## **HRK** Hochschulrektorenkonferenz

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#### **Title**

Assessing the progress and the underlying nature of the flows of doctoral and master degree candidates using absorbing Markov chains

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#### **Abstract**

In this paper, absorbing markov chains are used to analyse the flows of higher degree by research candidates (doctoral and master) within an Australian faculty of business. The candidates are analysed according to whether they are full time or part time. The need for such analysis stemmed from what appeared to be a rather poor completion rate (as reported by the University concerned). However, this reported completion rate was a ?macro? figure that aggregated PhD and Master (by full time and part time) completions together. If there really was a problem, then the Faculty needed to know where in the system it was and what potentially might then be done to remedy the problem. The assembling of data into an appropriate database was difficult and required considerable care, but an adequate database was developed. The application of the absorbing markov chains to the problem resulted in an increase in the level of understanding associated with the long term underlying probabilities of completion and also expected durations of candidature. This information highlighted one area of

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concern. With the information gained from this study, appropriate strategies can subsequently be put in place for the rectification of some of the areas of concern discovered in the analysis. Areas for further research are also highlighted in this paper. (HRK / Abstract übernommen) Nicholls, Miles G., E-Mail: miles.nicholls@rmit.edu.au