Action Plan

Objective:

By the year 2024, Archbishop Ryan High School students will demonstrate improved academic performance in Science as measured by:

Strategy a. A 3% increase in the PSAT ERW score of all 11th grade students

Baseline: PSAT 2016 477

Action Step	Person(s)/Group(s) Responsible	Timeline for Completion	Resources Needed	Indicators of Success	Status
1. Increase the number of analytical and critical thinking questions on science assessments and laboratory assignments	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning September 2017	Classroom and Laboratory Assessments and Materials	Improved scores Replace with improved scores	
2. Increase the number of problems involving graphing and interpretation of data on science assessments and laboratory assessments	Science Dept. Chair Science Teachers	Beginning September 2017	Classroom, Laboratory Materials, and Time	Improved scores Replace with improved scores	
Proposed wording change: Increase the number of problems involving graphing and interpretation of data on science assessments					

and laboratory assessments				
3. Develop systematic plan for using PSAT/SAT prep books in science classes	Principal and Assistant Principal for Academic Affairs	September 2018	PSAT book	Improve PSAT scores Replace with improved scores
Develop systematic plan for using PSAT/SAT prep books in science classes				
4. Implement plan for using PSAT/SAT prep books in science classes Implement plan for using PSAT/SAT prep books in science classes	President, Librarian, Principal, Assistant Principal for Academic Affairs, Science Department Chair	September 2018	PSAT book	Improved PSAT scores Replace with improved scores
5. Develop systematic plan for Khan Academy use through science classes	Principal and Assistant Principal for Academic Affairs, Science Chair, Science faculty	October 2018	Online Connectivity Khan Academy	Improved scores Replace with improved scores
Develop systemic plan for Khan Academy use through science classes				
6. Implement systematic plan for Khan Academy use through science classes	Principal, Assistant Principal for Academic Affairs, Science Department Chair, Science Teachers	January 2019	Online Connectivity Khan Academy	Improved scores Replace with improved scores

Implement systematic plan for Khan Academy use through science classes					
8. Develop a Pre and Post Test for Biology, Chemistry, and Physics based on the SAT standards	Science Department Chair, Science Teachers	Create June 2019	Assessment Materials	Proposed change: Tests developed	
9. Implement a Pre and Post Test for Biology, Chemistry, and Physics based on the SAT standards	Science Department Chair, Science Teachers	September 2019	Assessment Materials	Improved scores Replace with improved scores	
10. Develop and add to the Summer Reading Assignments:Fiction or Nonfiction	Librarian, Science Department Chair, Science Teachers	Summer 2018	Reading materials	Improved scores Replace with improved scores	
(THIS STEP IS ON HOLD) 11. Develop a science-related reading list for seniors Proposed change: Develop a science-related reading list for seniors	Librarian, Science Department Chair, Science Teachers	September 2019	Reading materials	List developed Proposed Change: Add: List developed	
12. Develop a science-related list for juniors Proposed change: Develop a science-related list for	Librarian, Science Department Chair, Science Teachers	September 2020	Reading materials	List developed (Delete above) Proposed Change:	

juniors				Add: List developed
13.Develop a science-related list for sophomores Proposed change: Develop a science-related list for sophomores	Librarian, Science Department Chair, Science Teachers	September 2021	Reading materials	List developed (Delete above) Proposed Change: Add: List developed
14. Develop a plan to use Literacy Strategies in science classes	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team	Summer 2018	Teacher training and professional collaboration	List developed (Delete above) Proposed Change: Add: List developed
15. Implement the use of Literacy Strategies in science classes	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team, Teachers	September 2018	Literacy Strategies and classroom materials	Improved scores (Delete above) Replace with improved scores
16. Develop a plan for all teachers to use Marzano's strategies to monitor for learning Proposed Change: Develop a plan for all teachers to use Marzano's strategies to monitor for learning	Principal, Assistant Principal of Academic Affairs, Academic Board	September 2018	Summary of Marzano monitoring best practices	Improved scores (Delete above)
17. Implement a plan for all teachers to use Marzano's strategies to	Principal, Assistant Principal of Academic Affairs, Academic	September 2019	Summary of Marzano monitoring best practices	(Delete above)

