

Review of: "Role of Leadership with Equity, Integrity, Ethics, Humility, and Outstanding Culture in the Development of Engineering Institutions"

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Potential competing interests: No potential competing interests to declare.

Thank you for the opportunity to have sight of this work. The motivations behind the study, which I note was not funded, are admirable and I think perhaps the author might make more of their driving force behind it. If the catalyst was your observations of inequity and, lack of integrity, and corruption, and to identify how these might be addressed then do spell these out.

I have not focused on typing errors or grammar, but suggest a review of the final manuscript.

Some general points:

1. I was keen to hear more about your methodology and purpose.
2. Please be more objective, for example "Many administrators have unethically ruled colleges" suggests widespread corruption. This does a disservice to the many who are ethical. Are there any reports or inquiries into this that could be referenced?
3. The referencing would benefit from a review and greater consistency. I found a mix of citation methods from initials, surnames, and at times using the first names of authors, for example Kate (2001); Shirley (2004), Reena (2016), and Rockwell (2020).
4. Figure numbering and referencing. The table is useful, but not numbered or connected to the text.

Section specific.

Title: I don't feel the role of leadership is pulled out clearly enough in the body of the paper, or the recommendations, I offer some thoughts on how this might be achieved. But this is much needed.

Definition and use of equity and equity ethics. From my reading of "Dora et al" creation of an equity ethic is more than equity and ethics as separate words and is about cultural change and can occur through intentional programming and practice. I suggest you are more specific about this and rephrase your equity definition too.

"*Equity* refers to fair treatment for all people, so that the norms, practices, and policies in place ensure identity is not predictive of opportunities or workplace outcomes. Equity differs from equality in a subtle but important way. While equality assumes that all people should be treated the same, equity takes into consideration a person's unique circumstances, adjusting treatment accordingly so that the end result is equal." From McKinsey. <https://www.mckinsey.com/featured->

[insights/mckinsey-explainers/what-is-diversity-equity-and-inclusion](#)

Introduction: I see an overuse of “many” – this is non-specific and sets up the reader for a disappointment. If this is from public reports then cite them, but if this is from personal observation, or your findings from the interactions in your research, then please explain this.

Perhaps structuring the introduction around the driving force, the research this stimulated and the high level findings from the interviews might make this easier to read.

Literature review: This could be more tightly structured and referenced. There are books on the academy and inclusion and inclusive teaching – see Royal Academy of Engineering Report on Inclusive engineering education (2018) and another on engineering culture, plus A whole New Engineer by Dave Goldberg and Mark Somerville, as well as Challenging Knowledge, Sex and Power – gender, work, and engineering by Julie Mills, Suzanne Franzway, Judith Gall and Rhonda Sharp. Further, Gender Inclusive Engineering Education by Mills, Ayre, and Gill.

Methodology: Too little is written about this. I am most curious to hear about your methods: were these 1 to 1 interviews – free ranging or semi-structured? Did you use focus groups or are these reported conversations from an open forum. How did you go about your analysis?

Some section based comments:

2.9 I am not sure what you are trying to say. MNC often are the opposite of disruptive.

3.5 Industry should / could be used to co-design projects based on real, current, industry problems. Try referring to the CDIO methodology, <http://www.cdio.org/> and Olin College and University of Illinois iFoundry (see “A whole new engineer” <https://wholenewengineer.org/>).

And please reference NEP or provide a weblink.

25 steps: are the 235 steps your assimilation and recommendation or the outcomes from your research and literature review? Could you group the 25 steps into themes?

For your recommendations, I suggest you focus on the 3 most important actions to get started and consider Top down leadership, middle managements and student focused measures.

I offer these in good faith to assist with ensuring your research is well read.