological systems. (HS-ESS3-1),(HS-ESS3-3)
- Engineers continuously modify these technological systems by applying scientific knowledge and engineering design practices to increase benefits while decreasing costs and risks. (HS-ESS3-2),(HS-ESS3-4)
- New technologies can have deep impacts

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HS-ESS3 Earth and Human Activity

experiences and progresses to using appropriate and sufficient evidence and scientific reasoning to defend and critique claims and explanations about natural and designed world(s). Arguments may also come from current scientific or historical episodes in science. ▪ Evaluate competing design solutions to a real-world problem based on scientific ideas and principles, empirical evidence, and logical arguments regarding relevant factors (e.g. economic, societal, environmental, ethical considerations). (HS-ESS3-2) --- ***Connections to Nature of Science*** **Scientific Investigations Use a Variety of Methods** ▪ Science investigations use diverse methods and do not always use the same set of procedures to obtain data. (HS-ESS3-5) ▪ New technologies advance scientific knowledge. (HS-ESS3-5) **Scientific Knowledge is Based on Empirical Evidence** ▪ Science knowledge is based on empirical evidence. (HS-ESS3-5) ▪ Science arguments are strengthened by multiple lines of evidence supporting a single explanation. (HS-ESS3-5)	account a range of constraints, including cost, safety, reliability, and aesthetics, and to consider social, cultural, and environmental impacts. *(secondary to HS-ESS3-2),(secondary HS-ESS3-4)*	on society and the environment, including some that were not anticipated. (HS-ESS3-3) ▪ Analysis of costs and benefits is a critical aspect of decisions about technology. (HS-ESS3-2) --- ***Connections to Nature of Science*** **Science is a Human Endeavor** ▪ Science is a result of human endeavors, imagination, and creativity. (HS-ESS3-3) **Science Addresses Questions About the Natural and Material World** ▪ Science and technology may raise ethical issues for which science, by itself, does not provide answers and solutions. (HS-ESS3-2) ▪ Science knowledge indicates what can happen in natural systems—not what should happen. The latter involves ethics, values, and human decisions about the use of knowledge. (HS-ESS3-2) ▪ Many decisions are not made using science alone, but rely on social and cultural contexts to resolve issues. (HS-ESS3-2)

Connections to other DCIs in this grade-band: **HS.PS1.B** (HS-ESS3-3); **HS.PS3.B** (HS-ESS3-2),(HS-ESS3-5); **HS.PS3.D** (HS-ESS3-2),(HS-ESS3-5); **HS.LS1.C** (HS-ESS3-5); **HS.LS2.A** (HS-ESS3-2),(HS-ESS3-3); **HS.LS2.B** (HS-ESS3-2),(HS-ESS3-3),(HS-ESS3-6); **HS.LS2.C** (HS-ESS3-3),(HS-ESS3-4),(HS-ESS3-6); **HS.LS4.D** (HS-ESS3-2),(HS-ESS3-3),(HS-ESS3-4),(HS-ESS3-6); **HS.ESS2.A** (HS-ESS3-2),(HS-ESS3-3),(HS-ESS3-6); **HS.ESS2.D** (HS-ESS3-5); **HS.ESS2.E** (HS-ESS3-3)

Articulation of DCIs across grade-bands: **MS.PS1.B** (HS-ESS3-3); **MS.PS3.B** (HS-ESS3-5); **MS.PS3.D** (HS-ESS3-2),(HS-ESS3-5); **MS.LS2.A** (HS-ESS3-1),(HS-ESS3-2),(HS-ESS3-3); **MS.LS2.B** (HS-ESS3-2),(HS-ESS3-3); **MS.LS2.C** (HS-ESS3-3),(HS-ESS3-4),(HS-ESS3-6); **MS.LS4.C** (HS-ESS3-3); **MS.LS4.D** (HS-ESS3-1),(HS-ESS3-2),(HS-ESS3-3); **MS.ESS2.A** (HS-ESS3-1),(HS-ESS3-3),(HS-ESS3-4),(HS-ESS3-5),(HS-ESS3-6); **MS.ESS2.C** (HS-ESS3-6); **MS.ESS2.D** (HS-ESS3-5); **MS.ESS3.A** (HS-ESS3-1),(HS-ESS3-2),(HS-ESS3-3); **MS.ESS3.B** (HS-ESS3-1),(HS-ESS3-4),(HS-ESS3-5); **MS.ESS3.C** (HS-ESS3-2),(HS-ESS3-3),(HS-ESS3-4),(HS-ESS3-5),(HS-ESS3-6); **MS.ESS3.D** (HS-ESS3-4),(HS-ESS3-5),(HS-ESS3-6)

