AC 2011-2236: ENGINEERING CHILDREN’S LITERATURE:

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Engineering Children's Literature:  
Development of an engineering storybook for young children  

While the notions of doctor, teacher and firefighter are ubiquitous in young literature, there is a lack of engagement about engineering (Holbrook et al., 2008). Picture books are a compelling medium for introducing concepts to children at a young age. Story books have the ability to present new information, increase stimulation of the imagination, and deliver messages both moral and social. In a school setting, story books have been shown to impact kindergartener’s mathematical achievement when produced in tandem with a mathematics unit (Keat & Wilburne, 2009). However, there have been little to no studies regarding the impact of engineering literature (Holbrook et al., 2008). This could potentially be affected by the lack of children’s books on the subject.

Distributing correct messages about engineering to a younger age group may assist in developing a stronger perception of engineering further down the line (NAE, 2002). A marketing analysis of engineering showed that targeted audiences weren’t familiar with engineering (NAE, 2008). They piloted several different taglines to market engineering, such as “engineers shape our world” and “engineers breathe life into ideas and make them reality”. However, some of the taglines were found to be more relatable to targeted audiences, such as women and underrepresented minorities, than others. Appropriate informal messages for young children include: what engineering is, what an engineer does (in terms of occupation), many types of engineering exist, engineering is all around, and anyone can be an engineer with the proper training (diversity).

This poster will illuminate the process of writing a children’s book on engineering. By increasing the number of available children’s books on engineering, with age appropriate and approved messages, it may increase the early positive exposure of engineers and/or engineering to young children.
References


