We develop a theoretical framework to spell out the conditions under which spillovers in productivity lead to peer effects in wages. We test the key implications of peer effects in the productivity of workers in the same workplace. Our analysis is based on a large-scale employer-employee data set for one well-defined local labour market. Our preliminary results provide evidence for positive peer effects in wages. About one third of the effect stems from a worker’s past peer group (conditional on his/her current peer group). We argue that this provides strong evidence for learning and knowledge transfer between workers as opposed to other channels of peer interaction such as social pressure.