

ORANGE TOWNSHIP PUBLIC SCHOOL DISTRICT

451 Lincoln Avenue, Orange, NJ 07050

JOB DESCRIPTION

COMPUTER LITERACY/APPLICATIONS/PROGRAMMING TEACHER (9-12)

NATURE AND SCOPE OF JOB:

The Computer Literacy/Applications/Programming Teacher will assume professional responsibility for providing learning experiences and supervision of assigned students in a supportive and positive classroom climate that develops in each child the skills, attitudes, and knowledge to meet and exceed the State Standards; following the approved curricula of the computer science course. In addition, the teacher will strive to meet the highly effective criteria for the preparation of lesson plans, the use of data to drive instruction, the delivery of quality instruction; addressing the needs of diverse learners through differentiation, classroom environment, leadership, and professionalism. Students will (a) learn about the big ideas in computing such as abstraction and design, (b) explore various aspects of computing relevant to them and to society, and (c) learn to program in languages (e.g. Java, Python) with an emphasis on problem-solving and applications.

QUALIFICATIONS:

1. Hold a Bachelor's or Master's degree from an accredited college or university in Computer Science, Science, Mathematics, Engineering or Technology Education.
2. Hold a New Jersey instructional certificate in accordance with N.J.S.A. 18A:27.1 et seq., and N.J.A.C. Title 6 Chapter 11 with appropriate subject area endorsement (N.J.A.C. 6:11-6.1, 6.2 or 8.1 et seq.) in Science, Mathematics, Computer Science, Technology Education and/or other related STEM fields.
3. Have excellent experience in teaching and working with adolescents.
4. Hold and maintain a valid driver's license with no serious violations (if applicable to assignment).
5. Have excellent integrity and demonstrate good moral character and initiative.
6. Demonstrate a comprehensive knowledge of the content field and describe ways in which the content can be organized into lessons for secondary students.
7. Demonstrate knowledge and understanding of curriculum development and design, child growth and development, effective instructional strategies, classroom management, learning assessment and diagnosis, and research related to learning.
8. Demonstrate the ability to communicate effectively in English, both orally and in writing, using proper grammar and vocabulary.
9. Demonstrate the ability to use electronic equipment for word processing, data management, information retrieval, visual and audio presentations, and telecommunications.
10. Demonstrate excellent organizational skills and the ability to work as part of a team.
11. Demonstrate experience as described in the duties and responsibilities set forth in this job description.
12. Provide proof of U. S. citizenship or legal resident alien status by completing Federal Form I-9 in compliance with the Immigration Reform and Control Act of 1986.
13. Provide evidence that a criminal record history check has been conducted and clearance has been given by the Department of Education, or, during the initial six month period provide a sworn statement that the individual has not been convicted of a crime or a disorderly person's offense in accordance with 18A:6-7.1.
14. Provide evidence that health is adequate to fulfill the job functions and responsibilities with reasonable accommodation pursuant to 42 U.S.C. 12101 and in accordance with N.J.A.C. 6:3-4A.4.
15. Pass the State required Mantoux Intradermal Tuberculin Test as required by N.J.A.C. 6:3-4A.4.
16. Such other qualifications as the Board may find appropriate.
17. Meet such alternatives to the above qualifications as the Superintendent may find appropriate and acceptable.

PREFERRED QUALIFICATIONS:

1. Have at least 2 years successful teaching experience.
2. Hold a Bachelor's or Master's degree from an accredited college or university in a Computer Science, Science, Mathematics, Engineering or Technology Education.

REPORTS TO:

SCHOOL BUILDING
ADMINISTRATORS
DEPARTMENT
DIRECTOR

SUPERVISES:

STUDENTS
PARAPROFESSIONALS
(IF APPLICABLE)

SALARY:

COMMENSURATE W /
EDUCATION &
EXPERIENCE

UNION

AFFILIATION:

ORANGE EDUCATION
ASSOCIATION

EMPLOYMENT

TERMS:

10 MONTHS

VERIFICATION OF COMPETENCY:

1. District Application and resume
2. Required documentation outlined in the qualifications above
3. A minimum of three letters of reference from former employers, teachers, professors or other professional sources, or copies of recent evaluations and observations of teaching performance
4. College transcripts
5. Employment interview

JOB FUNCTIONS AND RESPONSIBILITIES:

