

***Drosophila melanogaster* & Modern
Protocol Analysis for the Classroom Setting**

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Abstract

Drosophila is a model organism that gives many advantages that include the ease of visualization of embryonic development through protocols and techniques such as DNA staining and immunofluorescence. In research protocols, a significant amount of time and materials are used to observe the aspects of interest in the common fruit fly. In this study, protocols for *Drosophila* studies were tested and modified to fit the time constraints and chemical use restrictions of an advanced placement high school classroom. Modification to these protocols will enable the study of development while keeping the interest of the students, preserving the scientific aspect of the study and making the protocols more economical. With the use of a reference strain, modifications to embryonic analysis protocols were generally successful. Modifications of the protocols will enable *Drosophila* use in the high school level setting where time and material constraints are a general factor.