

Structured Autobiographies— A Tool for Promoting Students’ Self-Awareness and Success

Although it is unusual in engineering courses to ask students to submit a short autobiography, this exercise gives students the important message that you are interested in them, may highlight common points of interest among the class, and is also an excellent mechanism to encourage them to reflect more deeply about their backgrounds and aspirations. Students typically write about their hometown, childhood pets and hobbies, places they’ve travelled, and family members. When you conduct this exercise, in addition to the “standard” background items, ask the students to include a one-page response to any of the following prompts:

- *What are your current long-term goals? Are you on track to achieve them? What will you do to either stay or get back on track?*
- *What are the brick walls you’ve faced in your own life? How did you get over them?*
- *Who has been a mentor to you? What lessons have they taught you?*

To stimulate their thoughts, encourage them to first watch one or more of the following short reflective talks:

- *J.K. Rowling’s Harvard Commencement Speech, 2008 (20:58)^[1]*
- *Steve Jobs’ Stanford Commencement Speech, 2005 (15:04)^[2]*
- *Lin-Manuel Miranda’s Wesleyan Commencement Speech, 2015 (16:39)^[3]*

I typically assign the structured autobiography in Material and Energy Balances, but it could be used in any course. The assignment is part of their participation grade, and I do not provide a numerical grade or deduct points for spelling or grammar. I remind students that asking them to reflect on their aspirations, obstacles they have overcome, or lessons learned from mentors is excellent preparation for the kinds of interview questions they may later encounter. In addition, I provide the students with my own autobiography so they can get to know me better. In my experience, rather than viewing this assignment as “busy work,” students appreciate that I am interested in their background and often relate personal experiences that open the door for further conversations in an advising context.

Literature suggests that encouraging students to think deeply and carefully about such things can have a significant impact on improving the retention of women and underrepresented minority students.^[4] Reminding students of how they have demonstrated “grit” in the past can help prepare them for the challenges of the engineering curriculum and remind them of what they may have already overcome to be sitting in your class. Finally, consider making and filing copies of their documents and returning them to the students at graduation, where you can remind them of how far they’ve come and celebrate their accomplishment.

REFERENCES

1. <<https://www.youtube.com/watch?v=wHGqp8lz36c>>
2. <<https://www.youtube.com/watch?v=UF8uR6Z6KLc>>
3. <<https://www.youtube.com/watch?v=BZqqWC1QaN4>>
4. Adams, E.A., C.L. Antaya Dancz, and A.E. Landis, “Improving Engineering Student Preparedness, Persistence, and Diversity Through Conative Understanding,” Proceedings of the ASEE Annual Conference and Exposition, Seattle, WA (2015) □

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This one-page column presents practical teaching, advising, and diversity tips in sufficient detail that others can adopt the tip. Focus on the teaching method, not content. The column should be maximum 550 words, but subtract 50 words for each figure or table. Submit as a Word file to Phil Wankat <wankat@ecn.purdue.edu>.