UASCS

UASCS Portfolio 2015-16

Where Future Leaders Act Glocally

Utica Academy of Science Charter School

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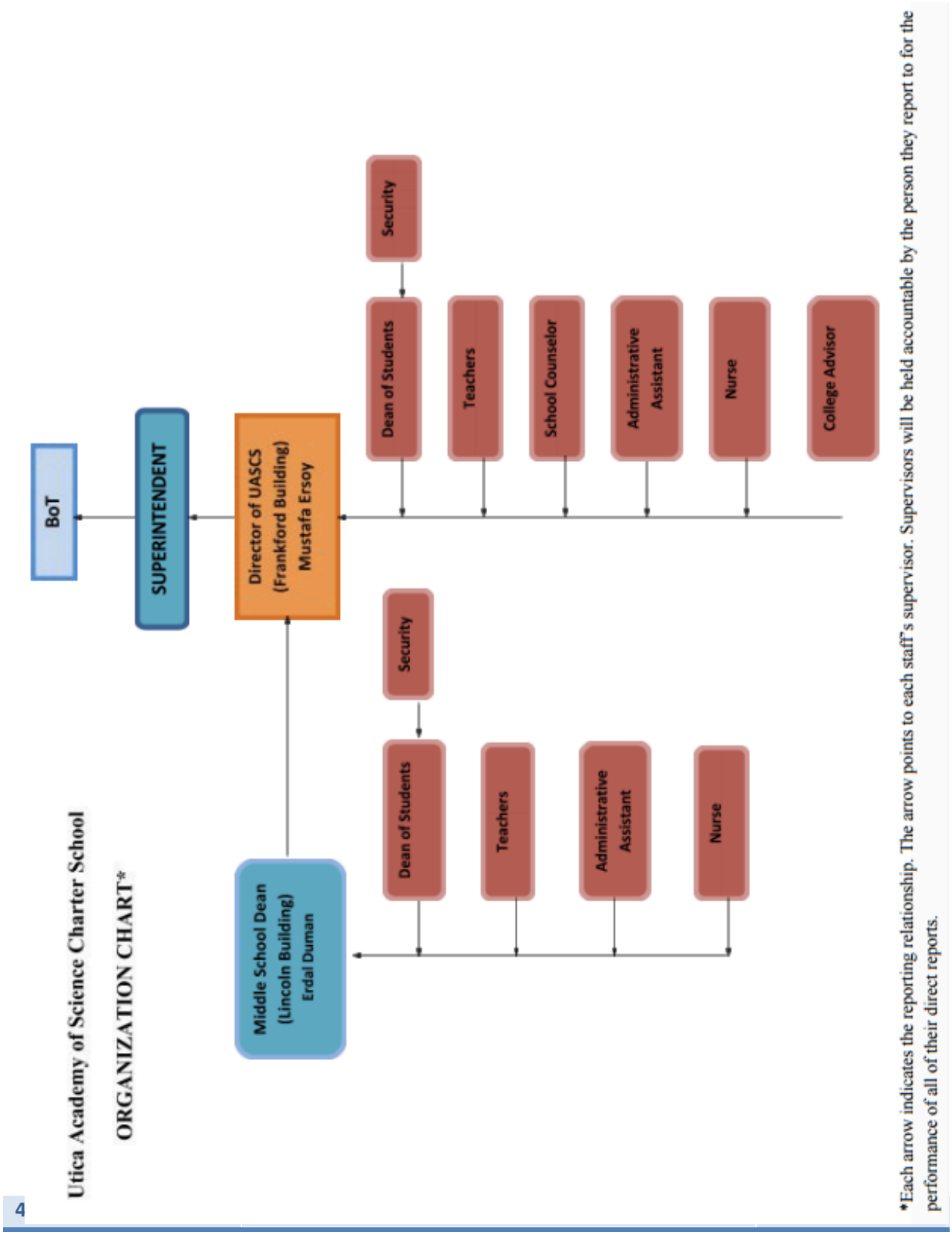
I. Mission & Vision

The Utica Academy of Science Charter School (UASCS) will provide *support*, *challenges* and *opportunities* for its students, and it will instill the necessary skills and knowledge in *math, science, and technology* to empower students, through high intellectual standards, preparing them for *college, career, and citizenship*. The school seeks to graduate students who can think critically and creatively, who are committed to a lifetime of learning and civic involvement, and who are conscious of local, global, and environmental issues.

The Utica Academy of Science Charter School (UASCS) will provide:

- Replication the Success
- Experienced and Diverse Founding Group
- College Preparation
- Focus on STEM (science, technology, engineering and math)
- Glocal Education
- Character education
- Adventure-Based education
- Environmental education
- Small School Setting
- Extensive Tutoring and After School Program
- Parental Involvement and Home Visits
- Extended School Day
- Performance Assessment and Evaluation

II. Organizational Chart



III. Key Design Elements

A. STEM Focus

- Curricular
  - School-wide Science Fair,
  - Courses: Anatomy, Forensic Science, Robotic, SUNY ESF – Environmental Science

- Extra Curricular
  - Robotics – First Lego League (FLL), First Tech Challenge (FTC)
  - Math Counts & ILearn Math Competition at Princeton NJ
  - Math League
  - Utica College Science Fair
  - SUNY Oswego Summer Research Project

- Educational Technology
  - 220 Chrome books, 70 I-pads, 2 Mac computer labs, 11 Smart boards & 11 Smart TVs
  - SIS –Student Information System,
  - Rubicon Atlas – Curriculum Platform
  - Teachscape – Teacher Evaluation & Support System
  - Planbook – Lesson plan platform
  - Accelerated Math & Study Island

B. College Prep

- Counselors in both buildings
- Counseling Services
    - Social and emotional services
    - Naviance – College & career planning
    - SAT /ACT Prep classes
    - College trips
    - Summer internship
- CMP College Mentoring Program