Common Core State Standards Connections:

ELA/Literacy –

RST.11-12.1	Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. *(HS-ESS3-1),*(HS-ESS3-2),(HS-ESS3-4),(HS-ESS3-5)
RST.11-12.2	Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. *(HS-ESS3-5)*
RST.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem. (HS-ESS3-5)
RST.11-12.8	Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. (HS-ESS3-2),(HS-ESS3-4)
WHST.9-12.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. (HS-ESS3-1)

Mathematics –

MP.2	Reason abstractly and quantitatively. *(HS-ESS3-1),*(HS-ESS3-2),(HS-ESS3-3),*(HS-ESS3-4),*(HS-ESS3-5),(HS-ESS3-6)
MP.4	Model with mathematics. (HS-ESS3-3),(HS-ESS3-6)
HSN-Q.A.1	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. *(HS-ESS3-1),*(HS-ESS3-4),(HS-ESS3-5),(HS-ESS3-6)
HSN-Q.A.2	Define appropriate quantities for the purpose of descriptive modeling. *(HS-ESS3-1),(HS-ESS3-4),(HS-ESS3-5),*(HS-ESS3-6)
HSN-Q.A.3	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. *(HS-ESS3-1),(HS-ESS3-4),*(HS-ESS3-5),(HS-ESS3-6)

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HS-ESS2 Earth's Systems

HS-ESS2 Earth's Systems

Students who demonstrate understanding can:

HS-ESS2-1. **Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.** [Clarification Statement: Emphasis is on how the appearance of land features (such as mountains, valleys, and plateaus) and sea-floor features (such as trenches, ridges, and seamounts) are a result of both constructive forces (such as volcanism, tectonic uplift, and orogeny) and destructive mechanisms (such as weathering, mass wasting, and coastal erosion).] [Assessment Boundary: Assessment does not include memorization of the details of the formation of specific geographic features of Earth's surface.]

HS-ESS2-2. **Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.** [Clarification Statement: Examples should include climate feedbacks, such as how an increase in greenhouse gases causes a rise in global temperatures that melts glacial ice, which reduces the amount of sunlight reflected from Earth's surface, increasing surface temperatures and further reducing the amount of ice. Examples could also be taken from other system interactions, such as how the loss of ground vegetation causes an increase in water runoff and soil erosion; how dammed rivers increase groundwater recharge, decrease sediment transport, and increase coastal erosion; or how the loss of wetlands causes a decrease in local humidity that further reduces the wetland extent.]

HS-ESS2-3. **Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection.** [Clarification Statement: Emphasis is on both a one-dimensional model of Earth, with radial layers determined by density, and a three-dimensional model, which is controlled by mantle convection and the resulting plate tectonics. Examples of evidence include maps of Earth's three-dimensional structure obtained from seismic waves, records of the rate of change of Earth's magnetic field (as constraints on convection in the outer core), and identification of the composition of Earth's layers from high-pressure laboratory experiments.]

HS-ESS2-4. **Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.** [Clarification Statement: Examples of the causes of climate change differ by timescale, over 1-10 years: large volcanic eruption, ocean circulation; 10-100s of years: changes in human activity, ocean circulation, solar output; 10-100s of thousands of years: changes to Earth's orbit and the orientation of its axis; and 10-100s of millions of years: long-term changes in atmospheric composition.] [Assessment Boundary: Assessment of the results of changes in climate is limited to changes in surface temperatures, precipitation patterns, glacial ice volumes, sea levels, and biosphere distribution.]

HS-ESS2-5. **Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.** [Clarification Statement: Emphasis is on mechanical and chemical investigations with water and a variety of solid materials to provide the evidence for connections between the hydrologic cycle and system interactions commonly known as the rock cycle. Examples of mechanical investigations include stream transportation and deposition using a stream table, erosion using variations in soil moisture content, or frost wedging by the expansion of water as it freezes. Examples of chemical investigations include chemical weathering and recrystallization (by testing the solubility of different materials) or melt generation (by examining how water lowers the melting temperature of most solids).]

HS-ESS2-6. **Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.** [Clarification Statement: Emphasis is on modeling biogeochemical cycles that include the cycling of carbon through the ocean, atmosphere, soil, and biosphere (including humans), providing the foundation for living organisms.]

