The goal of this paper is to depict assessment of teaching and learning processes from the point of view of a student-centered teaching model, Learning Mathematics, Doing Mathematics, under construction since several years ago. As a premise of our model description and the illustration of some of its assessment instruments, we discuss some relevant texts on assessment produced in recent years, and we discuss the main mathematics curricula on Mexican High School System with respect to assessment: Colegio de Ciencias y Humanidades (cch), Escuela Nacional Preparatoria (enp), Dirección General del Bachillerato (dgb) of Secretaría de Educación Pública, and High School of Instituto Politécnico Nacional. The assessment instruments that we illustrate are rubrics, result matrix, Gowin's V, checklist, and col binnacle, applied in several bachillerato courses taught to students and teachers as well.

**Keywords**

Alternative assessment, student centered teaching model, assessment instruments.