Evaluating Faculty Staff: an Application of Group MCDM based on the Fuzzy AHP Approach

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Abstract

Faculty evaluation is a crucial component of human resource management in higher education institutions. One of the main issues of evaluation is how to assess overall performance of faculty members based on multiple criteria. In this paper, we propose a faculty evaluation index system by employing group Multiple Criteria Decision Making (MCDM) based on fuzzy Analytic Hierarchy Process (AHP). Specifically, after determining the criteria and attributes, the evaluation hierarchy is established. The weights of criteria and attributes are then calculated by the fuzzy AHP method. Employing the fuzzy AHP in group decision making facilitates a consensus of decision-makers and reduces uncertainty in decision making. The evaluation process can then be conducted by the use of the multiple criteria measurement method. A case application is also used to illustrate the proposed framework. The application of this framework can make the evaluation more scientific, accurate, and objective. It is expected that this work may serve as an assistance tool for managers of higher education institutions in improving the educational quality level.

Keywords: Fuzzy AHP, MCDM, faculty staff evaluation, higher education institutions.