Brownsville Independent School District



2016-2017

Coding Handbook

BISD does not discriminate on the basis of race, color, national origin, sex, religion, age, disability or genetic information in employment or provision of services, programs or activities.

BISD no discrimina a base de raza, color, origen nacional, sexo, religión, edad, discapacidad o información genética en el empleo o en la provisión de servicios, programas o actividades.

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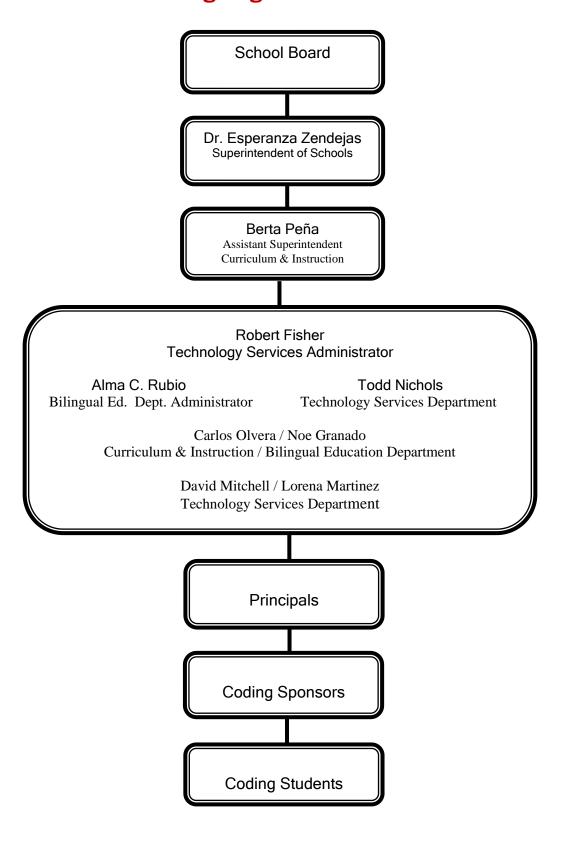
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Brownsville Independent School District

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Coding Organizational Chart



Standard Operating Procedures Elementary Level

Description

The Brownsville Independent School District in collaboration with the University of Texas at Rio Grande Valley Continuing Education Department, and Border Kids Code will provide Coding Instruction to BISD 4th and 5th grade students. Coding is one of the largest growing occupations in the world with a high demand in the workforce.

Tufts (2014) states teaching children how to code will provide a lifetime of benefits: 1. Coding improves traits needed in the future, 2. Improves problem-solving skills, 3. Motivates students to learn, 4. Improves Technology skills 5. Improves memory skills 6. Coding is a universal language and 7. Coding instruction will prepare students to be the next generation of programmers.

Coding Sponsor Qualifications

Coding sponsors are certified elementary teachers.

Coding Sponsor Staff Development

All coding sponsors receive an initial training of 20 hours of staff development on Coding. The first 12 hours will be completed before the school year begins and the remaining 8 hours will be completed in October. Coding sponsors are trained in the use of the UTRGV Blackboard platform, MIT SCRATCH, and CODE.ORG.

Coding Sponsor Responsibilities

The Coding Sponsor will:

- provide coding instruction to participating 4th and 5th grade students
- sponsor Club Code at their respective campus.
- ensure that the coding students submit the student coding projects coordinate the Campus Level Coding Competition.
- ensure participation of the coding students who place at the campus level to participate at the District Level Coding Competition.
- ensure that the Coding club that places at the District Level Coding Competition participates in the UTRGV Coding Summit.
- coordinate the campus involvement in the HOUR of CODE.

Student Eligibility

Participation:

- 1. Elementary participation is open to students in 4th and 5th grades.
- 2. The campus Coding Clubs will be composed of 4th and 5th graders.

Recruiting: Coding Club sponsors shall recruit throughout the school year to maintain a Coding Club with NO less than 15 students (per grade level)

Coding Budget

Stipends: Each coding sponsor will receive a \$2000 stipend*. There is a maximum of 2 coding sponsors per campus. Only Certified BISD employees will be able to serve as sponsors. An additional stipend will be paid to the club sponsors for having their coding clubs participate in a minimum of two competitions (\$150 per competition). All coding sponsors must hold practice a minimum of 3 hours per week for 10 months (see attached BISD Coding Calendar of recommended practice dates). The BISD Stipend Form will be submitted by each campus, listing the 2 Coding sponsors.

*as per the BISD board approved compensation plan (pending board approval)

Coding Attendance

Students will sign in digitally as they sit at their Coding computer by accessing the <<u>CLUB</u> CODE> Sign in (http://bilingualeslbisd.weebly.com/clubcodesign-in.html).

