1106-05-2058 **Jeong-Ok Choi** (jchoi351@gist.ac.kr), Gwangju Inst. of Science and Technology, Gwangju, South Korea, **John P Georges** (john.georges@trincoll.edu), Math Dept., Trinity College, Hartford, CT 06106, and **David Mauro*** (david.mauro@trincoll.edu), Math Dept., Trinity College, Hartford, CT 06106. *On a pursuit-evasion model without instantaneous movement.*

Given a simple graph G, we consider a vertex search model under which pursuers and evaders move along edges at finite speed and reside on vertices at integral times. An evader is captured by a pursuer if and only if one of the following occurs: (a) at integral time t, the pursuer and the evader occupy the same or adjacent vertices; (b) between integral times $t-1$ and t, the evader passes through a vertex incident to an edge containing the pursuer; (c) between integral times $t-1$ and t, the evader passes through a vertex that is adjacent to a vertex containing the pursuer. Letting $w(G)$ denote the minimum number of pursuers required to guarantee the capture of all evaders in finite time, we explore conditions under which $w(G)$ is at least $w(H)$ for subgraph H of G. We consider the relationship between $w(G)$ and graph invariants such as girth, diameter, and minimum degree. We determine $w(G)$ for G in various classes of graphs, with emphasis on trees. And, we extend the model to one of greater generality in which evaders may have edges as destinations at integral times. (Received September 15, 2014)