C. Rigorous Innovative Approach

- Longer school day 8:00 -4:00pm
- 10 hours a week in 6th-9th Math & ELA
- Extensive Tutoring and Saturday school
- Winter & spring camps
- Summer bridge program for new students
- Small and nurturing school community
- Parent involvement

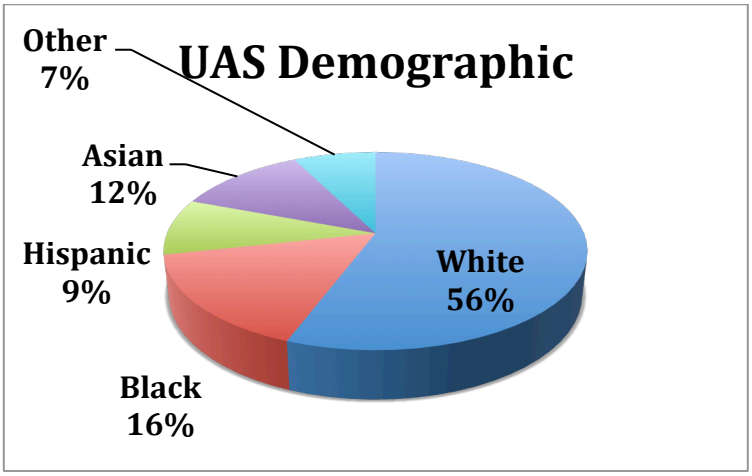
D. Citizenship

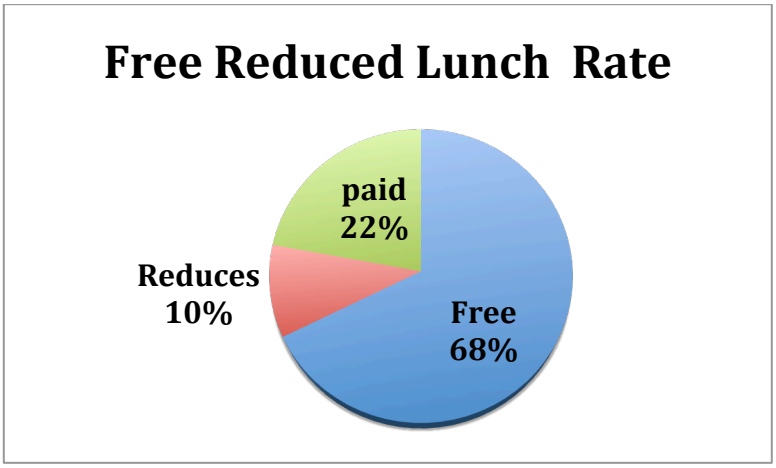
- Leadership speaker series
- Community involvement through service projects
- Glocal education emphasis
- Model UN Program

E. Parent Involvement

- Parent Involvement Committee (PIC)
- Parent empowerment through local and online resources
- Home visits
- Annual Parent Events: Back to School BBQ, International Day, Science Fair
- Student Information System – SIS academic and behavioral update
- Quarterly Award Ceremony
- Effective, periodic and multi-way communication through individual meetings, parent teacher conferences, phone calls, emails.

