



Next Generation Science Standards Implementation Timeline

October 10, 2017

Adam Sinor

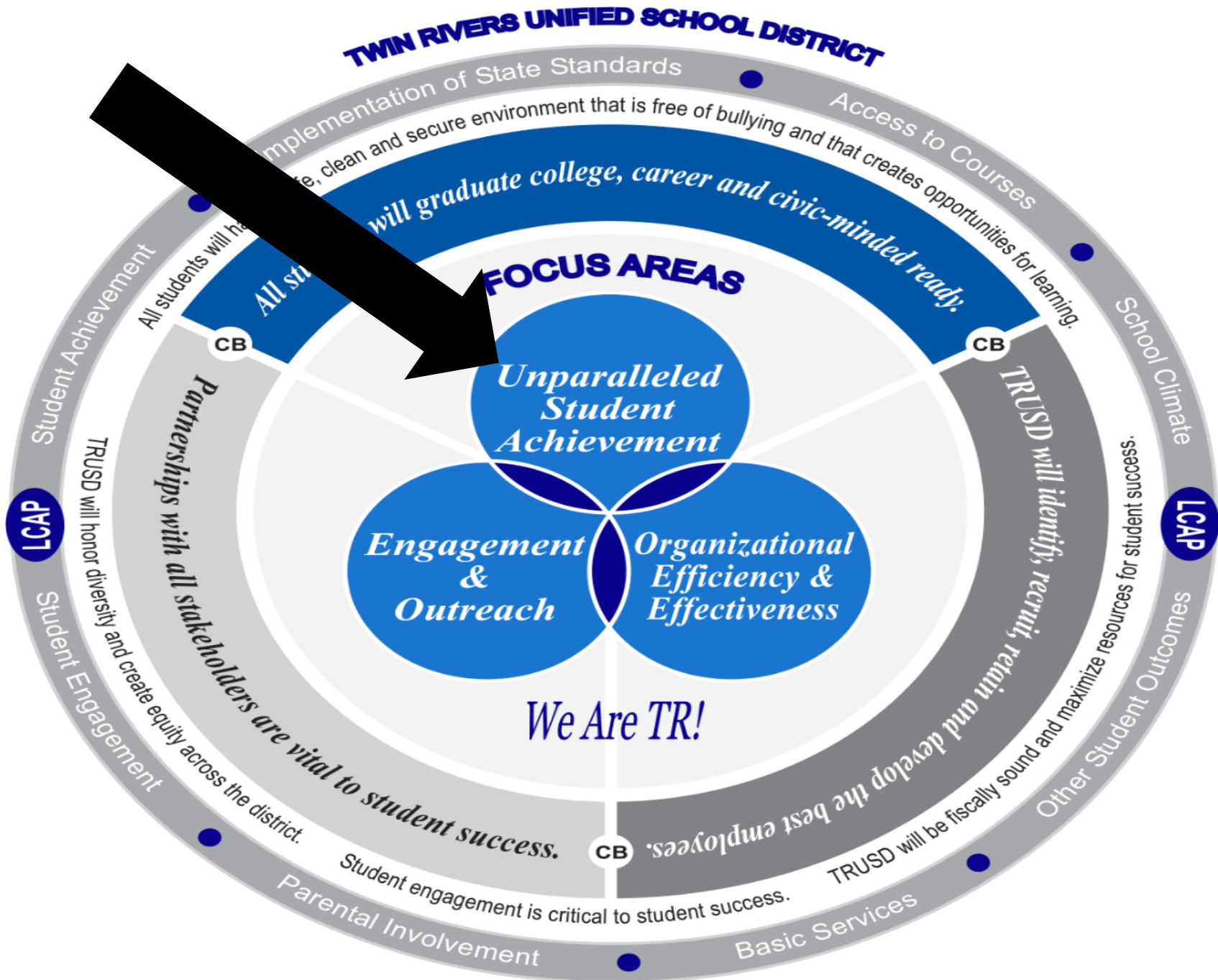
Coordinator of Curriculum and Instruction

Eric Garber

Curriculum TOSA, Science

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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

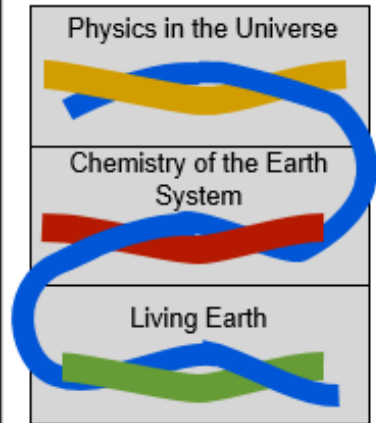
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Twin Rivers High School Science Courses

- 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
- Select pathways for middle school and high school - Begin to include Next Generation Science Standards in teaching	- 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	- Begin Course Implementation - Review available science curriculum - Identify curriculum to pilot - Restructure classes to align with new standards - Test and Refine District Benchmark assessments	- Continue Course Implementation - Pilot and adopt curriculum - Public comment and parent viewing - Refine and Align District Benchmark assessments to State Science Test	- 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

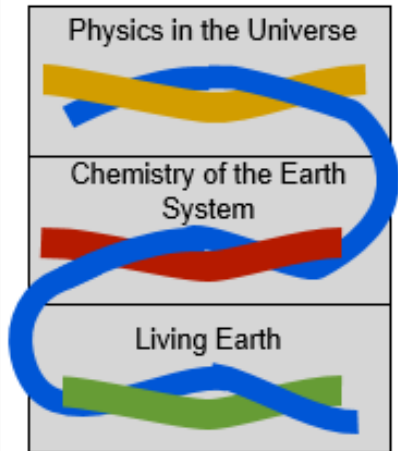
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High School Sequence

- 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



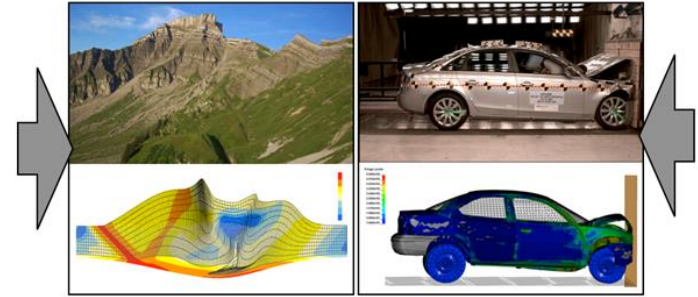
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High School Course 3

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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