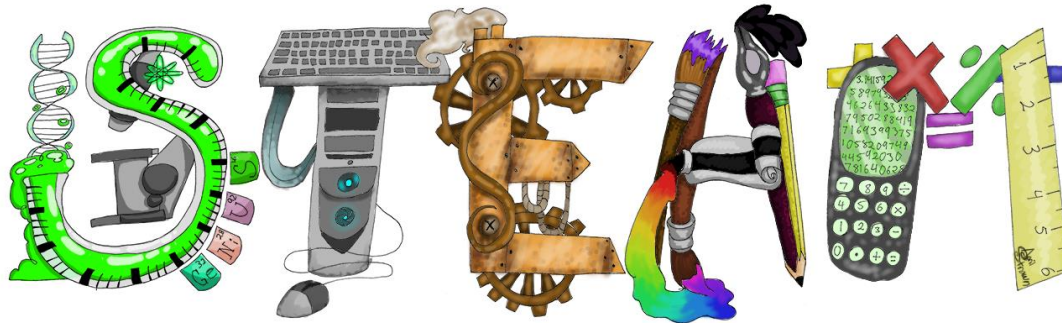

RBBCSC S.T.E.M.

— August 2019 Update —



Richland-Bean Blossom Community School Corporation
Living, Learning, and Leading Together

Vision: Educating students for a world where learning is continuous, relevant, and adaptive.

Mission: At RBBCSC students will be empowered through STEAM educational opportunities to become globally aware and locally engaged leaders and innovators, who will leave our schools with a capacity for critical thinking, creative design, effective communication and collaboration skills.

Budget Overview

2019 RDC Deposit	270,000	RBBCSC Investment	Grants/Other
STEM Coaches (3)	-\$114, 364	K-12 Science Curric: Discovery Ed./ McGraw-Hill: - \$110,000	RBB Foundation Grants:
VEX IQ Robotics Teams: <ul style="list-style-type: none"> Team registrations Coach stipends 	-\$2800 -\$1750	WeVideo licenses - \$5,228	Robotics grants (3): <ul style="list-style-type: none"> Cook Polymer - \$1000 Bton.. Robotics - \$800 Tasis - \$500
PBL Summer Training <ul style="list-style-type: none"> PBL 101 / 201 PBL Certification 	-\$18,000	EJHS music software - \$2988	TechPoint Girl Powered Grant - \$500 Recruitment Grant - \$250
Makerspace Lab Equipment - EIS and EPS (summer 2019)	-\$50,000	Chromebook mgmt. Licenses - \$162,000	Robotics Event Host Revenue \$1080
Elementary Grades K-5 Chromebooks: 2:1 / 1:1	-\$54,000	Student book fees for STEAM programming - \$6500	Title II Grant \$14,000
Professional Conferences	-\$5,575	Coding and Math software - \$25,000	ROI Ready Schools Grant, \$130,000
RDC Remaining Balance:	\$23,511	Total Investment: \$311,776	Total: \$148,130

Project-Based Learning (PBL) Professional Development

- R-BB hosted a third week-long training opportunity for professional development in project-based learning (PBL) with Magnify Learning during Summer 2019.
- Our district has now trained over half of our teachers in PBL as follows:
 - 30 elementary teachers have completed an initial workshop (PBL 101).
 - 15 additional elementary teachers have completed two workshops (PBL 101 and 201).
 - 30 secondary teachers have completed the initial workshop (PBL 101).
 - 5 additional secondary teachers have completed two workshops (PBL 101 and 201).
- Elementary and Secondary coach will be IDOE Ford NGL PBL Trainers
- Cohorts at EHS, EJHS, and EPS during the year to help develop teacher skills in integrating PBL and Technology.

Professional Presentations and Collaborations

- **Indiana State STEM Conference at Purdue University**
 - Genius Hour model as a means for scaling student-led learning to the building level and engage community partners in sustainable ways
- **Hoosier Association of Science Teachers, Inc. (HASTI)**
 - Integrating technology with project-based learning for authentic 21st Century learning
- **Performance-Enrichment Days for Teachers**
 - Dr. Buddy Berry spoke to entire district staff, tying STEAM initiative, PBL and workforce development to the district vision and goal-setting
- **Community Foundation of Monroe County/Bloomington STEM Network**
 - STEM coaches participate in in-school/out-of-school STEM program alignment and enrichment planning sessions to reinforce partnerships with schools, community agencies and industry leaders and one coach is a member of the Uplands STEM guiding committee

STEM Certification: NISE and IDOE

- Our Elementary STEM Coaches completed the national STEM educator certification course.
- Our Secondary STEM Coach attended a 3-day Maker Space workshop in Chattanooga, TN.
- EPS and EIS have achieved full STEM Certification based on Indiana's STEM Certification rubric from the Department of Education.
- EJHS will be going through the application process to become STEM Certified during the 2019-2020 school year.

