Turning the bike wheel...

- Since there is no net external torque acting on the student-stool system, angular momentum is conserved.

  ➔ Remenber, L has a <u>direction</u> as well as a <u>magnitude</u>!

Initially: $L_{INI} = L_{W,I} = +25\ kg\ m^2/s$

Finally: $L_{FIN} = L_{W,F} + L_S$

$= -25\ kg\ m^2/s + L_s$

$L_s = 50\ kg\ m^2/s$

L_S

$L_{W,I} = L_{W,F} + L_S$

$L_{W,I}$

$L_{W,F}$