HONEOYE FALLS-LIMA CENTRAL SCHOOL DISTRICT **Quality Education Design: A Student-Centered Approach to Program Budget Development for the 2018-19 School Year** **Operational Plan 2018-19**	

Decision Input Unit Name:	**Science**
Site:	**9-12**
DIU Chairperson:	**Rosanne Procopio / Kimberly Agar**

Name/Title of Committee Members	Name/Title of Committee Members
Kimberly Agar, Science Teacher	Joan Hamer, Science Teacher
Christopher Benedict, Science Teacher	Beth McCourt, Community Member
Robert Callens, Science Teacher	Susan Packard, Science Teacher
Andrew Corey, Science Teacher	Rosanne Procopio, Science Teacher
Scott Davis, Science Teacher	Jeffrey Sommers, Science Teacher
Dick Gatto, Community Member	Kenneth Warren, Science Teacher

The DIU/PBAC process is one of continuous improvement. Please developed goals by considering the questions listed in the diagram below. For additional information, see the presentation on *"What is a Strong Goal"* and the *HFL PBAC Guidelines* document.

Goals for 2018 - 2019

Select approximately three goals to prioritize for the 2018-2019 budget year. For each goal, describe how you will know if you accomplish each goal. Please detail the budget impacts and resources you will need to accomplish each goal.

1. Each science discipline will maintain levels achieved on 2017 Regents exams.
   How will we know if we accomplish this goal?
   - Exam scores will be monitored and evaluated in June

   Budget impacts and resources required:
   - Reduce lab sizes to a maximum of 14 students per lab
   - Support make-up labs for students falling behind in NYS requirements

- Obtain a certified science tutor for students in need of additional support
- Staff a Science Resource Lab (modeled after the Math Lab and Reading/Writing Lab) to support academic interventions for at-risk students.
- Establish Room 104 as a Science Skills Lab
- Participate in professional development and regional conferences to support the development of best practices in moving more students to mastery and STEM involvement
- Support science teacher work days during the summer to: 1) develop strategies to identify and assist struggling students; 2) plan, develop and implement strategies in increase STEM career awareness; and 3) plan for NYSSLS changes
- Castle Learning or a similar program would help remediate struggling students

2. By June 2019, there will be an increase in the number of students participating in four or more years of science instruction.

How will we know if we accomplish this goal?

- With the help of the Counseling Department we can monitor the number of students enrolled in science

Budget impacts and resources required:

- Study the development of additional college-credit course offerings, such as in the areas of Geosciences and Physics
- Increase the number of science sections available
- Work with the Counseling Department to encourage enrollment in fourth and fifth year science courses
- Incorporate a Career Exploration in STEM areas in conjunction with the Business Education Department. This is a vital program which needs the HFL District's support to prepare our students for College and Career readiness. Continuous monitoring of student performance
- Support make-up labs for students falling behind in lab requirements
- Obtain a certified science tutor for students in need of additional support
- STAFF a Science Resource lab like the math model to support students with academic interventions for SCIENCE
- Participate in professional development and regional conferences to support the development of best practices in moving more students to mastery and STEM involvement
- Support science teacher work days during the summer to: 1) develop strategies to identify and assist struggling students; 2) plan, develop and implement strategies in increase STEM career awareness; and 3) plan for NYSSLS changes
- Additional staff to meet the increased lab requirements
- Increase paid professional development opportunities for STEM teachers
- Balanced class and lab enrollments
- Smaller class sizes in the sciences
- Participation in facilities planning to improve instructional space
- Collaboration with Counseling Department to monitor student performance and progress
- Update textbooks and technology to maintain current trends in Science (AP Physics; Chemistry)
- Four sets of 30 iPads for each Regents discipline (Chemistry, Biology, Earth Science, Physics)
- Castile Learning for use in Earth Science and LE/Biology
- Purchase newest software version of ESAMGEN every year (Update)
- Update / repair/ replace equipment as needed
- Participation in facilities planning to improve instructional space
- Ceiling-mounted projector replacement in Room 133B
- Vernier Sensors for Physics
- Vernier LabQuest bundles for Biology
- Mini PCR machine for AP Biology
- Two external DVD players
- A special education teacher assigned to Applied Physics for consistency regarding level of support as a student transitions from Chemistry Today to Applied Physics. Jeff Recktenwald would be ideal as he works with the Chemistry Today students each year. His established rapport, as well as his insight into these students' academic strengths and weaknesses, would benefit the Applied Physics classroom.

3. Mental health has a direct impact on students' ability to learn and process information. A survey of high school staff shows there is increased concern about student anxiety and depression. 80% of staff report student anxiety as the #1 concern; stress management was #2.

   The high school staff believes programming must be designed specifically to address needs of the students struggling with mental health issues such as anxiety / depression. A comprehensive program should consider the issues of:
   - Staffing: teacher to address academic needs and counselors to address mental health concerns
   - Location: a safe environment with separate entrance within a school building
   - Academic options: flexibility in credit earning and course pacing with access to computer credit-bearing and credit-recovery programs, and/or scheduling later start to the days or Saturday options as well as full or part-time placement

   A program with structured counseling, problem solving and strategy building would benefit students that struggle within a traditional classroom setting. We recognize that with declining enrollment across the District a specific commitment still must be made to address the learning needs of this population with appropriate resource allocation.

Goals for the current School Year (2017-2018)

Please list your DIU goals for the current school year. For each goal, please indicate if we are on plan with this goal and what measures you are tracking.

1. Each science discipline will maintain mastery rate levels achieved on 2016 Regents exams.
   - 1 of 4 science disciplines improved mastery by 2%, the remaining disciplines decreased mastery between 5-11%. These can be considered normal fluctuations in the difficulty of the exam and the ability levels of various groups.

2. There will be an increase in the number of students participating in four or more years of science instruction.
   - There is no previous data to base this on. During the 2016-17 school year 80.66% of seniors had at least 4 science credits.

Goals for the previous School Year (2016-2017)

Please list your DIU goals for the school year just finished this past June. For each goal, please indicate if we achieved this goal and the measures you tracked.

1. Each science discipline will maintain mastery rate levels achieved on 2015 Regents exams.

2. There will be an increase in the number of students participating in four or more years of science instruction.