

# **A Multi-Agent System to Support ICT based Distance Learning through Modeling of Learner Needs: The Case of Bachelor of Education at the University of Nairobi**

YonahEtene<sup>1</sup>, Patrick Owoche<sup>2</sup>, Dr.RobertOboko<sup>3</sup>

<sup>1</sup>Department of Computer Science, Kibabii University-Kenya

<sup>2</sup> Department of Information Technology, Kibabii University – Kenya

<sup>3</sup>Department of Computer Science, University of Nairobi–Kenya

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## **Abstract:**

In distant learning environments, most learners need feedback from their lecturers and administration. The feedback supports them to achieve their learning objectives. However, the feedback that the most distant learners receive through the student's portal system is not adequate. This leads to learners using a lot of the scarce resources travelling to college to seek guidance on academic and administrative issues. This study proposes a multi-agent system that can provide personalized feedback to learners, lectures and administration in an efficient and effective way. The distant learners' need updates on fees, center meetings, examination results, assignments, study schedules etc. The feedback system provides feedback to the learner using the learners most appropriate mode, either sending an email alert, short message services or for clarification the learner can request for a phone call from the administration. The alerts provide a detailed summary of the information posted on the University website.

**Keyword:** Classifiers, Distant learners, Feedback, Learner needs, Multi-agent system