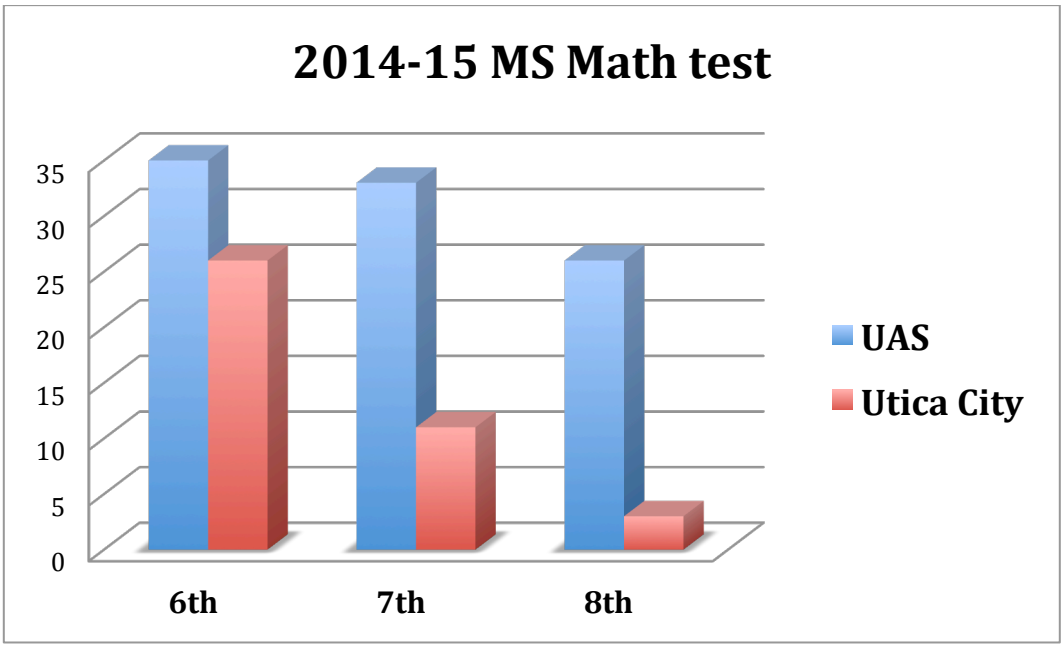
IV. Data

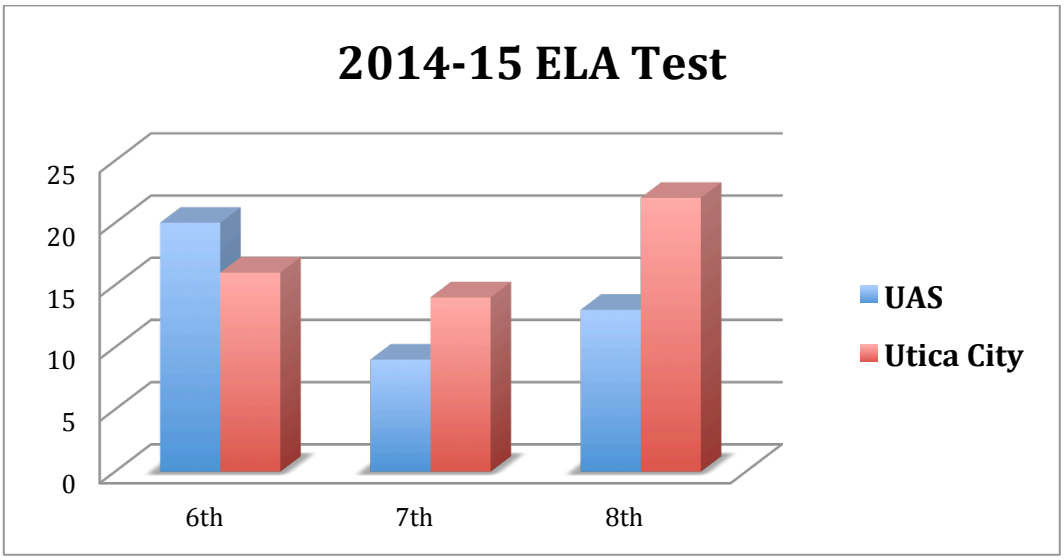




- 8% SWD Students with Disabilities Rate
- 16% ELL English Language Learners Rate

2014-15 State Test Results in Math & ELA





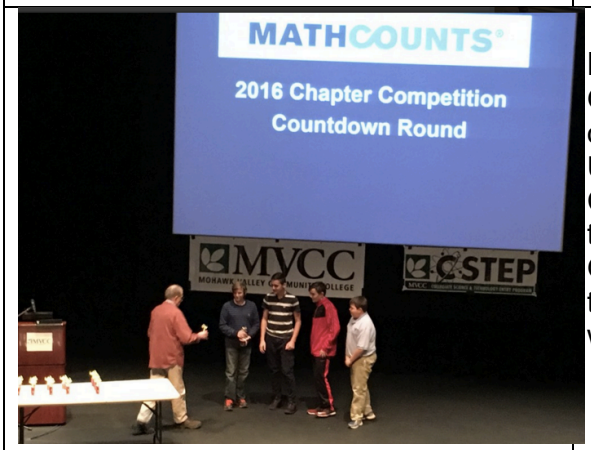
V. STEM

STEM

With recent Nanotechnology and GM investments in the Utica area, we believe that UASCS has a major role to play in building an educational pipeline in STEM. By creating a rigorous STEM program with curricular and extra curricular opportunities, our goal is to collaborate with area colleges, STEM related business and local community to encourage our students to explore, involve and pursue a career in such fields. Such mission supports our local colleges and businesses meet their need on highly qualified college student body and work force in the STEM fields.

Robotics

The Robotics Program at UASCS is designed to prepare our students to compete in the ever-expanding fields of science and technology, which are becoming increasingly embedded into our everyday lives. Our Robotics Program is offered as afterschool program in both middle and high school buildings. It addresses key concepts of the core subjects, including science, technology, mathematics and ELA as well as research, team-building and time management.



Math-Counts

Our Math Olympiad team worked extremely hard on weekdays and Saturdays to represent UASCS at the competition. The UASCS Community is proud of our dedicated coach and the Math counts team. The UASCS Math Olympiad Team Member Everett Fischer won the 2nd place on Countdown Part and the team won 3rd Place and qualified for the state finals.

Science Bowl
UASCS Scholars compete at regional Science Bowl competition each year at Syracuse University. Science Bowl is a nationwide academic competition that tests students' knowledge in all areas of science and mathematics. Teams face-off in a fast-paced question-and-answer format, being tested on a range of science disciplines including biology, chemistry, Earth science, physics, energy, and math.

Annual Utica College Science Fair
Utica College Regional Science Fair is an annual event that takes place each year in March. There were twelve schools participated from the region. In 2014, Utica Academy of Science was the only senior level school from Utica City area. UAS Scholars have worked hard and recognized by so many medals, certificates and cash awards for their projects.

Annual UASCS Science Fair
UASCS Annual Science Fair is a great opportunity for our students to research, understand, apply and communicate scientific facts of their interest. All students (grades 6-11) are required to complete a science project and compete to be qualified for the Science Fair showcase and Regional Utica College Science Fair. The event also brings our local colleges and business together to support and celebrate our students' hardwork.

VI. Guidance

At UASCS, we believe that college is for everyone. To assure that our students reach that goal, we strive to provide our students an individualized guidance support to produce the best match between our students' interest and colleges. Such goal can be achieved through strong relationship between home and school.

One of the key components of college guidance at UASCS is to expose students to college environment through various college visits and guest speakers. College visits, hosting individual college representatives and guest speakers help our students expand their knowledge about necessary skills, requirements and available programs at local, regional and national colleges. UASCS' counseling department uses paperless college application tools; Naviance and Common App. for college applications.

As of summer of 2016, eligible UASCS high school will be able to take college credits from MVCC and SUNY ESF campuses. Students will also take advantage of local area and SUNY Oswego summer internship opportunities based on their interest.

The following services are the highlights of UASCS' College Guidance Services:

- Individual support for college and career choice
- Online college application tools: Naviance and Common App.
- Local, regional and national college visits
- MVCC and SUNY ESF College courses
- SAT/ACT courses, prep sessions
- SUNY Oswego Summer Internship

VII. Curriculum and Instruction

Utica Academy of Science Charter School provides rigorous, and engaging curriculum, which provides data driven personalized attention to meet students' needs in a small and safe learning environment. UASCS aligns its Math and English Language Art curriculum by New York State Common Core Standards.

