



Towards Feasible Instructor Intervention in MOOC Discussion Forums



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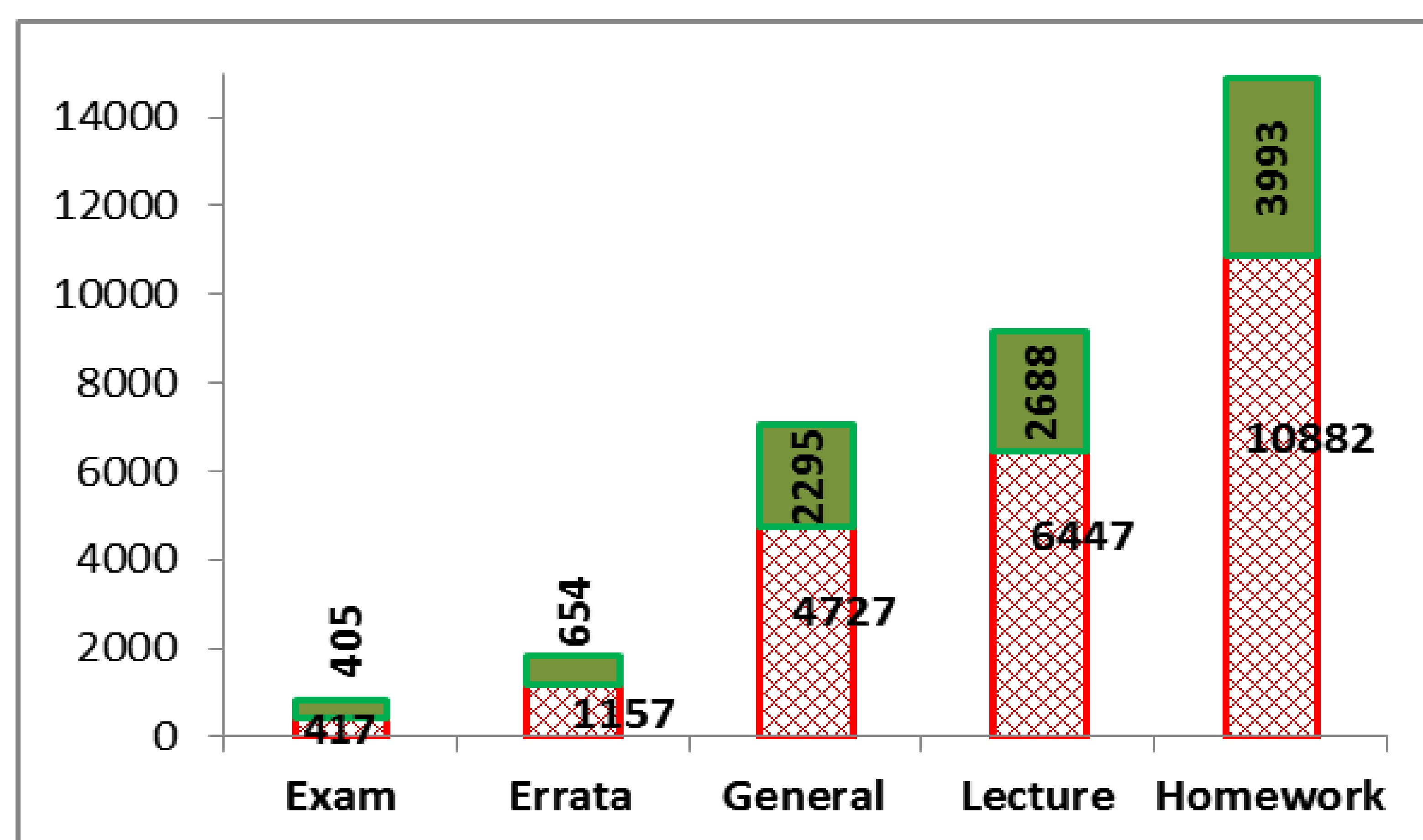


Problem: We propose to study interventions and its types in MOOC forums to enable instructors to intervene strategically to maximise peer learning and efficiently use their bandwidth.

Why instructor should intervene?

- Peer learning aided by instructor feedback has been shown to foster learning better than lectures.
- An instructor's skillful facilitation of a threaded discussion can **promote students' critical thought**, as well as **construct new knowledge** (Trufant, 2003).
- It brings in new material periodically to freshen up the discussion, provokes and instigates controversy, replaces missing cues by contextualizing establishing general topicality.
- It also weaves together recently posted ideas salient to the discussion.

