The learner graph is introduced as a mathematical structure that makes assumptions about validators (aka acceptors in the context of consensus) explicit. A quick recap of the main points is the following diagram.

[

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1374×683 86.9 KB

](https://europe1.discourse-cdn.com/standard20/uploads/anoma1/original/1X/f49ae767bcdc40ba05b7907abfc13346dbed11b3.png)

based on §3 of the (ready for review) PDF spec.

We have the following questions:

1. how to represent & store the learner graph (two closely related issues)
2. how to match the observations against the learner graph (to detect failures)
3. how to update the learner graph, e.g., in case of stake change
4. how to deal with forking (in particular in the case of chimera chains)

Questions 1. and 2. are clear for the consensus and mempool protocols; question 3. is in the workings, and the last question is still research.

This might be related to the slow game.