HS-ESS2-7. **Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.** [Clarification Statement: Emphasis is on the dynamic causes, effects, and feedbacks between the biosphere and Earth's other systems, whereby geoscience factors control the evolution of life, which in turn continuously alters Earth's surface. Examples include how photosynthetic life altered the atmosphere through the production of oxygen, which in turn increased weathering rates and allowed for the evolution of animal life; how microbial life on land increased the formation of soil, which in turn allowed for the evolution of land plants; or how the evolution of corals created reefs that altered patterns of erosion and deposition along coastlines and provided habitats for the evolution of new life forms.] [Assessment Boundary: Assessment does not include a comprehensive understanding of the mechanisms of how the biosphere interacts with all of Earth's other systems.]

The performance expectations above were developed using the following elements from the NRC document *A Framework for K-12 Science Education*:

Science and Engineering Practices

Developing and Using Models

Modeling in 9–12 builds on K–8 experiences and progresses to using, synthesizing, and developing models to predict and show relationships among variables between systems and their components in the natural and designed world(s).

- Develop a model based on evidence to illustrate the relationships between systems or between components of a system. (HS-ESS2-1),(HS-ESS2-3),(HS-ESS2-6)
- Use a model to provide mechanistic accounts of phenomena. (HS-ESS2-4)

Planning and Carrying Out Investigations

Planning and carrying out investigations in 9-12 builds on K-8 experiences and progresses to include investigations that provide evidence for and test conceptual, mathematical, physical, and empirical models.

- Plan and conduct an investigation individually and collaboratively to produce data to serve as the basis for evidence, and in the design: decide on types, how much, and accuracy of data needed to produce reliable measurements and consider limitations on the precision of the data (e.g., number of trials, cost, risk, time), and refine the design accordingly. (HS-ESS2-5)

Analyzing and Interpreting Data

Analyzing data in 9–12 builds on K–8 experiences and progresses to introducing more detailed statistical analysis, the comparison of data sets for consistency, and the use of models to generate and analyze data.

- Analyze data using tools, technologies, and/or models (e.g., computational, mathematical) in order to make valid and reliable scientific claims or determine an optimal design solution. (HS-ESS2-2)

Disciplinary Core Ideas

ESS1.B: Earth and the Solar System

- Cyclical changes in the shape of Earth's orbit around the sun, together with changes in the tilt of the planet's axis of rotation, both occurring over hundreds of thousands of years, have altered the intensity and distribution of sunlight falling on the earth. These phenomena cause a cycle of ice ages and other gradual climate changes. *(secondary to HS-ESS2-4)*

ESS2.A: Earth Materials and Systems

- Earth's systems, being dynamic and interacting, cause feedback effects that can increase or decrease the original changes. (HS-ESS2-1),(HS-ESS2-2)
- Evidence from deep probes and seismic waves, reconstructions of historical changes in Earth's surface and its magnetic field, and an understanding of physical and chemical processes lead to a model of Earth with a hot but solid inner core, a liquid outer core, a solid mantle and crust. Motions of the mantle and its plates occur primarily through thermal convection, which involves the cycling of matter due to the outward flow of energy from Earth's interior and gravitational movement of denser materials toward the interior. (HS-ESS2-3)
- The geological record shows that changes to global and regional climate can be caused by interactions among changes in the sun's energy output or Earth's orbit, tectonic events, ocean circulation, volcanic activity, glaciers, vegetation, and human activities. These changes can occur on a variety of time scales from sudden (e.g., volcanic ash clouds) to intermediate (ice ages) to very long-term tectonic cycles. (HS-ESS2-4)

ESS2.B: Plate Tectonics and Large-Scale System Interactions

- The radioactive decay of unstable isotopes continually generates new energy within Earth's crust and mantle, providing the primary source of the heat that drives mantle convection. Plate tectonics can be viewed as the surface expression of mantle convection. (HS-ESS2-3)

Crosscutting Concepts

Cause and Effect

- Empirical evidence is required to differentiate between cause and correlation and make claims about specific causes and effects. (HS-ESS2-4)

Energy and Matter

- The total amount of energy and matter in closed systems is conserved. (HS-ESS2-6)
- Energy drives the cycling of matter within and between systems. (HS-ESS2-3)

Structure and Function

- The functions and properties of natural and designed objects and systems can be inferred from their overall structure, the way their components are shaped and used, and the molecular substructures of its various materials. (HS-ESS2-5)

Stability and Change

- Much of science deals with constructing explanations of how things change and how they remain stable. (HS-ESS2-7)
- Change and rates of change can be quantified and modeled over very short or very long periods of time. Some system changes are irreversible. (HS-ESS2-1)
- Feedback (negative or positive) can stabilize or destabilize a system. (HS-ESS2-2)

Connections to Engineering, Technology, and Applications of Science

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HS-ESS2 Earth's Systems

Engaging in Argument from Evidence
Engaging in argument from evidence in 9–12 builds on K–8 experiences and progresses to using appropriate and sufficient evidence and scientific reasoning to defend and critique claims and explanations about the natural and designed world(s). Arguments may also come from current scientific or historical episodes in science.

