Our skill and competency in computational mechanics (CM) continues to increase. At the same time the software, that emerges from the research and development labs and software producers, becomes increasingly more innovative and realistic with much higher fidelity to the real world. With these two parallel aspects of CM operating, it is easy to see how students of the discipline may lose an appreciation of the mechanics behind the software. This can have many downstream consequences.

Many of the early pioneers and software developers are “moving on” and the next generation have a rather different approach to the computational tools. In this context, and the one above, education and dissemination issues have become of interest and importance. There is a need to maintain the competency of practitioners with ever more sophisticated software, whilst at the same time keeping them grounded in the fundamentals of the discipline. This is not to say that every student has to write an FEA code from scratch, but more to ensure that the software products used are seen as white boxes and not black boxes; also that there are educational protocols that ensure a sufficient level of competency.

With this in mind I am keen to run a session at the 3rd MIT Conference on Computational Fluid and Solid Mechanics on the theme of the title above. I see the session containing all sorts of presentations from personal experiences of novel classroom practices to survey work on student responses to software and many others.

Some of the themes that spring to mind are in the list below, however papers on any aspect of education and dissemination in CM are invited. Please contact

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- WWW education in CM
- The role of the software vendors in CM Education
- Pedagogical Issues in teaching CM
- Collaboration in teaching delivery and material development
- Effective assessment processes for CM education.
- The use of CM to teach Mechanics
- New tools for teaching CM
- A unified approach to teaching CM versus a topic specific approach.