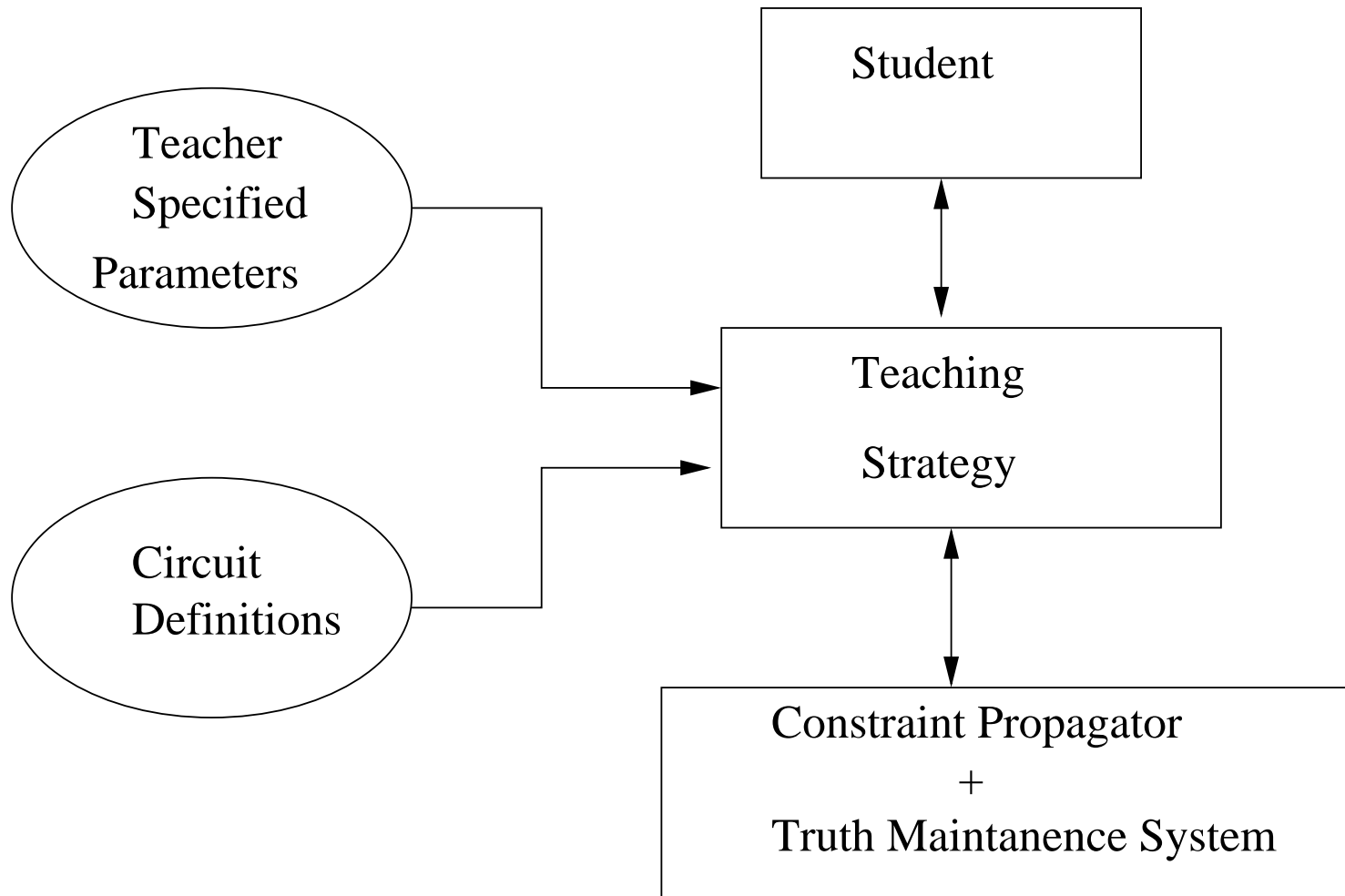


# Teaching Strategy: *An Overview*

July 24, 2003

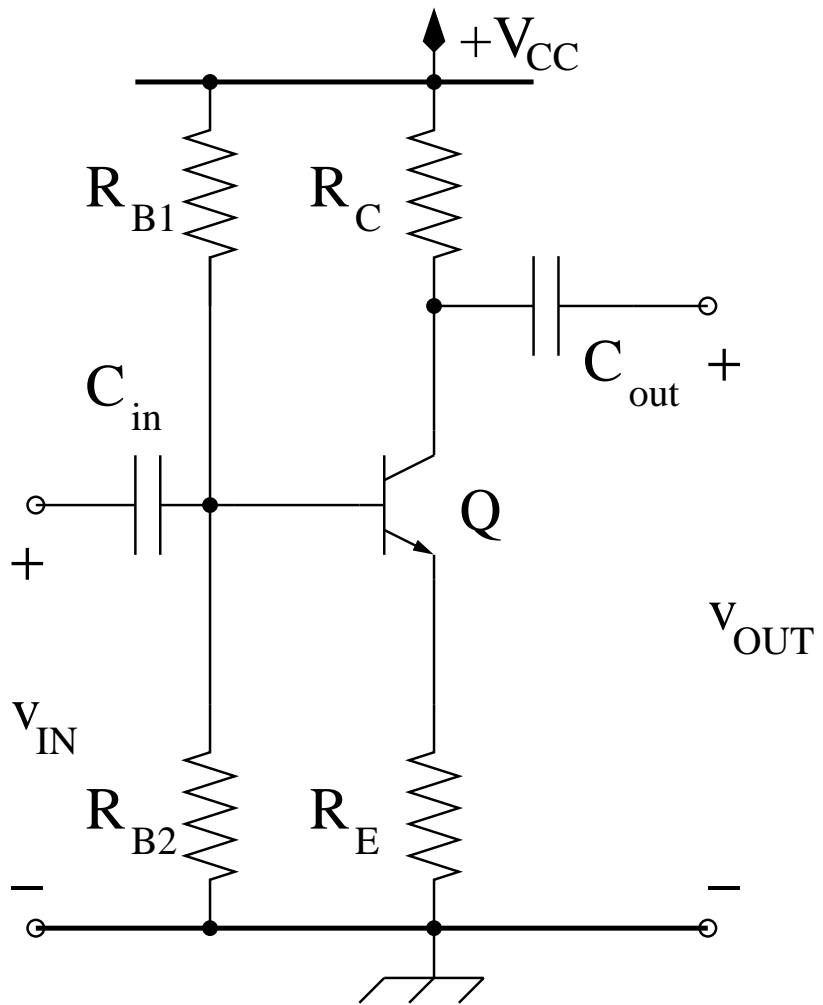
# Teaching Strategy: An Overview Cont.



## Teacher Specified Parameters

- Constraints
- Heuristics
- Interesting Variables

## CE Amplifier



## Teaching Strategy

- Situations handled
  - don't know
  - set value
  - retraction
  - question
  - history (set variables and interesting variables)

## Situations: Student Don't Know

- System attempts the following, in order
  - Suggests first unset variable from queue
  - Obtains suggestion from constraint propagator
  - Suggests a random interesting variable
  - Say assignment is complete

## Situations: Student Set Value

- Checks for correctness (deduced variable)
- Sets and propagates variable through constraint propagator
- Upon contradiction
  - Prints proof and supports
  - Prompts for retraction of student set support

## Situations: Student Retraction

- Lists support to be retracted
- Propagates through constraint propagator



## Situations: Question and History

- Replies with value of student set variables
- Lists variables that have been set
- Lists interesting variables

## To be implemented

- Upon completion, system should
  - change heuristics ( $\beta$  assumptions)
  - proceed to next scenario (chain of scenarios for a more scripted approach)
- Other scenarios
- I/O format