Coding Practice Schedule:

Students will meet and work on coding minimum 3 hours per week. Campus coding sponsors will submit their coding schedules through a MS Office 365 ONE DRIVE FOLDER.

Coding Competitions

All campus coding clubs will participate in and attend 1 Campus Level Coding Competition and 1 District level Coding competition. **Coding clubs who place at the district level will compete at the UTRGV Coding Competition.**

Campus Level Coding Competition

- A. The coding sponsors will coordinate their campus coding competition. Coding sponsors may contact technology services for support.
- B. A minimum of 5 judges will be invited to judge the student Coding projects using the Coding RUBRIC found on the <u>UTRGV BLACKBOARD</u>. Judges will review the Coding Rubric with the Coding sponsors prior to the competition
- C. Campus coding club members will submit their Coding program through the MIT SCRATCH Platform prior to the Coding Competition
- D. Coding students will be present to answer questions the judges might have on their coding projects.
- E. The coding competition will occur in a designated computer area with Internet.
- F. A first, second and third place certificate will be awarded. All students who do not place will be provided with a participation certificate.

District Level Coding Competition

- A. The Curriculum and Instruction Department will coordinate the District Level Coding Competition in collaboration with the Technology Services Department and the Bilingual Education Department.
- B. Campuses will be sorted by High school cluster for the District Level Coding Competition.
- C. Judges will be invited to judge the student coding projects. Judges will be trained by the Curriculum and Instruction Dept. on the use of the Coding Rubric.
- D. Campus coding club members will submit their Coding projects through the MIT SCRATCH Platform.
- E. The District Level Coding Competition will take place in the spring semester.
- F. A first, second and third place certificate will be awarded. All students who do not place will be provided with a participation certificate.

Campuses will utilize the same attendance codes as adopted by the BISD School Board:

1. ABS – (Absent)

~Student not physically present in class not due to non-extracurricular activity

2. EXT - (Extracurricular Activity)

~Students will be counted present (excused absence) with verification of approved list

Note: Students are responsible for making up all class and homework assignments as per District Policy.

Transportation/Travel

UTRGV Coding Competition: BISD transportation for UTRGV Coding Competition needs to be requested by the participating campus. BISD will not be liable or responsible for any action, injuries, or damages that occur to students riding in vehicles that are not provided by the school.

A principal may choose to attend local and valley competitions and/or appoint an administrator to attend.

Travel to UTRGV Coding Competition in the Rio Grande Valley must be approved by the campus principal and assistant area superintendent.

Pursuant to policy CNB (LOCAL): **Use of School Buses**. "Field trips within Cameron, Hidalgo, Starr, and Willacy counties may be approved by the area administrator. All other trips outside of the District must be approved by the superintendent, but in no case shall approval be granted for a school bus to travel out of the state of Texas."

Travel Arrangement Deadlines: Tentative paperwork deadline for students and adults traveling out of town is as follows: It is necessary for coding sponsors and campus administrator to send the preliminary paperwork to the designated administrator in charge of the Coding Program **two months prior to the anticipated trip date** in order to allow time for the appropriate signatures. The administrator is asked to submit the cover transmittal requesting permission for travel. Each requisition must be accompanied with a list of student participant names, and chaperones. Failure to provide that information will result in unnecessary delays. If requisitions for food purchases are also needed, it is imperative that the requisition receive a purchase order number before any purchase is made pursuant to policy CHD (LOCAL).

School officials are to use prudence when deciding on activities for the students at all grade levels while out of town on a Coding Competition. School officials are to adhere to the following parameters:

- 1) Students shall not be allowed to dine in establishments that serve alcoholic beverages unless prior written approval of the school's Assistant Superintendent has been obtained.
- 2) School officials are to maintain professional decorum while supervising coding students. School district policies regarding smoking and alcoholic beverages, while traveling with students, must be upheld. Failure to do so could result in disciplinary action in accordance with BISD policy.
- 3) Coding sponsors and administrators are required to attend the coding competition in which their team is competing and must remain supervising the students throughout the duration of the competition.

Transportation will NOT be provided for local coding competitions.

Hour of Code

BISD elementary campuses will be participating in the <u>Hour of Code</u> scheduled to take place from December 5^{th} – 11^{th} , 2016.

APPENDICES

UTRGV BLACKBOARD

Club Code Calendar
BISD Coding Calendar
Stipend form

References

Tufts, P. (2014). 7 Lifetime Benefits of Teaching Coding Games for Kids to Your Kids. Retrieved August 1, 2016, from http://learntocode.biz/7-lifetime-benefits-of-teaching-coding-games-for-kids-to-your-kids/