



Next Generation Science Standards Implementation Timeline

October 10, 2017

Adam Sinor

Coordinator of Curriculum and Instruction

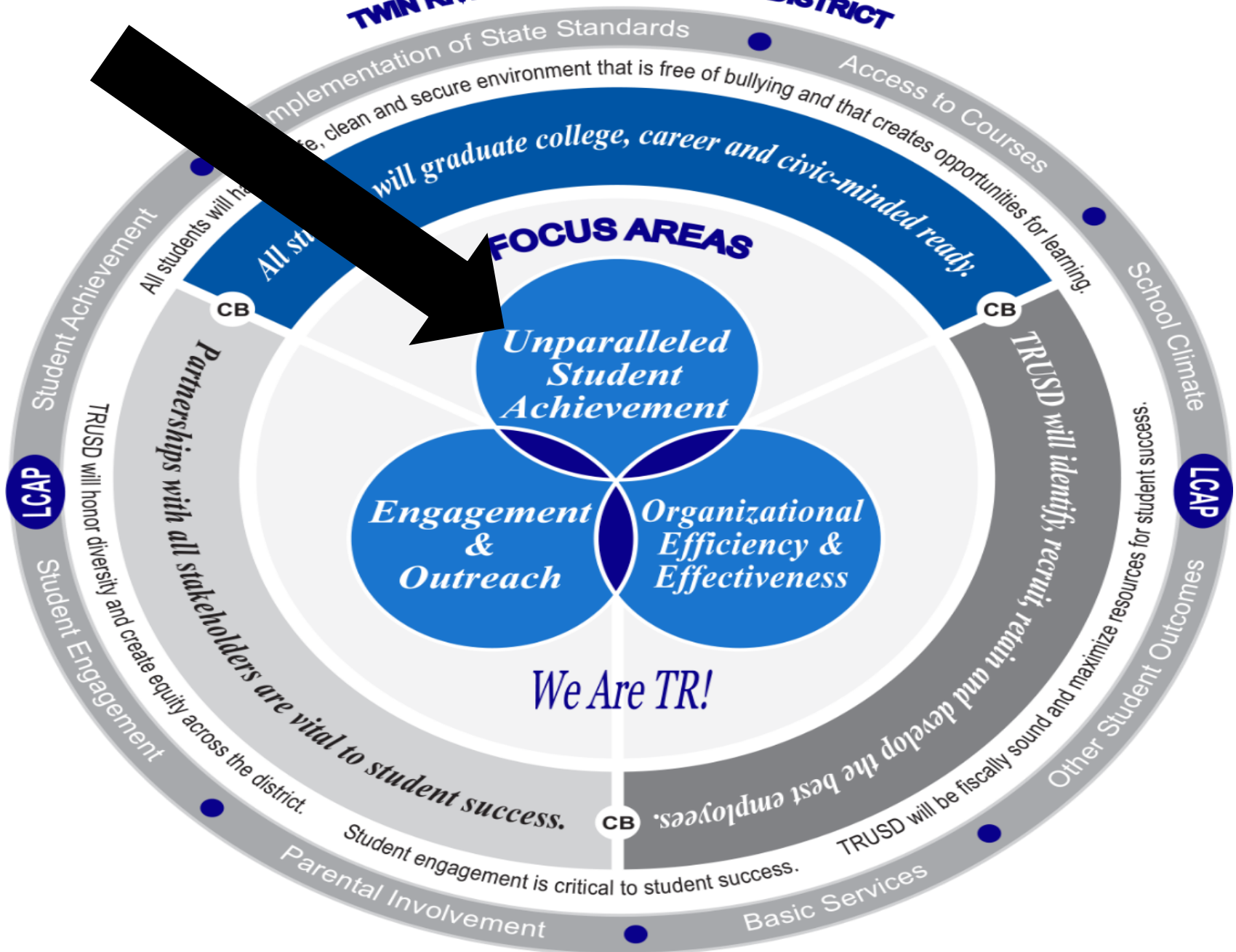
Eric Garber

Curriculum TOSA, Science

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TWIN RIVERS UNIFIED SCHOOL DISTRICT



Purpose of Presentation

Inform the Board of the sequence of courses for the high school science progression

Outline the implementation process timeline for the transition of the new science courses and curriculum for high school

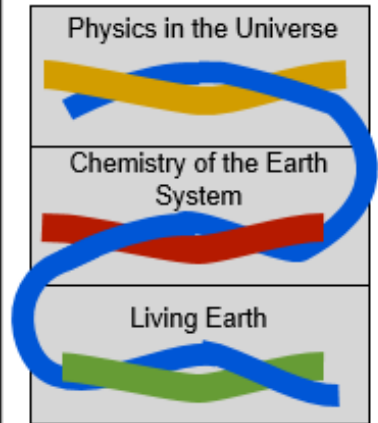
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Twin Rivers High School Science Courses