Main Instructional Practices

- **Common Core Learning Standards (CCLS)** instruction and learning - CCLS are national standards that provide high benchmarks for rigorous learning in Mathematics, English Language Arts and Literacy. Students at UASCS receive CCLS-based instruction to get ready for the challenges of college and future work place as competent, globally oriented individuals.

- **Charlotte Danielson Model:** At Utica Academy of Science, good teaching is defined by the NYSED approved Charlotte Danielson's rubric. Our teachers have been trained and periodically being updated through daily walkthrough visits and feedback as well as online Teachscape –Learn video modules. Weekly Teacher Institute (TI) sessions also help teachers analyze real classroom scenarios and develop deeper understanding of high quality instruction practices.

- **Instructional Best Practices:** UASCS uses a common classroom instruction and the lesson plan format with certain components, which are commonly supported by various academic researches and books including Marzano, Hattie, Fisher and Frey, Lemov.

Sample Lesson Plan

ELA, 8 Week: 17 (12/16-12/20)		
Common Core Standards	**Essential question/ Objective** (Student friendly objectives, E/Q)	**Procedures (Step by step)**
RI.8.1: Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text. **RI.8.2**: Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text. **RI.8.4:** Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. **RI.8.5**: Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept. **RI.8.6**: Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.	**EQ:** What makes a piece of literature effective and worthwhile? **Obj**.: I can… *Evaluate the effectiveness of a book. *Compare and contrast a fictional piece with non-fiction articles. *Support their answers with textual evidence. *Work independently with a purpose. **Vocab**: author's purpose, tone, evaluate, compare & contrast, Venn diagram, short answer response, refugee **HW**: Read independent book **Assessment (CFU):** Teacher will monitor student progress and make note of students not making ample progress. Exit slips will be collected. Ultimately, the packets will be collected and graded. **Differentiation:** Students are moving at their own pace, choosing which activities in the packet to complete in which order, and have the option of enrichment activities if they finish early. Support teacher will assist as needed to support struggling students.	**Hook:** Goal setting reminder: What have you completed so far, what do you need to work on to complete the packet, what is your specific, measurable, and attainable goal for today's class, and what resources should you be using? For example: "I will provide at least three examples of textual support for each part of my Venn diagram." **Teaching**: Teacher will teach 5-7 min. mini-lesson reinforcing how to use textual evidence in each section of the packet. Teacher will informally assess student work, looking for common mistakes and use of textual evidence. Teacher will address the class as a whole should she notice common mistakes. Teacher will also give updates and reminders about the weekly project. For example: "Since this is our 3rd class working on this packet, everyone should have completed at least one section of the packet, but preferably two in order to minimize the amount of work needed to be completed over winter break." **Guided Practice**: Students will start with *think-pair-share* activity with their shoulder partner, and then transition to work independently to complete the part of their packet they have identified in their daily goal. If they complete that section before the end of class, they have the option of moving on to the next section, reading their independent reading book, or completing an enrichment activity. **Closure:** Exit Slip: Did you meet your daily goal? If so, what did you do to make it possible? If not, what happened?