monitor for learning Proposed Change: Implement a plan for all teachers to use Marzano's strategies to monitor for learning	Board, Literacy Team, Teachers				
18. Investigate ways to better serve our international students	Principal, Assistant Principal of Academic Affairs, Academic Board, Guidance Director	September 2018	ESL Teacher, tutoring in international house Proposed change: In service on ESL strategies?	Improved academic performance; Students regularly meeting with ESL teachers and tutors	
19.Inservice teachers in differentiation	Principal, Assistant Principal of Academic Affairs, Academic Board	September 2019	Plan developed for teacher training	Improved scores	

Action Plan

Objective:

By the year 2024, Archbishop Ryan High School students will demonstrate improved academic performance in Science

- 1. Strategy # A ____% increase in the number of 11th grade students identified through AP Potential Baseline: AP Potential 2016
 - 1. AP Biology 7(current #) 100%
 - 2. AP Chemistry 5- 100%
 - 3. AP Environmental Science 16 75%

Action Step	Person(s)/Group(s) Responsible	Timeline for Completion	Resources Needed	Indicators of Success	Status
2. Increase and number of analytical and critical thinking questions on science assessments and laboratory assignments	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning September 2017	Classroom and Laboratory Assessments and Materials	Improved scores Replace with improved scores	
3. Increase the number of problems involving graphing and interpretation of data on science assessments and laboratory assessments Proposed wording change: Increase the number of problems involving graphing and interpretation of data on science assessments and laboratory assessments	Science Dept. Chair Science Teachers	Beginning September 2017	Classroom and Laboratory Materials and Time Add: Time	Improved scores (Delete above) Replace with improved scores	
4. Develop systematic plan for using PSAT/SAT prep books in sciences classes Proposed wording change: Develop systematic plan for using	Principal and Assistant Principal for Academic Affairs	August 2018	PSAT book	Improved PSAT scores (Delete above) Increased PSAT scores Replace with improved scores	

PSAT/SAT prep books in sciences classes					
5. Implement plan for using PSAT/SAT prep books in science classes Proposed wording change: Implement plan for using PSAT/SAT prep books	President, Librarian, Principal, Assistant Principal for Academic Affairs, Science Department Chair	September 2018	PSAT book	Improved PSAT scores (Delete above) Increased PSAT scores Replace with improved scores	
in science classes 6. Develop systematic plan for Khan Academy use in sciences classes Proposed wording change: Develop systematic plan for Khan Academy use in sciences classes	Principal and Assistant Principal for Academic Affairs, Science Chair	October 2018	Online Connectivity Khan Academy	Improved scores (Delete above) Replace with improved scores	
7. Implement the use of Khan Academy in the Science courses Proposed wording change: Implement plan for Khan Academy use in sciences classes	Principal, Assistant Principal for Academic Affairs, Science Department Chair, Science Teachers	January 2019	Online Connectivity Khan Academy	Improved scores (Delete above) Increased scores Replace with improved scores	
8. Develop a Pre and Post Test for Biology, Chemistry, and Physics based on the SAT	Science Department Chair, Science Teachers	Create June 2019	Assessment Materials	Improved scores (Delete above) Increased assessment	

