## Curves in OpenGL — Evaluators

OpenGL supports the drawing of curved surfaces through the use of evaluators.

Evaluators can be used to construct curves and surfaces based on the Bernstein basis polynomials. This includes Bézier curves and patches, and B-splines.

In order to draw curves and surfaces using other basis polynomials (e.g., Hermite polynomials) the user program must transform that basis to a Bernstein basis.

Consider first one-dimensional evaluators. The following steps are performed:

- Define a one-dimensional evaluator with `glMap1*()`
- Enable it with `glEnable()`

  (Both functions are usually called as part of initialization.)
- The function is evaluated at a series of points using `glEvalCoord1()` between a `glBegin()` and `glEnd()` block in the `display()` function. [This is similar to using `glVertex*()`.]

`glEvalCoord1()` is usually called within a `for` loop.