- Construct an oral and written argument or counter-arguments based on data and evidence. (HS-ESS2-7)

Connections to Nature of Science

Scientific Knowledge is Based on Empirical Evidence

- Science knowledge is based on empirical evidence. (HS-ESS2-3)
- Science disciplines share common rules of evidence used to evaluate explanations about natural systems. (HS-ESS2-3)
- Science includes the process of coordinating patterns of evidence with current theory. (HS-ESS2-3)
- Science arguments are strengthened by multiple lines of evidence supporting a single explanation. (HS-ESS2-4)

- Plate tectonics is the unifying theory that explains the past and current movements of the rocks at Earth's surface and provides a framework for understanding its geologic history. Plate movements are responsible for most continental and ocean-floor features and for the distribution of most rocks and minerals within Earth's crust. *(ESS2.B Grade 8 GBE)* (HS-ESS1-1)

ESS2.C: The Roles of Water in Earth's Surface Processes

- The abundance of liquid water on Earth's surface and its unique combination of physical and chemical properties are central to the planet's dynamics. These properties include water's exceptional capacity to absorb, store, and release large amounts of energy, transmit sunlight, expand upon freezing, dissolve and transport materials, and lower the viscosities and melting points of rocks. (HS-ESS2-5)

ESS2.D: Weather and Climate

- The foundation for Earth's global climate systems is the electromagnetic radiation from the sun, as well as its reflection, absorption, storage, and redistribution among the atmosphere, ocean, and land systems, and this energy's re-radiation into space. (HS-ESS2-2),(HS-ESS2-4)
- Gradual atmospheric changes were due to plants and other organisms that captured carbon dioxide and released oxygen. (HS-ESS2-6),(HS-ESS2-7)
- Changes in the atmosphere due to human activity have increased carbon dioxide concentrations and thus affect climate. (HS-ESS2-6),(HS-ESS2-4)

ESS2.E: Biogeology

- The many dynamic and delicate feedbacks between the biosphere and other Earth systems cause a continual co-evolution of Earth's surface and the life that exists on it. (HS-ESS2-7)

PS4.A: Wave Properties

- Geologists use seismic waves and their reflection at interfaces between layers to probe structures deep in the planet. *(secondary to HS-ESS2-3)*

Interdependence of Science, Engineering, and Technology

- Science and engineering complement each other in the cycle known as research and development (R&D). Many R&D projects may involve scientists, engineers, and others with wide ranges of expertise. (HS-ESS2-3)

Influence of Engineering, Technology, and Science on Society and the Natural World

- New technologies can have deep impacts on society and the environment, including some that were not anticipated. Analysis of costs and benefits is a critical aspect of decisions about technology. (HS-ESS2-2)

Connections to other DCIs in this grade-band: **HS.PS1.A** (HS-ESS2-5),(HS-ESS2-6); **HS.PS1.B** (HS-ESS2-5),(HS-ESS2-6); **HS.PS2.B** (HS-ESS2-1),(HS-ESS2-3); **HS.PS3.A** (HS-ESS2-4); **HS.PS3.B** (HS-ESS2-2),(HS-ESS2-3),(HS-ESS2-4),(HS-ESS2-5); **HS.PS3.D** (HS-ESS2-3),(HS-ESS2-6); **HS.PS4.B** (HS-ESS2-2); **HS.LS1.C** (HS-ESS2-6); **HS.LS2.A** (HS-ESS2-7); **HS.LS2.B** (HS-ESS2-2),(HS-ESS2-6); **HS.LS2.C** (HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-7); **HS.LS4.A** (HS-ESS2-7); **HS.LS4.B** (HS-ESS2-7); **HS.LS4.C** (HS-ESS2-7); **HS.LS4.D** (HS-ESS2-2),(HS-ESS2-7); **HS.ESS1.C** (HS-ESS2-4); **HS.ESS3.C** (HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-5),(HS-ESS2-6); **HS.ESS3.D** (HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-6)