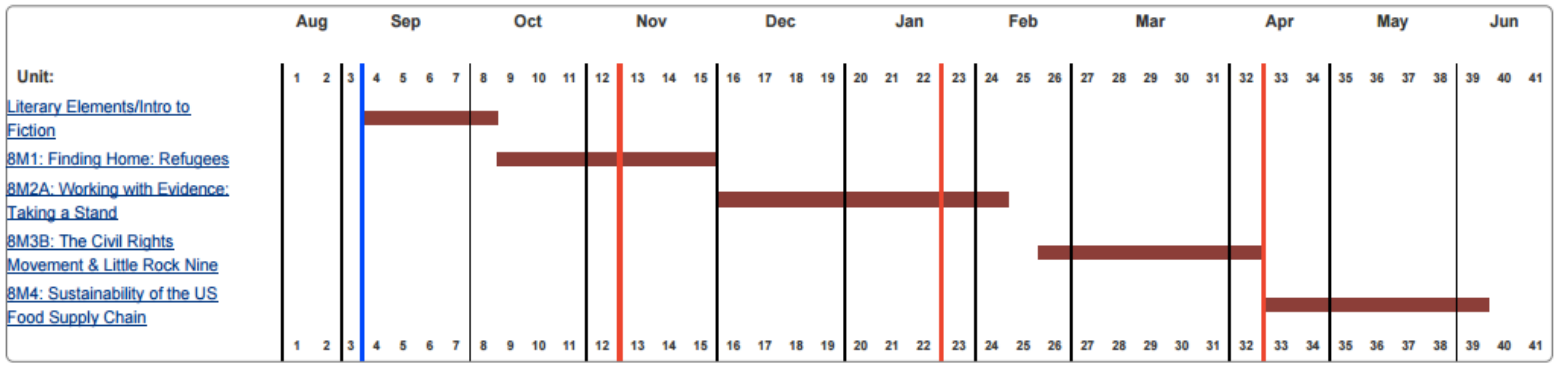
Sample ELA Unit Calendar

Academy of Science Charter School

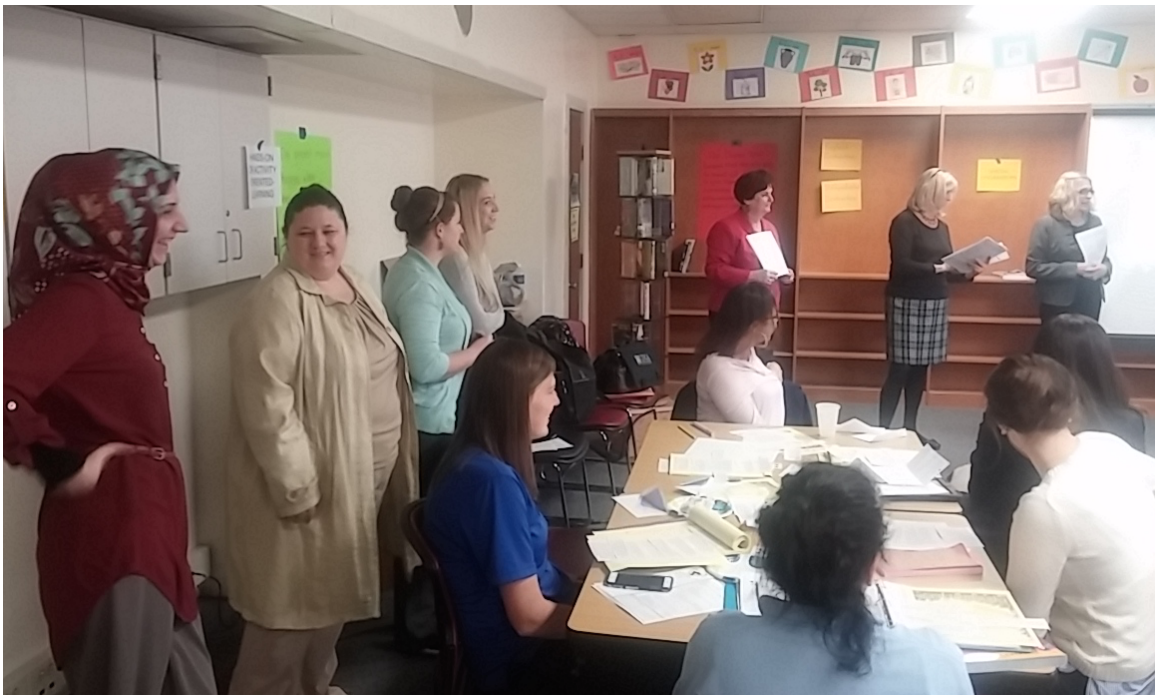
English-8 (EngageNY Oct 2014)

Utica High School > Grade 8 > English/Language Arts > English-8 (**EngageNY Oct 2014**)

Schumacher, Cassandra



VIII. Professional Development



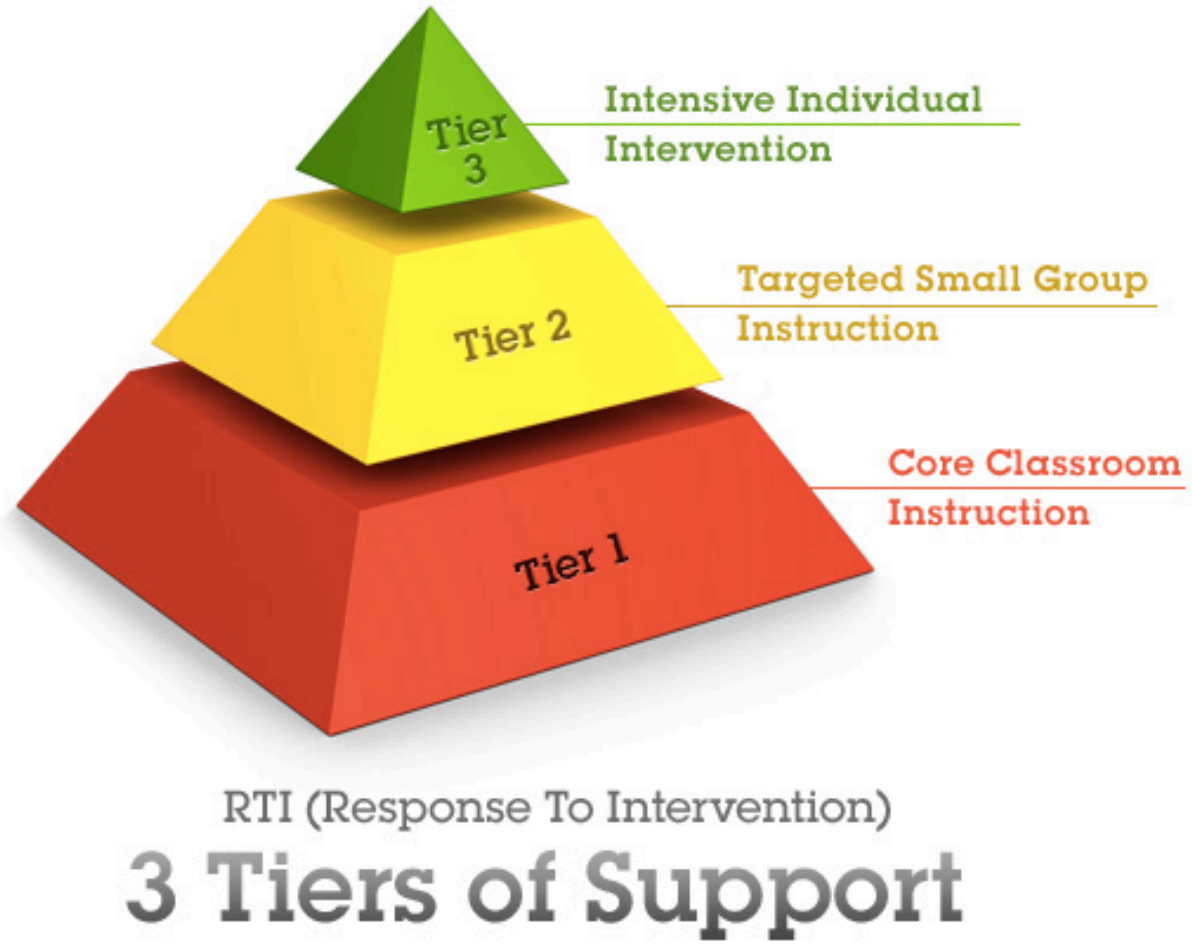
Professional Development is offered to UASCS faculty and staff from an extensive menu throughout the school year to support the commitment of college and career readiness for its scholars. The professional development sessions focus on defining and improving the quality of instruction in class; increasing teacher knowledge and self-reflection; and supporting collegiality and best practice sharing. The followings are examples of professional development opportunities:

- Summer teacher orientation
- Instructional coaches for individual support
- Teacher conference and course attendance
- Teacher Institute (TI)
- Teachscape -learn online modules
- Grade level meetings
- Department level meetings
- Weekly Friday PDs

IX. Response to Intervention (RTI)

UAS Response to Intervention (RTI) system includes a multi-level approach to maximize student learning and address non-instructional issues. With RTI, data is used to identify at-risk students for poor learning outcomes, monitor student progress, provide specific interventions and adjust the level of services and nature of those interventions based on a student's progress.