standards				scores and grades
9. Implement a Pre and Post Test for Biology, Chemistry, and Physics based on the SAT standards	Science Department Chair, Science Teachers	September 2019	Assessment Materials	Improved scores (Delete above) Increased assessment scores and grades
10. Develop and add to the Summer Reading Assignments:Fiction or Nonfiction (THIS STEP IS ON HOLD)	Librarian, Science Department Chair, Science Teachers	Summer 2018	Reading materials	Review and Share during Department Discussions (Delete above) Increased assessment scores and grades
11. Develop a science-related reading list for seniors Proposed change: Develop a science-related reading list for seniors	Librarian, Science Department Chair, Science Teachers	September 2019	Reading materials	List developed (Delete above) Proposed Change: Add: List developed
12. Develop a science-related list for juniors Proposed change: Develop a science-related list for juniors	Librarian, Science Department Chair, Science Teachers	September 2020	Reading materials	List developed (Delete above) Proposed Change: Add: List developed
13. Develop a science-related list for sophomores Proposed change: Develop a science-related list for sophomores	Librarian, Science Department Chair, Science Teachers	September 2021	Reading materials	List developed (Delete above) Proposed Change: Add: List developed

14. Develop a plan to use Literacy Strategies in science classes	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team	Summer 2018	Teacher training and professional collaboration	Improved scores (Delete above) Replace with improved scores	
15. Implement the use of Literacy Strategies in science classes	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team, Teachers	September 2018	Literacy Strategies and classroom materials	Improved scores (Delete above) Replace with improved scores	
16. Develop a plan for all teachers to use Marzano's strategies to monitor for learning Proposed Change: Develop a plan for all	Principal, Assistant Principal of Academic Affairs, Academic Board	September 2018	Provide a summary of Marzano monitoring best practices	Improved scores	
teachers to use Marzano's strategies to monitor for learning					
17. Implement a plan for all teachers to use Marzano's strategies to monitor for learning Proposed Change: Implement a plan for all teachers to use Marzano's strategies to monitor for learning	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team, Teachers	September 2019	Summary of Marzano monitoring best practices	Improved scores	
18. Investigate ways to better serve our international students	Principal, Assistant Principal of Academic Affairs, Academic Board, Guidance	September 2018	ESL Teacher, tutoring in international house	Students are regularly meeting with ESL teachers and tutors	

Need to change (New Step)	Director		Proposed change: In service on ESL strategies?	Improved scores	
19. Develop a plan for training teachers in differentiation (New Step)	Principal, Assistant Principal of Academic Affairs, Academic Board	September 2018	Plan for teacher training	Improved scores	

Action Plan

Objective:

By the year 2024, Archbishop Ryan High School students will demonstrate improved academic performance in Science as measured by:

Strategy a. A __3_% increase in the PSAT ERW score of all 10th grade students
Baseline: PSAT 2016: 467

Action Step	Person(s)/Group(s) Responsible	Timeline for Completion	Resources Needed	Indicators of Success	Status
2. Increase the number of analytical and critical thinking questions on science assessments and laboratory assignments	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning September 2017	Classroom and Laboratory Assessments and Materials	Improved scores Replace with improved scores	
3. Increase the number of problems involving graphing and interpretation of data on science assessments and laboratory assessments	Science Dept. Chair Science Teachers	Beginning September 2017	Classroom, Laboratory Materials, and Time	Improved scores Replace with improved scores	
Proposed wording change: Increase the number of problems involving graphing and interpretation of data on science assessments and laboratory					

assessments					
4. Develop systematic plan for using PSAT/SAT prep books in science classes Develop systematic	Principal and Assistant Principal for Academic Affairs	September 2018	PSAT book	Improve PSAT scores Replace with improved scores	
plan for using PSAT/SAT prep books in science classes					
5. Implement plan for using PSAT/SAT prep books in science classes Implement plan for using PSAT/SAT prep books in science classes	President, Librarian, Principal, Assistant Principal for Academic Affairs, Science Department Chair	September 2018	PSAT book	Improved PSAT scores Replace with improved scores	
6. Develop systemic plan for Khan Academy use through science classes	Principal and Assistant Principal for Academic Affairs, Science Chair, Science faculty	October 2018	Online Connectivity Khan Academy	Improved scores Replace with improved scores	
Develop systemic plan for Khan Academy use through science classes					
7. Implement systematic plan for Khan Academy use through science classes	Principal, Assistant Principal for Academic Affairs, Science Department Chair, Science Teachers	January 2019	Online Connectivity Khan Academy	Improved scores Replace with improved scores	