Articulation of DCIs across grade-bands: **MS.PS1.A** (HS-ESS2-3),(HS-ESS2-5),(HS-ESS2-6); **MS.PS1.B** (HS-ESS2-3); **MS.PS2.B** (HS-ESS2-1),(HS-ESS2-3); **MS.PS3.A** (HS-ESS2-3),(HS-ESS2-4); **MS.PS3.B** (HS-ESS2-3),(HS-ESS2-4); **MS.PS3.D** (HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-6); **MS.PS4.B** (HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-5),(HS-ESS2-6); **MS.LS1.C** (HS-ESS2-4); **MS.LS2.A** (HS-ESS2-7); **MS.LS2.B** (HS-ESS2-1),(HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-6); **MS.LS2.C** (HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-7); **MS.LS4.A** (HS-ESS2-7); **MS.LS4.B** (HS-ESS2-7); **MS.LS4.C** (HS-ESS2-2),(HS-ESS2-7); **MS.ESS1.C** (HS-ESS2-1),(HS-ESS2-7); **MS.ESS2.A** (HS-ESS2-1),(HS-ESS2-2),(HS-ESS2-3),(HS-ESS2-4),(HS-ESS2-5),(HS-ESS2-6),(HS-ESS2-7); **MS.ESS2.B** (HS-ESS2-1),(HS-ESS2-2),(HS-ESS2-3),(HS-ESS2-4),(HS-ESS2-6); **MS.ESS2.C** (HS-ESS2-1),(HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-5),(HS-ESS2-6),(HS-ESS2-7); **MS.ESS2.D** (HS-ESS2-1),(HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-5); **MS.ESS3.C** (HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-6),(HS-ESS2-7); **MS.ESS3.D** (HS-ESS2-2),(HS-ESS2-4),(HS-ESS2-6)

Common Core State Standards Connections:

ELA/Literacy –

RST.11-12.1	Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. *(HS-ESS2-2),(HS-ESS2-3)*
RST.11-12.2	Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. *(HS-ESS2-2)*
WHST.9-12.1	Write arguments focused on *discipline-specific content.* (HS-ESS2-7)
WHST.9-12.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. (HS-ESS2-5)
SL.11-12.5	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. *(HS-ESS2-1),(HS-ESS2-3),(HS-ESS2-4)*

Mathematics –

MP.2	Reason abstractly and quantitatively. (HS-ESS2-1),(HS-ESS2-2),(HS-ESS2-3),(HS-ESS2-4),(HS-ESS2-6)
MP.4	Model with mathematics. (HS-ESS2-1),(HS-ESS2-3),(HS-ESS2-4),(HS-ESS2-6)
HSN-Q.A.1	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. (HS-ESS2-1),(HS-ESS2-2),(HS-ESS2-3),(HS-ESS2-4),(HS-ESS2-6)
HSN-Q.A.2	Define appropriate quantities for the purpose of descriptive modeling. (HS-ESS2-1),(HS-ESS2-3),(HS-ESS2-4),(HS-ESS2-6)
HSN-Q.A.3	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. (HS-ESS2-1),(HS-ESS2-2),(HS-ESS2-3),(HS-ESS2-4),(HS-ESS2-5),(HS-ESS2-6)

*The performance expectations marked with an asterisk integrate traditional science content with engineering through a Practice or Disciplinary Core Idea.

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HS-ESS1 Earth's Place in the Universe

HS-ESS1 Earth's Place in the Universe

Students who demonstrate understanding can:

HS-ESS1-1. **Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation.** [Clarification Statement: Emphasis is on the energy transfer mechanisms that allow energy from nuclear fusion in the sun's core to reach Earth. Examples of evidence for the model include observations of the masses and lifetimes of other stars, as well as the ways that the sun's radiation varies due to sudden solar flares ("space weather"), the 11-year sunspot cycle, and non-cyclic variations over centuries.] [Assessment Boundary: Assessment does not include details of the atomic and sub-atomic processes involved with the sun's nuclear fusion.]

HS-ESS1-2. **Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.** [Clarification Statement: Emphasis is on the astronomical evidence of the red shift of light from galaxies as an indication that the universe is currently expanding, the cosmic microwave background as the remnant radiation from the Big Bang, and the observed composition of ordinary matter of the universe, primarily found in stars and interstellar gases (from the spectra of electromagnetic radiation from stars), which matches that predicted by the Big Bang theory (3/4 hydrogen and 1/4 helium).]

HS-ESS1-3. **Communicate scientific ideas about the way stars, over their life cycle, produce elements.** [Clarification Statement: Emphasis is on the way nucleosynthesis, and therefore the different elements created, varies as a function of the mass of a star and the stage of its lifetime.] [Assessment Boundary: Details of the many different nucleosynthesis pathways for stars of differing masses are not assessed.]