The three-tier RTI approach at UASCS is below:



Tier One Interventions:

Tier one is the universal, preventative intervention methods that address the needs of all learners.

- Longer school year and school day
- Double period Math & ELA everyday in grades 6 through 9
- Data used for instruction (STAR Reader & Math, quarterly benchmark)
- School-wide available technology for online resources (Accelerated math, study island, newsela, Khanacademy, problemattic)
- Small and supportive school culture to promote student achievement (Leadership Speaker Series, college trips, community service, grade update with SIS, kiosks, Honor Roll Ceremonies)

Tier Two Interventions:

Tier two is the evidence-based, targeted interventions of moderate intensity that address the learning or behavioral challenges of most at-risk students.

- 9^{th} period tutoring sessions
- Saturday school
- Pull-out tutors (Hamilton College tutors, support teachers)
- Summer Bridge program* /summer school
- Dean of Students and counselor meetings with behaviorally challenging student on a daily basis

Tier Three Interventions:

Tier three is the individualized interventions with increased intensity for students who show minimal response to tier two interventions.

- Special Ed. teacher supports in resource room
- Small ESL classes with push-in support in general education classes
- Home visit by principal, deans, counselor, teachers for at-risk students
- Partnership with local community support organizations (Detailed list provided)
- School RTI Committee (Guidance, grade chair, admin) meeting with at-risk students and their parents to create individualized support plan

X. UASCS Assessment & Data Driven Instruction

UASCS uses an annual assessment calendar to identify necessary changes and adjust curriculum and instruction. Early intervention decisions are made, when needed, to keep students on academic track. Technology is often used for assessment so that teachers receive timely feedback and are able to adjust instructions and identify RTI needs. Diagnostic, formative, and summative assessments are all used to monitor student academic growth throughout the year.

STAR Math & ELA Tests: STAR Math and ELA tests are administered monthly to measure the progress in student learning. The test results are mainly used to identify missing skills and standards and provide intervention in the afternoon classes

Benchmark Assessment and Reflections: Benchmark assessments are given two weeks prior to the end of each quarter to measure student learning. Teachers submit benchmark reflection sheet after grading benchmarks, which provides a detailed report about intervention plan for intervention. Benchmark reflection includes general summary, data analysis and intervention plans.

Tutoring and Interventions:

- Post –benchmark re-teach week
- Support teachers in Math /ELA
- Saturday school
- 9th Period tutoring
- Hamilton College tutors
- Summer Bridge Program
- Feb/April Winter Camps

UASCS Assessment Chart

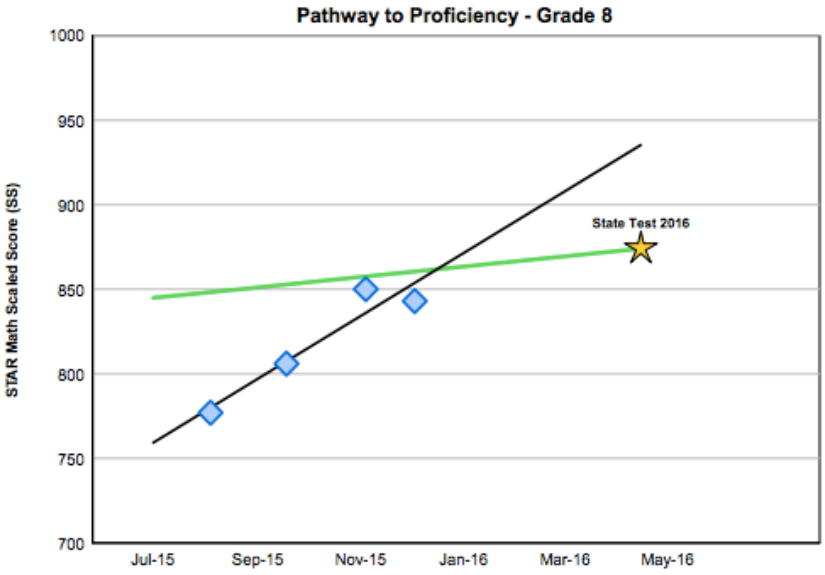
Assessment	Type	Date	Student Groups	Purpose	Actions /Interventions
STAR Diagnostic	Computer Diagnostic Formative	Ongoing	New accepted students	Diagnose the knowledge gaps of the new students	Summer Bridge Program
STAR Reading and Math	Computer Adaptive Formative	Monthly - First week of each month	7-11 graders	Monitor the student growth	Instructional adjustment in the after noon classes. RTI purposes, 9th period and Saturday school lists
Classroom assessments (Unit Test, Quiz, Portfolio, hands on project, science experiment, oral presentation, video production, research.	Teacher developed Formative	Ongoing	All students in all courses	These assessments are part of the instructional process; it provides the information needed to adjust teaching and learning while they are happening. These assessments inform both teachers and students about student understanding at a point when timely adjustments can be made. These adjustments help to ensure students achieve targeted standards-based learning goals within a set time frame.	
Benchmarks	Cumulative and teacher developed Formative	At the end of each Quarter.	All students in all courses	To check the mastery of the learning objectives that taught in that quarter.	Re-teaching Develop RTI plan 9th period tutoring
NYS Assessments	Scheduled by State	April 2016	All students	Help evaluate the effectiveness of programs and school improvement goals. Also used for the accountability purposes.	
PSAT /SAT	Norm based	November 2015 / Spring & Fall 2016 as scheduled	10 and 11th grades	College readiness measures. Scores also used for scholarship applications	SAT Tutoring College guidance meeting
Naviance Career test*	Computer based	March – April 2016	All students	To identify the career interests of the students	Career fair Career counseling Elective courses
ASVAB*	Paper based Diagnostic	April 2016	All High School students	To help students engage in career exploration	Career exploration program

