On the construction of approximation kernels for orthogonal polynomial expansions

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We consider orthogonal polynomial expansions and derive convergence results in certain Banach spaces. We focus on orthogonal polynomial systems which induce convolution structures on the natural numbers and on the compact intervall $[-1, 1]$, e.g. Jacobi polynomials. In particular Fejer-type kernels and de la Vallee-Poussin kernels are studied in the appropriate context. We will stress the analogy to the trigonometric case.