VEX Robotics District-Wide Program

- We now host twelve competitive robotics teams in grades 4-8.
- We will have robotics clubs in grades 2-3 to build foundational skills.
- We will host two joint VEX IQ robotics tournaments.
- We plan to implement robotics programming at EHS this year, with ties to both engineering and computer science coursework.

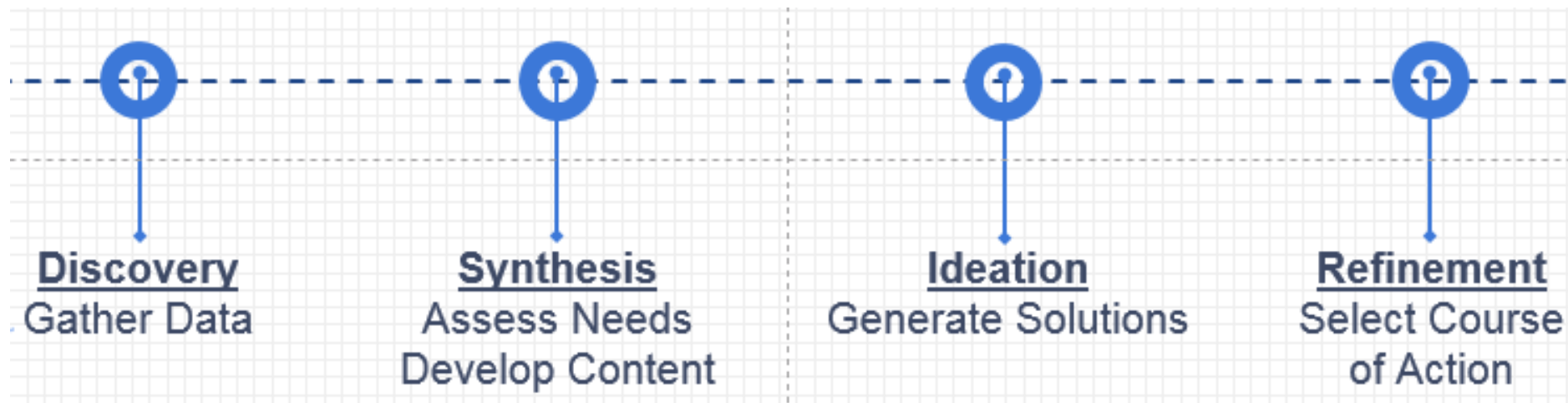
RBBCSC Growth in STEM during 2018-2019 school year

All Elem.	IDOE STEM Certification 2019-2024 Google Classroom LMS being used across all grade levels for eLearning and PED days PBL projects developed and implemented by all teachers
EPS	Classrooms engaging in Makerspace challenges independently STEM integration with literacy instruction throughout grade levels Classrooms borrowing STEM equipment for individual needs; student-led projects Chromebook initiative planned for K-1 Robotics Club for 60 second grade students
EIS	1:1 Chromebook Initiative continues with fifth grade now 1:1 Computer science standards integrated across content areas with fourth grade-specific PD emphasis 4H STEAM Club - increased student members and expanding to weekly programming VEX IQ robotics teams increased to six; third year hosting regional tournament; possible state tourn. Bid Digital Citizenship curriculum developed, implemented across grade levels; tied to SEL/wellness in 3-5
EJHS	Two VEX IQ robotics teams in sixth grade; plans to expand to 7-8 in 19-20 school year PBL projects developed and implemented by initial cohort of trained teachers Makerspace constructed and in use
EHS purchased	3D printer use by biology, psychology, physics and English classes; second 3D printer PBL projects developed and implemented by initial cohort of trained teachers; additional PD to come Makerspace constructed and in use

Future Vision Going into 2019-2020 School Year

- ROI Ready Schools Planning Grant
- Develop a Computer Science Curriculum Map for grades K-8
- Makerspaces outfitted at EIS/EPS (new construction), Fall 2019.
- Expand Advanced Placement course offerings at EHS (AP Physics)
- PLTW Launch being implemented at EPS and EIS.
- PLTW Gateway being implemented at EJHS.
- Franklin Initiative STEM Fair at EHS.
- Update "2020" Technology Vision - technology integration continues to be a priority with devices now in place (1:1 or 2:1 at every grade level)
- Update "2020" STEAM Vision - we continue to expand PBL teacher PD and shift our instructional methods to reflect best practices for STEM education across all content areas
- Unify previously siloed STEM opportunities to align with district-wide vision

Ready Schools Design Process



STEAM Activities in 2018-2019