STAR Test Sample Reports

Individual Student Progress towards proficiency

Grade: 8
ID: 404

Teacher: basic, M.
Class: Placement Test Class



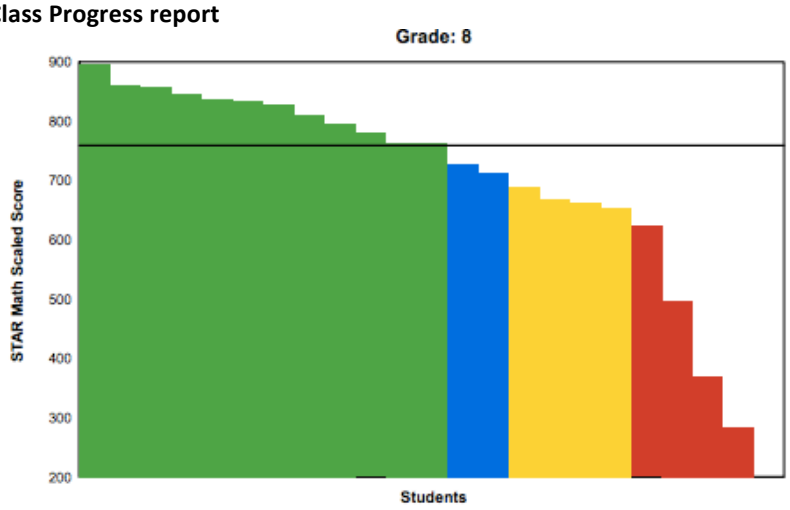
Enterprise Test

Trend line is statistically calculated after three or more tests to show the direction the scores are moving.

State Test 2016 is the STAR Math score (874 SS) that is approximately equivalent to the proficiency threshold (Level 3) on the 2016 NYSTP given in the spring.

Pathway to Proficiency represents typical growth for a student who minimally achieves proficiency on the NYSTP. A test score below the pathway indicates the student will need to improve at a higher than average rate to reach proficiency. A score above indicates the student is on the pathway to score at or above proficient.

Class Progress report



Categories / Levels	Benchmark Scaled Score	Benchmark Percentile Rank	Students Number	Students Percent
At/Above Benchmark				
At/Above Benchmark	At/Above 759 SS	At/Above 40 PR	12	55%
Category Total			12	55%
Below Benchmark				
On Watch	Below 759 SS	Below 40 PR	2	9%
Intervention	Below 710 SS	Below 25 PR	4	18%
Urgent Intervention	Below 625 SS	Below 10 PR	4	18%
Category Total			10	45%
Students Tested			22	

XI. School Life

Athletics

Utica Academy of Science Charter School believes that a strong athletic program with high academic expectations supports our school mission and help develop successful scholar athletes. The focus is on the development of the individual, as well as fostering an atmosphere of teamwork, citizenship, and good sportsmanship. In addition, the program emphasis is on discipline, respect, leadership, loyalty, and cooperation for success without looking for short cuts.
UASCS has been striving to offer a variety of athletics programs based on student interests, participation, and developmental needs. UASCS also seeks dedicated, and qualified coaches who are positive role models with an enthusiastic attitude about working with student-athletes.

UASCS currently offers the following sports:
Boys Soccer – JV
Boys Basketball – Modified
Boys & Girls Track
Girls Soccer – Club level

Clubs

At Utica Academy of Science Charter School we incorporate extra curricular activities, fieldtrips, clubs and sports into our academic program throughout the year. The focus is on supporting scholars as a whole child and fostering all aspect of their developmental needs. Such focus intends to build a safe and positive school culture for scholars to socialize.

A variety of programs have been provided based on student interests, participation, and developmental needs. Students and parents are invited to Back to School BBQ in September to sign up for clubs are of their interest offered by UAS staff as well as outside providers. Some of the clubs that are offered in 2015-16 school year are listed below:

- Robotics
- Math Counts Club
- Model UN Club
- Chess Club
- Creative Writing Club
- Cooking Club
- Diversity Club
- Table Tennis Club
- Soccer Club

Field Trip

Field trips are essential parts of Utica Academy of Science Charter School's academic program. UASCS offers variety of fieldtrips to meet the academic and social needs of our scholars including local, statewide and international trips. In 2014-15 students had an opportunity to attend over sixty local, regional and international field trips.

Since UASCS is a college prep charter public school, college trips are essential part of our school culture. All UASCS students get a chance to attend at least one college trip each year. The purpose of the tours is to expose our students to college campuses and college acceptance process so that they can make wise decisions about their futures. Some of the colleges that we have visited are MVCC, Utica College, SUNY Poly, Syracuse College, Hamilton College, Colgate University, Princeton University, Harvard University, MIT and more.

XII. School Culture, Discipline and Safety

School Culture and Safety

UASCS promises its parents and students a safe and positive school culture with incentive based merit and demerit program.
Students at UASCS can earn merit points for positive behavior. These points can be redeemed periodically with incentives including dress code apparel, school supplies, gift cards, field trips and other incentives.

Non-negotiables and Progressive Discipline

The students at UASCS are expected to behave as responsible young adults. It is expected that students treat each member of the school community with respect, courtesy and cooperation.
The school follows progressive discipline policy with built in support and interventions along the way. Students are given opportunities to write reflection, talk with a counselor, when they commit misconduct. UASCS builds partnership with local organizations and higher ed. to support students with persistent misbehaviors. Some of these organizations are as follows: Kids Oneida, MVCC, Office of Civil Responsibilities, and LD Association of the Mohawk Valley.

In case of repeated violation of school code of conduct and/or physical altercations may cause formal hearing, since it threatens the safety of school culture.