- Adopted in February 2017
- Earth and Space Science Integration
- 3 Year Model
- Our approved high school model

ESS Integration
3 Year Model



*Order of courses is NOT
prescribed*

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| 2016/2017 | 2017/2018 | 2018/2019 | 2019/2020 | 2020/2021 |
|---|--|---|--|--|
| <ul style="list-style-type: none"> Select pathways for middle school and high school Begin to include Next Generation Science Standards in teaching | <ul style="list-style-type: none"> Create and implement common learning experiences for 9th -12th Grades Adapt A-G Courses to align with new standards UC Doorways course approval and course outlines Create District Benchmark assessments | <ul style="list-style-type: none"> Begin Course Implementation Review available science curriculum Identify curriculum to pilot Restructure classes to align with new standards Test and Refine District Benchmark assessments | <ul style="list-style-type: none"> Continue Course Implementation Pilot and adopt curriculum Public comment and parent viewing Refine and Align District Benchmark assessments to State Science Test | <ul style="list-style-type: none"> Continue Course Implementation Implementation of adopted curriculum |
| State Pilot Test for Science | State Field Test for Science | State Science Test | State Science Test | State Science Test |

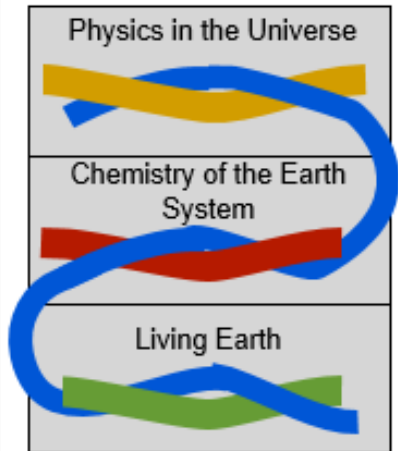
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High School Sequence

- Three courses woven together with the thread of Earth and Space Science

ESS Integration
3 Year Model



Order of courses is NOT prescribed

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High School Course 1

9th Grade Course

- The Living Earth
 - Life Science Lab Course
 - Course requires single subject biology credential
 - Satisfies the graduation and A-G requirements for life science



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High School Course 2

10th Grade

- Chemistry in the Earth System
 - Physical Science Lab Course
 - Requires single subject chemistry credential
 - Satisfies the graduation and A-G Physical science requirements



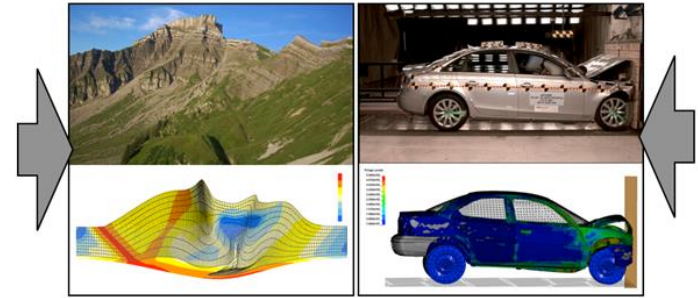
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High School Course 3

11th Grade

- Physics of the Universe
 - Physical Science Lab Course
 - Requires single subject physics credential
 - Satisfies A-G college prep elective



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Course Transition Plan

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 |
|------------------------|---------------------------|----------------------------|--|---|--------------------------------------|
| 9th | Earth Science/ Biology | Earth Science/Living Earth | Living Earth | Living Earth | Living Earth |
| 10th | Biology/ Chemistry | Living Earth /Chemistry | Living Earth/Chemistry in the Earth System | Chemistry in the Earth System | Chemistry in the Earth System |
| 11th | Chemistry/ Physics | Chemistry /Physics | Chemistry in the Earth System/Physics | Chemistry in the Earth System/Physics of the Universe | Physics of the Universe |

Credentialing Impacts

- 3 of 15 current Biology Teachers, will have 2 years to gain credential
- 6 of 8 current Chemistry Teachers, will have 3 years to gain credential
- 3 of 7 current Geo Science Teachers, will have 2 years to gain credential
- 3 Middle school science teachers can teach Living Earth
- Current Physics Teachers not impacted

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Human Resource's Next Steps

- (1) analyzing credentials of all science teachers and CTC requirements for assignments according to the proposed NGSS hybrid model.
- (2) developing individual teacher action plans outlining any necessary changes.
- (3) communicating and supporting individuals with the plan implementations.

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Thank you!

Any questions?

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