1. Delivers STEM-oriented instruction by facilitating "hands-on" project-based learning opportunities that allow students to learn by doing and exploring.
2. Employs a variety of instructional techniques, and performance/project-based assessments which guide the learning process toward academic achievement and curriculum goals.
3. Plans and implements instruction to ensure that all students meet and exceed the five broad areas of the Cross-Content Workplace Readiness Standard:
 - o Develop career planning and workplace readiness skills;
 - o Use technology, information, and other tools;
 - o Use critical thinking, decision-making, and problem-solving skills;
 - o Demonstrate self-management skills
4. Continues to grow professionally through collaboration with volunteer team and professional growth experiences.
 - Actively participates in an approved model of appropriate summer and ongoing professional development.
 - Manages and coordinates a volunteer team over the summer in preparation for the Co-Teaching Model.
 - Completes an introductory-level programming course, and report successful completion of the first major programming project in the approved curriculum.
 - Demonstrates clear progress toward learning the course content and pedagogy.
 - Completes assignments, projects, and assessments
 - Demonstrates competence in using Snap and Python
 - Develops proficiency in implementing approved curricula including College Board AP
 - Guides and supports students through an independent study culminating in a keystone project
 - Guides and supports students through summer projects
 - Guides and supports students through exposure to available opportunities including national competitions, Hackathons, Gam Jams, scholarships and internships
 - Completes required surveys and requests for information
 - Engages with an online community to learn about teaching computer science
 - Takes the lead role in classroom management, provide feedback to volunteers on pedagogy, and helps volunteers explain concepts to students
5. Establishes and promotes high standards and expectations for students for academic performance and responsibility for behavior.
6. Works cooperatively with a volunteer team to ensure that the instructional program and services are coordinated and administered uniformly and equitably.
7. Creates/co-creates and submits highly effective lesson plans that are reflective of quality instruction, in the approved format to the Principal or Supervisor as required.
8. Assists students who experience difficulty in learning, utilizing the services of the guidance counselor, social worker, nurse, psychologist, learning disabilities teacher coordinator, attendance officer, and others who may assist the student and family.
9. Identify, select, and modify instructional resources to meet the needs of the students with varying backgrounds, learning styles and special needs.
10. Assesses and diagnoses the learning, social, and emotional needs and styles of students, using a variety of assessment techniques and data.
11. Plans and adjusts the learning experiences accordingly, requesting advice and assistance from specialists when appropriate.
12. Assists with the preparation, monitoring, and following of Individualized Education Plans for selected students assigned to the class.
13. Employs a variety of methods for students to demonstrate learning and accomplishments. Evaluates and grades homework, assignments, and tests in a timely fashion providing feedback to the student on performance. Maintains records and provides evidence of growth and progress to parents and to students.
14. Serves as a role model for students, dressing professionally, and demonstrating the importance and relevance of learning, accepting responsibility, and pride in the education profession.
15. Ensures the safety and health of all students, notifying immediately appropriate personnel and agencies following established procedures when there is evidence of substance abuse, child abuse, child neglect, severe medical or social conditions, potential suicide or individuals appearing to be under the influence of alcohol, controlled substances, or anabolic steroids.
16. Assist with the preparation of grant and other applications as requested by school/district administration.
17. Attends required staff meetings and serve, as appropriate, on staff committees.
18. Creates and maintains a class and/or school website for use by staff, students and parents.
19. Troubleshoots connectivity and hardware/software issues.
20. Partners with PTA and school organizations to promote STEM-related activities during the school day or evening.
 - Apply safety standards.

21. Displays the highest ethical and professional behavior and standards to maintain positive, cooperative, and mutually supportive relationships with students, parents, school personnel, and other agencies associated with the school.
22. Assumes responsibility for all students within the school, beyond those specifically assigned, supervising in a fair and constructive manner to ensure the safety and well-being of all students.
23. Assists with extracurricular activities, supporting the total program of the school.
24. Adheres to New Jersey school law, State Board of Education rules and regulations, Board of Education policies, regulations and procedures, and the Collective Bargaining Agreement for teachers.
25. Completes in a timely fashion all records and reports as required by law and regulation or requested by the Principal or Supervisor. Maintains accurate attendance records.
26. Protects the confidentiality of records and information gained as part of exercising professional duties and uses discretion in sharing such information within legal confines.
27. Works cooperatively with adults assigned to the classroom (e.g., paraprofessionals, student teachers, parents, and volunteers), establishing clear expectations for roles and responsibilities.
28. Creates a stimulating, attractive, organized, functional, healthy, and safe classroom, with proper attention to the visual, acoustic, and thermal environments.
29. Maintains positive, cooperative, and mutually supportive relationships with the administration, instructional staff, students, parents, and representatives of resource agencies within the community.
30. Summarizes interprets and disseminates current developments in learning, instructional strategies and classroom management through the reading of professional journals, participation in professional development, and involvement in professional organizations.
31. Maintains in safe working condition and safely operate electronically and other equipment needed to carry out job functions and responsibilities.
32. Recommends to the Principal or Supervisor the supplies and equipment needed to support instruction and assists with ordering, following established procedures.
33. Completes the required 20 clock hours of State-approved continuing professional development annually in accordance with State and district procedures, as specified in the Professional Improvement Plan (N.J.A.C. 6:11-13); as well as, attendance compliance to mandated district professional development days and sessions.
34. Completes mandated training programs as required by law.
35. Completes and adheres to district mandates as directed by the District Superintendent or designee; i.e. non-negotiables, bulletins, emails, goals, and objectives, etc.
36. Performs any duties that are within the scope of employment and certifications, as assigned by the Principal and/or assigned supervisor, and not otherwise prohibited by law or regulation.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential responsibilities and functions of the job and are not meant to be all inclusive. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential responsibilities and functions of the job.

Unless reasonable accommodations can be made, while performing this job the staff member shall:

1. Use strength to lift items needed to perform the functions of the job.
2. Sit, stand and walk for required periods of time.
3. Speak, hear and demonstrate evidence of understanding.
4. Use close vision, peripheral vision and depth perception along with the ability to focus vision.
5. Communicate effectively in English, using proper grammar and vocabulary. American Sign Language or Braille may also be considered as acceptable forms of communication.
6. Reach with hands and arms and use hands and fingers to handle objects and operate tools, computers, and/or controls.

ENVIRONMENTAL DEMANDS:

The environmental demands described here are representative of those that must be met by an employee to successfully perform the essential responsibilities and functions of the job and are not meant to be all inclusive.

1. Exposure to a variety of childhood and adult diseases and illnesses.
2. Occasional exposure to a variety of weather conditions.
3. Exposure to heated/air conditioned and ventilated facilities.
4. Exposure to a building in which a variety of chemical substances are used for cleaning, instruction, and/or operation of equipment.
5. Function in a workplace that is usually moderately quiet but that can be noisy at times.

EVALUATION:

Performance of this job will be evaluated in accordance with provisions of the Board's policy and/or State Law.

**THE ORANGE BOARD OF EDUCATION
IS AN EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION EMPLOYER**

Revised: 1/14/2020

Approved: 3/14/2018