HS-ESS1-4. **Use mathematical or computational representations to predict the motion of orbiting objects in the solar system.** [Clarification Statement: Emphasis is on Newtonian gravitational laws governing orbital motions, which apply to human-made satellites as well as planets and moons.] [Assessment Boundary: Mathematical representations for the gravitational attraction of bodies and Kepler's Laws of orbital motions should not deal with more than two bodies, nor involve calculus.]

HS-ESS1-5. **Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks.** [Clarification Statement: Emphasis is on the ability of plate tectonics to explain the ages of crustal rocks. Examples include evidence of the ages oceanic crust increasing with distance from mid-ocean ridges (a result of plate spreading) and the ages of North American continental crust decreasing with distance away from a central ancient core of the continental plate (a result of past plate interactions).]

HS-ESS1-6. **Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history.** [Clarification Statement: Emphasis is on using available evidence within the solar system to reconstruct the early history of Earth, which formed along with the rest of the solar system 4.6 billion years ago. Examples of evidence include the absolute ages of ancient materials (obtained by radiometric dating of meteorites, moon rocks, and Earth's oldest minerals), the sizes and compositions of solar system objects, and the impact cratering record of planetary surfaces.]

The performance expectations above were developed using the following elements from the NRC document *A Framework for K-12 Science Education*:

Science and Engineering Practices

Developing and Using Models

Modeling in 9–12 builds on K–8 experiences and progresses to using, synthesizing, and developing models to predict and show relationships among variables between systems and their components in the natural and designed world(s).

- Develop a model based on evidence to illustrate the relationships between systems or between components of a system. (HS-ESS1-1)

Using Mathematical and Computational Thinking

Mathematical and computational thinking in 9–12 builds on K–8 experiences and progresses to using algebraic thinking and analysis, a range of linear and nonlinear functions including trigonometric functions, exponentials and logarithms, and computational tools for statistical analysis to analyze, represent, and model data. Simple computational simulations are created and used based on mathematical models of basic assumptions.

- Use mathematical or computational representations of phenomena to describe explanations. (HS-ESS1-4)

Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in 9–12 builds on K–8 experiences and progresses to explanations and designs that are supported by multiple and independent student-generated sources of evidence consistent with scientific ideas, principles, and theories.

- Construct an explanation based on valid and reliable evidence obtained from a variety of sources (including students' own investigations, theories, simulations, peer review) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future. (HS-ESS1-2)
- Apply scientific reasoning to link evidence to the claims to assess the extent to which the reasoning and data support the explanation or conclusion. (HS-ESS1-6)

Engaging in Argument from Evidence

Engaging in argument from evidence in 9–12 builds on K–8 experiences and progresses to using appropriate and sufficient evidence and scientific reasoning to defend and critique claims and explanations about the natural and designed world(s). Arguments may also come from current scientific or historical episodes in science.

- Evaluate evidence behind currently accepted explanations or solutions to determine the merits of arguments. (HS-ESS1-5)

Obtaining, Evaluating, and Communicating Information

Disciplinary Core Ideas

ESS1.A: The Universe and Its Stars

- The star called the sun is changing and will burn out over a lifespan of approximately 10 billion years. (HS-ESS1-1)
- The study of stars' light spectra and brightness is used to identify compositional elements of stars, their movements, and their distances from Earth. (HS-ESS1-2),(HS-ESS1-3)
- The Big Bang theory is supported by observations of distant galaxies receding from our own, of the measured composition of stars and non-stellar gases, and of the maps of spectra of the primordial radiation (cosmic microwave background) that still fills the universe. (HS-ESS1-2)
- Other than the hydrogen and helium formed at the time of the Big Bang, nuclear fusion within stars produces all atomic nuclei lighter than and including iron, and the process releases electromagnetic energy. Heavier elements are produced when certain massive stars achieve a supernova stage and explode. (HS-ESS1-2),(HS-ESS1-3)

ESS1.B: Earth and the Solar System

- Kepler's laws describe common features of the motions of orbiting objects, including their elliptical paths around the sun. Orbits may change due to the gravitational effects from, or collisions with, other objects in the solar system. (HS-ESS1-4)

ESS1.C: The History of Planet Earth

- Continental rocks, which can be older than 4 billion years, are generally much older than the rocks of the ocean floor, which are less than 200 million years old. (HS-ESS1-5)
- Although active geologic processes, such as plate tectonics and erosion, have destroyed or altered most of the very early rock record on Earth, other objects in the solar system, such as lunar rocks, asteroids, and meteorites, have changed little over billions of years. Studying these objects can provide information about Earth's formation and early history. (HS-ESS1-6)

