

DEFINING STANDARDS FOR RESEARCH-BASED LEARNING

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ABSTRACT

Many science students engage in a variety of research-based learning experiences both within their courses and outside the curriculum in special research experience programs. In the context of a project to develop students' awareness and experiences of research we were recently involved in writing a response to a document prepared by the American Council on undergraduate research "Characteristics of Excellence in Undergraduate Research". Our response demonstrated the extent to which undergraduate research and inquiry-based learning were being encouraged across our campus. This work provided an opportunity to critically reflect on standards of undergraduate research implementation. It led to a consideration of a set of standards for judging the quality of undergraduates' engagement in research-based activities. In this paper we will outline the characteristics of excellence and then discuss the set of standards we have developed. These are written in the form of levels of achievement that can be applied in a variety of situations within the curriculum and at a range of different levels and subjects.

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