Implement systematic plan for Khan Academy use through science classes					
8. Develop a Pre and Post Test for Biology, Chemistry, and Physics based on the SAT standards	Science Department Chair, Science Teachers	Create June 2019	Assessment Materials	Proposed change: Tests developed	
9. Implement a Pre and Post Test for Biology, Chemistry, and Physics based on the SAT standards	Science Department Chair, Science Teachers	September 2019	Assessment Materials	Improved scores Replace with improved scores	
10. Develop and add to the Summer Reading Assignments:Fiction or Nonfiction (THIS STEP IS ON HOLD)	Librarian, Science Department Chair, Science Teachers	Summer 2018	Reading materials	Improved scores Replace with improved scores	
11. Develop a science-related reading list for seniors	Librarian, Science Department Chair, Science Teachers	September 2019	Reading materials	List developed Proposed Change: Add: List developed	
Proposed change: Develop a science-related reading list for seniors					
12. Develop a science-related list for juniors Proposed change: Develop a science-related list for juniors	Librarian, Science Department Chair, Science Teachers	September 2020	Reading materials	(Delete above) Proposed Change: Add: List developed	

13.Develop a science-related list for sophomores Proposed change: Develop a science-related list for sophomores	Librarian, Science Department Chair, Science Teachers	September 2021	Reading materials	List developed (Delete above) Proposed Change: Add: List developed
14. Develop a plan to use Literacy Strategies in science classes	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team	Summer 2018	Teacher training and professional collaboration	List developed (Delete above) Proposed Change: Add: List developed
15. Implement the use of Literacy Strategies in science classes	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team, Teachers	September 2018	Literacy Strategies and classroom materials	Improved scores (Delete above) Replace with improved scores
16. Develop a plan for all teachers to use Marzano's strategies to monitor for learning Proposed Change: Develop a plan for all teachers to use Marzano's strategies to monitor for learning	Principal, Assistant Principal of Academic Affairs, Academic Board	September 2018	Summary of Marzano monitoring best practices	Improved scores (Delete above)
17. Implement a plan for all teachers to use Marzano's strategies to monitor for learning	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team,	September 2019	Summary of Marzano monitoring best practices	Improved scores (Delete above)

Proposed Change: Implement a plan for all teachers to use Marzano's strategies to monitor for learning	Teachers				
18. Investigate ways to better serve our international students	Principal, Assistant Principal of Academic Affairs, Academic Board, Guidance Director	September 2018	ESL Teacher, tutoring in international house Proposed change: In service on ESL strategies?	Improved academic performance; Students regularly meeting with ESL teachers and tutors	
19.Inservice teachers in differentiation	Principal, Assistant Principal of Academic Affairs, Academic Board	September 2019	Plan developed for teacher training	Improved scores	

Action Plan

Objective:

By the year 2024, Archbishop Ryan High School students will demonstrate improved academic performance in Science

2. StrategyA $__$ % increase in the number of 10th grade students identified through

AP Potential

Baseline: AP Potential 2016

- 1. AP Biology 7 100%
- 2. AP Chemistry 5 100%
- 3. AP Environmental Science 11 75%

Action Step	Person(s)/Group(s) Responsible	Timeline for Completion	Resources Needed	Indicators of Success	Status
2. Increase and number of analytical and critical thinking questions on science assessments and laboratory assignments	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning September 2017	Classroom and Laboratory Assessments and Materials	Improved scores Replace with improved scores	
3. Increase the number of problems involving graphing and interpretation of data on science assessments and laboratory assessments Proposed wording change: Increase the number of problems involving graphing and interpretation of data on science assessments and laboratory assessments	Science Dept. Chair Science Teachers	Beginning September 2017	Classroom and Laboratory Materials and Time Add: Time	Improved scores (Delete above) Replace with improved scores	
4. Develop systematic plan for using PSAT/SAT prep books in sciences classes Proposed wording change: Develop systematic plan for using	Principal and Assistant Principal for Academic Affairs	August 2018	PSAT book	Improved PSAT scores (Delete above) Increased PSAT scores Replace with improved scores	