ESS2.B: Plate Tectonics and Large-Scale System Interactions

- Plate tectonics is the unifying theory that explains the past and current movements of the rocks at Earth's surface and provides a framework for understanding its

Crosscutting Concepts

Patterns

- Empirical evidence is needed to identify patterns. (HS-ESS1-5)

Scale, Proportion, and Quantity

- The significance of a phenomenon is dependent on the scale, proportion, and quantity at which it occurs. (HS-ESS1-1)
- Algebraic thinking is used to examine scientific data and predict the effect of a change in one variable on another (e.g., linear growth vs. exponential growth). (HS-ESS1-4)

Energy and Matter

- Energy cannot be created or destroyed–only moved between one place and another place, between objects and/or fields, or between systems. (HS-ESS1-2)
- In nuclear processes, atoms are not conserved, but the total number of protons plus neutrons is conserved. (HS-ESS1-3)

Stability and Change

- Much of science deals with constructing explanations of how things change and how they remain stable. (HS-ESS1-6)

Connections to Engineering, Technology, and Applications of Science

Interdependence of Science, Engineering, and Technology

- Science and engineering complement each other in the cycle known as research and development (R&D). Many R&D projects may involve scientists, engineers, and others with wide ranges of expertise. (HS-ESS1-2),(HS-ESS1-4)

Connections to Nature of Science

Scientific Knowledge Assumes an Order and Consistency in Natural Systems

*The performance expectations marked with an asterisk integrate traditional science content with engineering through a Practice or Disciplinary Core Idea.

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HS-ESS1 Earth's Place in the Universe

Obtaining, evaluating, and communicating information in 9–12 builds on K–8 experiences and progresses to evaluating the validity and reliability of the claims, methods, and designs. ▪ Communicate scientific ideas (e.g. about phenomena and/or the process of development and the design and performance of a proposed process or system) in multiple formats (including orally, graphically, textually, and mathematically). (HS-ESS1-3) **----------** ***Connections to Nature of Science*** **Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena** ▪ A scientific theory is a substantiated explanation of some aspect of the natural world, based on a body of facts that have been repeatedly confirmed through observation and experiment and the science community validates each theory before it is accepted. If new evidence is discovered that the theory does not accommodate, the theory is generally modified in light of this new evidence. (HS-ESS1-2),(HS-ESS1-6) ▪ Models, mechanisms, and explanations collectively serve as tools in the development of a scientific theory. (HS-ESS1-6)	geologic history. *(ESS2.B Grade 8 GBE) (secondary to HS-ESS1-5)* **PS1.C: Nuclear Processes** ▪ Spontaneous radioactive decays follow a characteristic exponential decay law. Nuclear lifetimes allow radiometric dating to be used to determine the ages of rocks and other materials. *(secondary to HS-ESS1-5),(secondary to HS-ESS1-6)* **PS3.D: Energy in Chemical Processes and Everyday Life** ▪ Nuclear Fusion processes in the center of the sun release the energy that ultimately reaches Earth as radiation. *(secondary to HS-ESS1-1)* **PS4.B Electromagnetic Radiation** ▪ Atoms of each element emit and absorb characteristic frequencies of light. These characteristics allow identification of the presence of an element, even in microscopic quantities. *(secondary to HS-ESS1-2)*	▪ Scientific knowledge is based on the assumption that natural laws operate today as they did in the past and they will continue to do so in the future. (HS-ESS1-2) ▪ Science assumes the universe is a vast single system in which basic laws are consistent. (HS-ESS1-2)

Connections to other DCIs in this grade-band: **HS.PS1.A** (HS-ESS1-2),(HS-ESS1-3); **HS.PS1.C** (HS-ESS1-1),(HS-ESS1-2),(HS-ESS1-3); **HS.PS2.A** (HS-ESS1-6); **HS.PS2.B** (HS-ESS1-4),(HS-ESS1-6); **HS.PS3.A** (HS-ESS1-1),(HS-ESS1-2); **HS.PS3.B** (HS-ESS1-2),(HS-ESS1-5); **HS.PS4.A** (HS-ESS1-2); **HS.ESS2.A** (HS-ESS1-5)