Leadership Speaker Series

As part of our mission to prepare students to become responsible, productive and glocal citizens of the world, we endeavor to provide the opportunity for students to engage with leaders in our community who share their own knowledge and experiences such that they may educate, enlighten, empower and inspire the students to succeed. The Leadership Speaker Series at Utica Academy of Science is the vehicle by which our students are able to connect with stakeholders from various professions and backgrounds.

Through this series, our students have been empowered and inspired by many notable guests with diverse backgrounds and professions. Some of the speakers are listed below:

- Congressman Richard Hanna,
- Mayor Robert Palmieri
- Oneida County District Attorney Scott McNamara,
- SUNY IT, Chair of Engineering, Science and Applied Mathematics, Andrew Wolfe
- Assemblyman Antony Brindisi,
- Senator Joseph Griffo,
- Director of Utica Food Bank, Mark Wolber
- Utica Chief of Police, Mark Williams

XIII. Student-Teacher-Parent Triad

UASCS puts special emphasis on parent participation to fulfill our mission of providing high quality education to our students. We highly encourage all of our parents to be active participants in educating our students. We welcome our parents as partners so that our students are supported - both in school and at home - to ensure they strive toward achieving their highest potential.
Home visits are crucial part of our school model, which allow school's stakeholders to build strong communication and serve as an effective RTI method to address issues in a timely manner.

Parent Involvement Committee (PIC) is an active parent organization which supports the students of UASCS by engaging in fundraising activities, school advocacy, supporting various enrichment activities, providing a forum for parent, teacher and student interaction through community events and promoting open communication between parents, teachers, administration and the entire school community. PIC Meetings are held on the last available Thursday of each month at 5:30-6:30 PM

At UASCS, we attempt to keep positive and constant communication between home and school by using the following methods:

- Parent Involvement Committee (PIC)
- Home Visits
- Parent BBQs
- Quarterly Parent Teacher Conferences
- Quarterly Award Ceremonies
- Student Information System - SIS Parent Access
- Monthly E-Newsletters.

Teacher vs. Student Games

On the last day of the spirit week, UAS teachers and students gathered at the UASCS High School GYM for the first annual teachers vs. students basketball game. Staff (The Magicians) and the scholars (Team Curry) played a very competitive game. The UAS scholars have proven themselves to be ready for the upcoming school year. There will be more teachers vs. student activities in the spring to reinforce our commitment to the holistic development of our students at UASCS.

Community Service

UASCS scholars have been showing their dedication and commitment to our city by serving in the local community. This year the students have been actively involved in many community service events in the city of Utica.

Some of the community organizations that our students volunteered are listed below:

- Rescue Mission of Utica
- Masonic Care Nursing Home
- Bowman House Food Pantry
- Intergenerational Fall Cleanup in the City of Utica

XIV. Annual Events

Each year, the Utica Academy of Science organizes several events to improve our community based positive school culture. These events not only support academic excellence in the classroom, but also create opportunities to bring our stakeholders together so we can recognize our commonalities, while appreciating and celebrating our diversity all at once.

We encourage our families to take part in all of our annual events:

International Day - International food tasting where students, staff and their families share food, music and cultural activities to celebrate the diversity among the UASCS Family.

Science Fair - All students (grades 6-11) are required to complete a science project and compete to be qualified for the Science Fair showcase and Regional Utica College Science Fair. The event also brings our local colleges and business together to support and celebrate our students' hard work.

Back to School BBQ – Students, families and staff have so much fun with big school community cookout to kick off the new school year in September.

Winter and Spring Study Camps: Each year during winter and spring break UASCS students are given an opportunity to attend study camps at the school. The program entails three-hour study and a fun field trips built in in the afternoon.

XV. Technology

70 iPads available for teachers to enhance their lessons.

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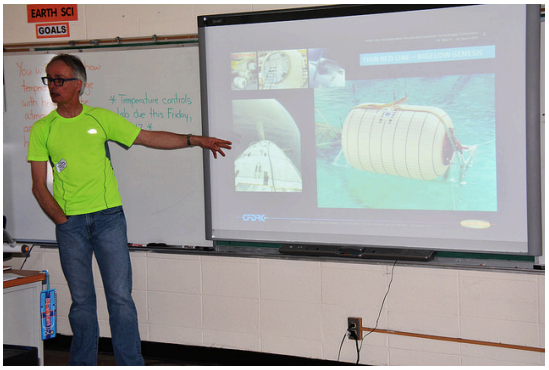
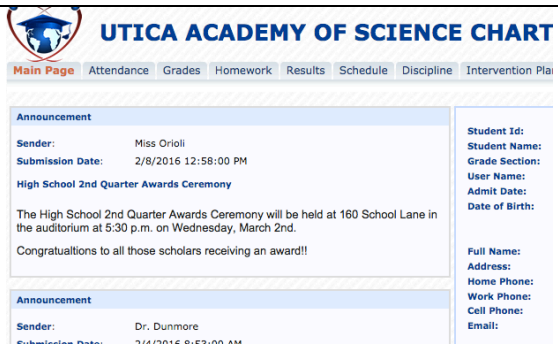
225 Chrome book computers are available to be used for RTI and Enrichment

Up-to-date school website with online parent resources is a great communication and support tool

All classrooms are equipped with document cameras, desktops and printers



All 11 classrooms in the MS are equipped with smart boards and 11 classrooms in the HS are equipped with smart TVs.



UASCS' completely web-based student information system allows parents to access their child's detailed school data anywhere and anytime. These include: attendance, grades, and homework.

	
Kiosks are located around the building to check grades, attendance & daily homework updates.	Two iMac labs are available to all students during school hours and after school for curricular and extracurricular programs.

Accelerated Math ENTERPRISE

STAR Math™
Computer-Adaptive Math Test

apple
educational services

NAVIANCE

teachscape

Study Island®

Rubicon Atlas

Problem-Attic

NEWSELA