Abstract: In this paper we track the changes made over 4 years to the amount and type of assessment in a Computing Science Software Engineering module based solely on group-work. Most of the changes have been made as part of our CETL project: Active Learning in Computing [1], which has attempted to introduce larger, more meaningful assessments to the module in response to feedback from the students, employers and staff involved. Our approach has not always been wholly successful in terms of reducing the student workload or in creating assessments that can differentiate an individual's learning outcomes clearly. However, our experiences have led us to recognise the need for an alternative approach to assessment in these types of projects. We review the assessment methods and types we used prior to the CETL project and those we use now and outline the experiences and feedback that prompted the changes we made. We evaluate the impact of these changes on students' learning outcomes and then describe our work towards an alternative assessment framework for group-projects in Software Engineering that aims to help staff recognise and measure student achievement more clearly and to help students get the most from their group learning experiences.