COMPUTER SCIENCE PROJECTS – Use as a guideline to determine if a presentation meets the necessary requirements.

Computer Science Projects are judged on the following five criteria.

STATEMENT OF THE PROBLEM

- a) Is the objective of the project clearly stated?
- b) Does the problem chosen have relevance or practical application in today's world?
- c) Did the student use appropriate computer vocabulary?
- d) Did the student show depth of understanding of relevant programming concepts and principals?
- e) Does the project entail creative thinking in approach techniques?

METHODS

- a) Was there unity, coherence, and inherent logic in the sequence of the presentation?
- b) Does the student follow accepted procedures, using either structured programming or object-oriented programming? Is the underlying logic sound?
- c) Did the student explain the design of the project using a high level diagram?
- d) Did the student include an explanation of difficult, unique and/or significant sections(s) of the program?

FULLFILLMENT OF PURPOSE

- a) Did the student show the results of his work? Was the objective obtained?
- b) Does the student have a quality project?
- c) Did the project include exceptional features and/or coding?
- d) Does the present know of areas for further expansion or improvement of the project?

PRESENTATION

The presentation should, preferably, be in the form of a free talk employing good oral communication skills. The time restrictions in the rules necessitate planning and rehearsal.

- a) Is the talk well organized and flowing in a logical pattern?
- b) Do the audiovisual aids enhance the audience's understanding?
- c) Did the presenter speak clearly and refer to notecards rather than read from them?
- d) Is the student's competency with the principals such that he can answer questions with clarity, and elaborate where necessary to make a point?
- e) If the student is employing a special medium, such as VCR or computer screen, is its value to the speech significant? Was its use limited to less than 10% of the total speech?

It is acceptable for a student to show key parts of code line by line. However, the presentation should not consist of a student explaining his/her program line by line. A high level method should be used instead.

JUDGE'S OPINION

This criterion covers simply the judge's overall reaction to the nature of the project and its handling by the student.

Evaluate the complexity and quality of the project with respect to the age and grade level of the student and the amount of previous experience with computers. Remember schools vary considerably in what computer offerings they can make available to students.

SCORING

- Judges score the student on their individual worksheets after each presentation.
- The student is rated numerically by his success in each of 5 independently-evaluated criteria. For each of the 5 criteria the lowest score is 1, the highest score is 5. Use integer scores only.
- Students are not in competition with each other for some single top award; rather they are evaluated on how well they succeed in fulfilling the 5 criteria. Therefore, there is no limit to the number of each award that may be awarded in a given Presentation Room.
- PJAS Awards are based on the average of all judges' scores

| Average | Award |
|---------------|--------------------|
| 4.0 or higher | First Place Award |
| 3.0 – 3.99 | Second Place Award |
| Below 3.0 | Third Place Award |

SCORING RUBRIC

| Exceeds Characteristics | 5 |
|-------------------------------------|---|
| Meets ALL of the Characteristics | 4 |
| Meets MOST of the Characteristics | 3 |
| Meets FEW of the Characteristics | 2 |
| Meets NONE of the Characteristics | 1 |