Data: Discussion threads from Coursera

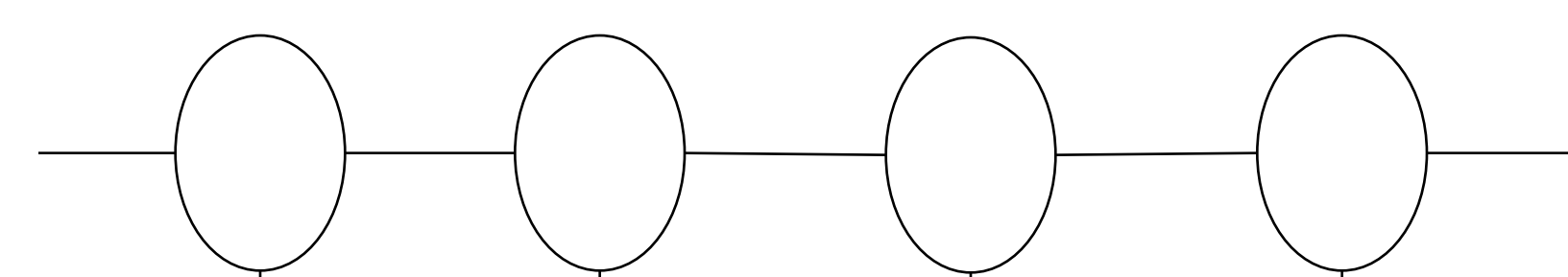


Our proposed taxonomy for annotating posts

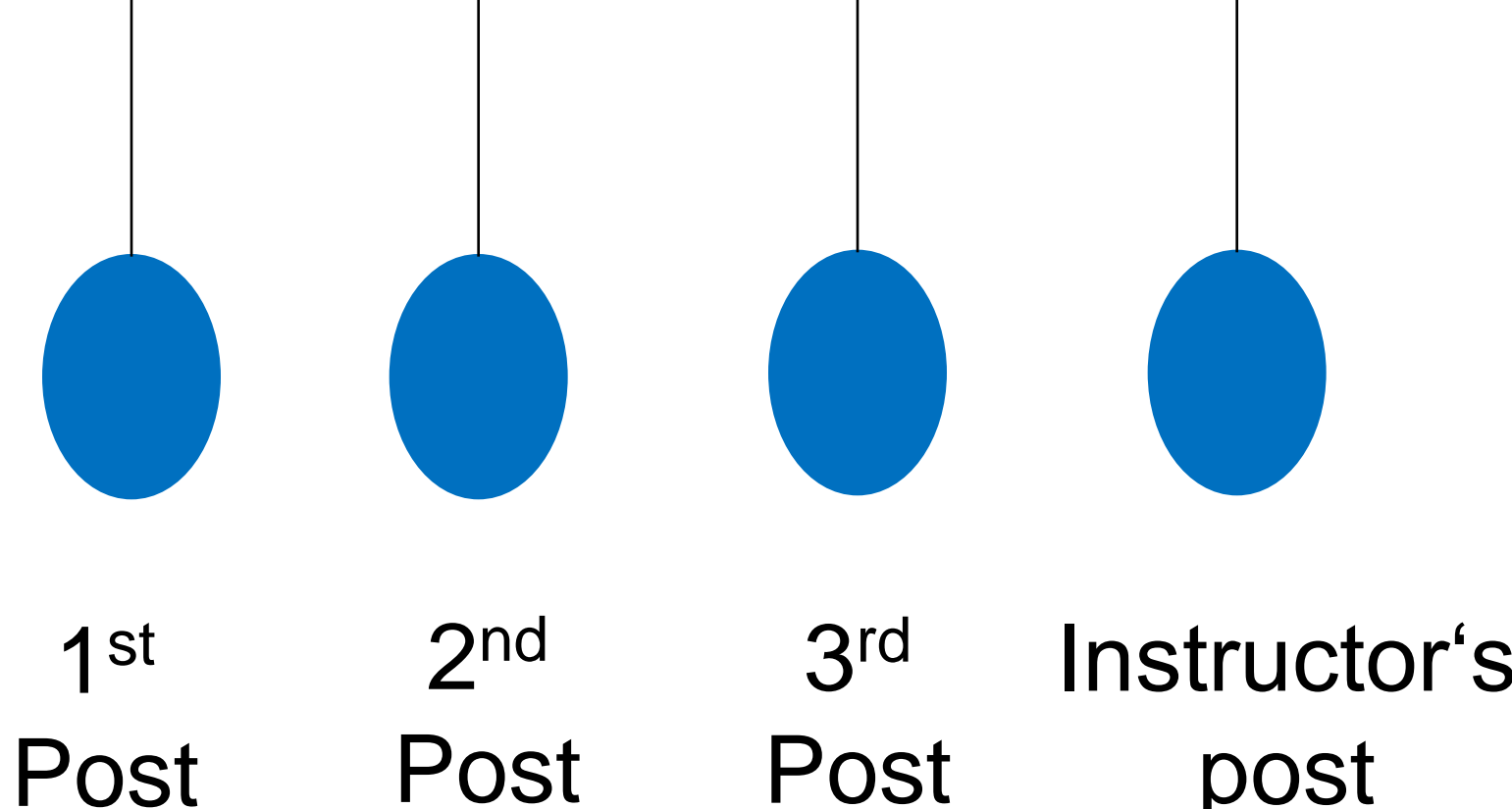
Peer Interventions	Instructor Interventions
Feedback Request	Justification Request
Paraphrase	Extension
Juxtaposition	Reasoning Critique
Refinement	Integration / Summing up
Clarification	
Completion	

Machine learning the sequence

Label sequence



Post sequence



A conditional random field model to learn the discourse sequence

Applications

- Dashboards for instructors to display forum threads ranked by an automated triage.
- Dashboards will also enable to gauge student learning due to forum discussions.
- A prescription for intervention in MOOC forums.

