Off[InterpolatingFunction::dmval];

{(x0, y0), {x1, y1}, {x2, y2)} = Table[{i/4, i/4}, {i, 3}];
LocatorPane[
  Dynamic[{{x0, y0}, {x1, y1}, {x2, y2}}],
  Dynamic[
    ff1 = Interpolation[
      {{x0, y0}, {x1, y1}, {x2, y2}},
      InterpolationOrder -> 2
      ];
    Plot[ff1[x], {x, 0, 1}, PlotRange -> {0, 1}]
  ],
  {{0, 0}, {1, 1}}
]
DynamicModule[
{n = 10, pts, x, y},
pts = Table[{x[i], y[i]}, {i, n}];
Evaluate[pts] = Table[{i, i} / (n + 1), {i, n}];
LocatorPane[
Dynamic[pts],
Dynamic[

ff2 = Interpolation[
Evaluate[pts],
InterpolationOrder -> n - 1, Method -> "Hermite"
];
Plot[ff2[t], {t, 0, 1}, PlotRange -> {0, 1}]
],
{{0, 0}, {1, 1}}
]
]
DynamicModule[
  {n = 10, pts, x, y},
  pts = Table[{x[i], y[i]}, {i, n}];
  Evaluate[pts] = Table[{i, i} / (n + 1), {i, n}];
  LocatorPane[
    Dynamic[pts],
    Dynamic[
      c = BezierCurve[Evaluate[pts], SplineDegree -> n - 1];
      Graphics[c, PlotRange -> {{0, 1}, {0, 1}}]
    ],
    {{0, 0}, {1, 1}},
    Appearance -> Range[n]
  ]
]

BezierFunction @@ c

BezierFunction[{0., 1.}, <>]