PSAT/SAT prep books in sciences classes					
5. Implement plan for using PSAT/SAT prep books in science classes Proposed wording change: Implement plan for using PSAT/SAT prep books	President, Librarian, Principal, Assistant Principal for Academic Affairs, Science Department Chair	September 2018	PSAT book	Improved PSAT scores (Delete above) Increased PSAT scores Replace with improved scores	
in science classes 6. Develop systematic plan for Khan Academy use in sciences classes Proposed wording change: Develop systematic plan for Khan Academy use in sciences classes	Principal and Assistant Principal for Academic Affairs, Science Chair	October 2018	Online Connectivity Khan Academy	Improved scores (Delete above) Replace with improved scores	
7. Implement the use of Khan Academy in the Science courses Proposed wording change: Implement plan for Khan Academy use in sciences classes	Principal, Assistant Principal for Academic Affairs, Science Department Chair, Science Teachers	January 2019	Online Connectivity Khan Academy	Improved scores (Delete above) Increased scores Replace with improved scores	
8. Develop a Pre and Post Test for Biology, Chemistry, and Physics based on the SAT	Science Department Chair, Science Teachers	Create June 2019	Assessment Materials	(Delete above) Increased assessment	

standards				scores and grades
9. Implement a Pre and Post Test for Biology, Chemistry, and Physics based on the SAT standards	Science Department Chair, Science Teachers	September 2019	Assessment Materials	Improved scores (Delete above) Increased assessment scores and grades
10. Develop and add to the Summer Reading Assignments:Fiction or Nonfiction (THIS STEP IS ON HOLD)	Librarian, Science Department Chair, Science Teachers	Summer 2018	Reading materials	Review and Share during Department Discussions (Delete above) Increased assessment scores and grades
11. Develop a science-related reading list for seniors Proposed change: Develop a science-related reading list for seniors	Librarian, Science Department Chair, Science Teachers	September 2019	Reading materials	List developed (Delete above) Proposed Change: Add: List developed
12. Develop a science-related list for juniors Proposed change: Develop a science-related list for juniors	Librarian, Science Department Chair, Science Teachers	September 2020	Reading materials	List developed (Delete above) Proposed Change: Add: List developed
13. Develop a science-related list for sophomores Proposed change: Develop a science-related list for sophomores	Librarian, Science Department Chair, Science Teachers	September 2021	Reading materials	List developed (Delete above) Proposed Change: Add: List developed

14. Develop a plan to use Literacy Strategies in science classes	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team	Summer 2018	Teacher training and professional collaboration	Improved scores (Delete above) Replace with improved scores	
15. Implement the use of Literacy Strategies in science classes	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team, Teachers	September 2018	Literacy Strategies and classroom materials	Improved scores (Delete above) Replace with improved scores	
16. Develop a plan for all teachers to use Marzano's strategies to monitor for learning Proposed Change: Develop a plan for all	Principal, Assistant Principal of Academic Affairs, Academic Board	September 2018	Provide a summary of Marzano monitoring best practices	Improved scores	
teachers to use Marzano's strategies to monitor for learning					
17. Implement a plan for all teachers to use Marzano's strategies to monitor for learning Proposed Change: Implement a plan for all teachers to use Marzano's strategies to monitor for learning	Principal, Assistant Principal of Academic Affairs, Academic Board, Literacy Team, Teachers	September 2019	Summary of Marzano monitoring best practices	Improved scores	
18. Investigate ways to better serve our international students	Principal, Assistant Principal of Academic Affairs, Academic Board, Guidance	September 2018	ESL Teacher, tutoring in international house	Students are regularly meeting with ESL teachers and tutors	

Need to change (New Step)	Director		Proposed change: In service on ESL strategies?	Improved scores	
19. Develop a plan for training teachers in differentiation (New Step)	Principal, Assistant Principal of Academic Affairs, Academic Board	September 2018	Plan for teacher training	Improved scores	

Action Plan

Objective:

By the year 2024, Archbishop Ryan High School students will demonstrate improved academic performance in Science as measured by:

Strategy f. A percentage increase in the reading scores of all 11th grade students on the Newsela rubric.