Articulation of DCIs across grade-bands: **MS.PS1.A** (HS-ESS1-1),(HS-ESS1-2),(HS-ESS1-3); **MS.PS2.A** (HS-ESS1-4); **MS.PS2.B** (HS-ESS1-4),(HS-ESS1-6); **MS.PS4.B** (HS-ESS1-1),(HS-ESS1-2); **MS.ESS1.A** (HS-ESS1-1),(HS-ESS1-2),(HS-ESS1-3),(HS-ESS1-4); **MS.ESS1.B** (HS-ESS1-4),(HS-ESS1-6); **MS.ESS1.C** (HS-ESS1-5),(HS-ESS1-6); **MS.ESS2.A** (HS-ESS1-1),(HS-ESS1-5),(HS-ESS1-6); **MS.ESS2.B** (HS-ESS1-5),(HS-ESS1-6); **MS.ESS2.D** (HS-ESS1-1)

Common Core State Standards Connections:

ELA/Literacy –

RST.11-12.1	Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. *(HS-ESS1-1),(HS-ESS1-2),(HS-ESS1-5),(HS-ESS1-6)*
RST.11-12.8	Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. (HS-ESS1-5),(HS-ESS1-6)
WHST.9-12.1	Write arguments focused on *discipline-specific content.* (HS-ESS1-6)
WHST.9-12.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. (HS-ESS1-2),*(HS-ESS1-3),(HS-ESS1-5)*
SL.11-12.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. *(HS-ESS1-3)*

Mathematics –

MP.2	Reason abstractly and quantitatively. (HS-ESS1-1),(HS-ESS1-2),(HS-ESS1-3),(HS-ESS1-4),(HS-ESS1-5),(HS-ESS1-6)
MP.4	Model with mathematics. (HS-ESS1-1),(HS-ESS1-4)
HSN-Q.A.1	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. (HS-ESS1-1),(HS-ESS1-2),(HS-ESS1-4),(HS-ESS1-5),(HS-ESS1-6)
HSN-Q.A.2	Define appropriate quantities for the purpose of descriptive modeling. (HS-ESS1-1),*(HS-ESS1-2)*,(HS-ESS1-4),*(HS-ESS1-5),(HS-ESS1-6)*
HSN-Q.A.3	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. (HS-ESS1-1),(HS-ESS1-2),(HS-ESS1-4),(HS-ESS1-5),(HS-ESS1-6)
HSA-SSE.A.1	Interpret expressions that represent a quantity in terms of its context. *(HS-ESS1-1),(HS-ESS1-2),*(HS-ESS1-4)
HSA-CED.A.2	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. *(HS-ESS1-1),(HS-ESS1-2),(HS-ESS1-4)*
HSA-CED.A.4	Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. *(HS-ESS1-1),(HS-ESS1-2),(HS-ESS1-4)*
HSF-IF.B.5	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. *(HS-ESS1-6)*
HSS-ID.B.6	Represent data on two quantitative variables on a scatter plot, and describe how those variables are related. *(HS-ESS1-6)*

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Kenosha Unified School District

November 28, 2017

DONATIONS TO THE DISTRICT

The District has received the following donations:

1. Greg Leech donated $3,000 to the Bradford Boys Basketball program.

2. JW Industries donated “leftover material” from a KUSD project to the Facilities Department. The estimated value of this donation is $1,500.

3. Pacetti’s Music donated $1,000 to the Fine Arts Department to be used for instructors and clinicians outside of the district to work with KUSD students.

4. CJW donated $750 and printing, banners, decals and stickers valued at $250 to the LakeView Technology Academy Supermileage Club.

Administrative Recommendation

Administration requests the Board of Education approve acceptance of the above listed gift(s), grant(s) or bequest(s) as per Board Policy 1400, to authorize the establishment of appropriate accounts to monitor fiscal activity, to amend the budget to reflect this action and to publish the budget change per Wisconsin Statute 65.90(5)(a).

Dr. Sue Savaglio-Jarvis
Superintendent of Schools

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KENOSHA UNIFIED SCHOOL DISTRICT
Kenosha, Wisconsin

November 28, 2017

Tentative Schedule of Reports, Events, and Legal Deadlines for School Board November-December

November

- November 3, 2017 – Staff Workday, No students report
- November 14, 2017 – Standing Committee Meeting – 5:30 P.M. in ESC Boardroom
- November 22, 2017 – Half day for students and instructional staff
- November 23-24, 2017 – Thanksgiving recess
- November 28, 2017 - Regular Board of Education Meeting – 7:00 P.M. in ESC Boardroom

December

- December 12, 2017 – Standing Committee Meetings Canceled
- December 12, 2017 - Regular Board of Education Meeting – 7:00 P.M. in ESC Boardroom (rescheduled from December 26, 2017)
- December 20, 2017 through January 2, 2018 – Winter Recess – Schools and ESC closed

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