Baseline: to be determined in school year 2017-2018

Action Step	Person(s)/Group(s) Responsible	Timeline for Completion	Resources Needed	Indicators of Success	Status
New Step 1: Implement a NEWSELA workshop for science	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning September 2017	Online Connectivity Access to Newsela Website	Workshop completed	Completed
department teachers 2. Create a rubric to measure the reading comprehension of students through the use of NEWSELA	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning January, 2018	Online Connectivity Access to Newsela Website	Full data collected by March 2018	
New Step 3: Implement a rubric to measure the Reading comprehension of students through the use of NEWSELA	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning January, 2018	Online Connectivity Access to Newsela Website	Full data collected by March 2018	
2. Increase the number of analytical and critical thinking questions on science assessments and laboratory assignments	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning September 2017	Classroom and Laboratory Assessments and Materials	Improved scores Replace with improved scores	

Action Plan

Objective:

By the year 2024, Archbishop Ryan High School students will demonstrate improved academic performance in Science as measured by:

Strategy g. A percentage increase in the reading scores of all 10th grade students on the Newsela rubric.

Baseline: to be determined in school year 2017-2018

Action Step	Person(s)/Group(s) Responsible	Timeline for Completion	Resources Needed	Indicators of Success	Status
New Step 1:	Assistant Principal of Academic Affairs	Beginning September 2017	Online Connectivity Access to Newsela	Workshop completed	Completed
Implement a NEWSELA workshop for science department teachers	Science Dept. Chair Science Teachers		Website		
2. Create a rubric to measure the reading comprehension of students through the use of NEWSELA	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning January, 2018	Online Connectivity Access to Newsela Website	Full data collected by March 2018	
New Step 3: Implement a rubric to measure the Reading comprehension of students through the use of NEWSELA	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning January, 2018	Online Connectivity Access to Newsela Website	Full data collected by March 2018	
2. Increase the number of analytical and critical thinking questions on science assessments and laboratory assignments	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning September 2017	Classroom and Laboratory Assessments and Materials	Improved scores Replace with improved scores	

Action Plan

Objective:

By the year 2024, Archbishop Ryan High School students will demonstrate improved academic performance in Science as measured by:

Strategy h. A percentage increase in the reading scores of all 9th grade students on the Newsela rubric.

Baseline: to be determined in school year 2017-2018

Action Step	Person(s)/Group(s) Responsible	Timeline for Completion	Resources Needed	Indicators of Success	Status
New Step 1: Implement a NEWSELA workshop for science	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning September 2017	Online Connectivity Access to Newsela Website	Workshop completed	Completed
department teachers 2. Create a rubric to	Assistant Principal of	Beginning January, 2018	Online Connectivity	Full data collected by	
measure the reading comprehension of students through the use of NEWSELA	Academic Affairs Science Dept. Chair Science Teachers		Access to Newsela Website	March 2018	
New Step 3: Implement a rubric to measure the Reading comprehension of students through the use of NEWSELA	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning January, 2018	Online Connectivity Access to Newsela Website	Full data collected by March 2018	
2. Increase the number of analytical and critical thinking questions on science assessments and laboratory assignments	Assistant Principal of Academic Affairs Science Dept. Chair Science Teachers	Beginning September 2017	Classroom and Laboratory Assessments and Materials	Improved scores Replace with improved scores	