

making waves

changemaking in the
classroom

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environmental studies



Thanks for inviting me

inspiring change

- understanding complexity (and connectivity)
- promoting action
- why Ashoka matters



At first I felt as though I have an unfair advantage when it comes to changemaking, due to my field (marine biology), and how, especially here in san diego, our lives are so intertwined with the ocean. Then I realized I was being narrow minded (or maybe just arrogant?), and that ALL of the tools I use to try and effect change in the classroom are tools that could serve in any course.

inspiring change

- understanding complexity (and connectivity)
- authentic examples



explain context of wave

understanding complexity



oil spill in gulf



demand for oil

talk about iconic images, enviro issues with oil spill, but also personal actions that create the demand

inspiring change

- understanding complexity (and connectivity)
 - authentic examples
- help *them* make connections



so how do we help them make connections? I can tell you how we DONT do it – DONT spoon-feed the students, because they need to discover on their own.

inspiring change

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rely on the classic (but underused) socratic method. Let me give an example from my class...



habitats



endangered species

tijuana river national estuarine research reserve

to teach students about marine ecology, one great local asset is TR NERR. learn about habitats, es, ecology, management



impacts



on both sides

tijuana river national estuarine research reserve

but we also look to the south, and the students themselves will slowly engage and actually run through a string of emotions – irritation that “Mexico is ruining our marshes with sediment and trash”, but then also an appreciation for the level of poverty and human aspects across the border



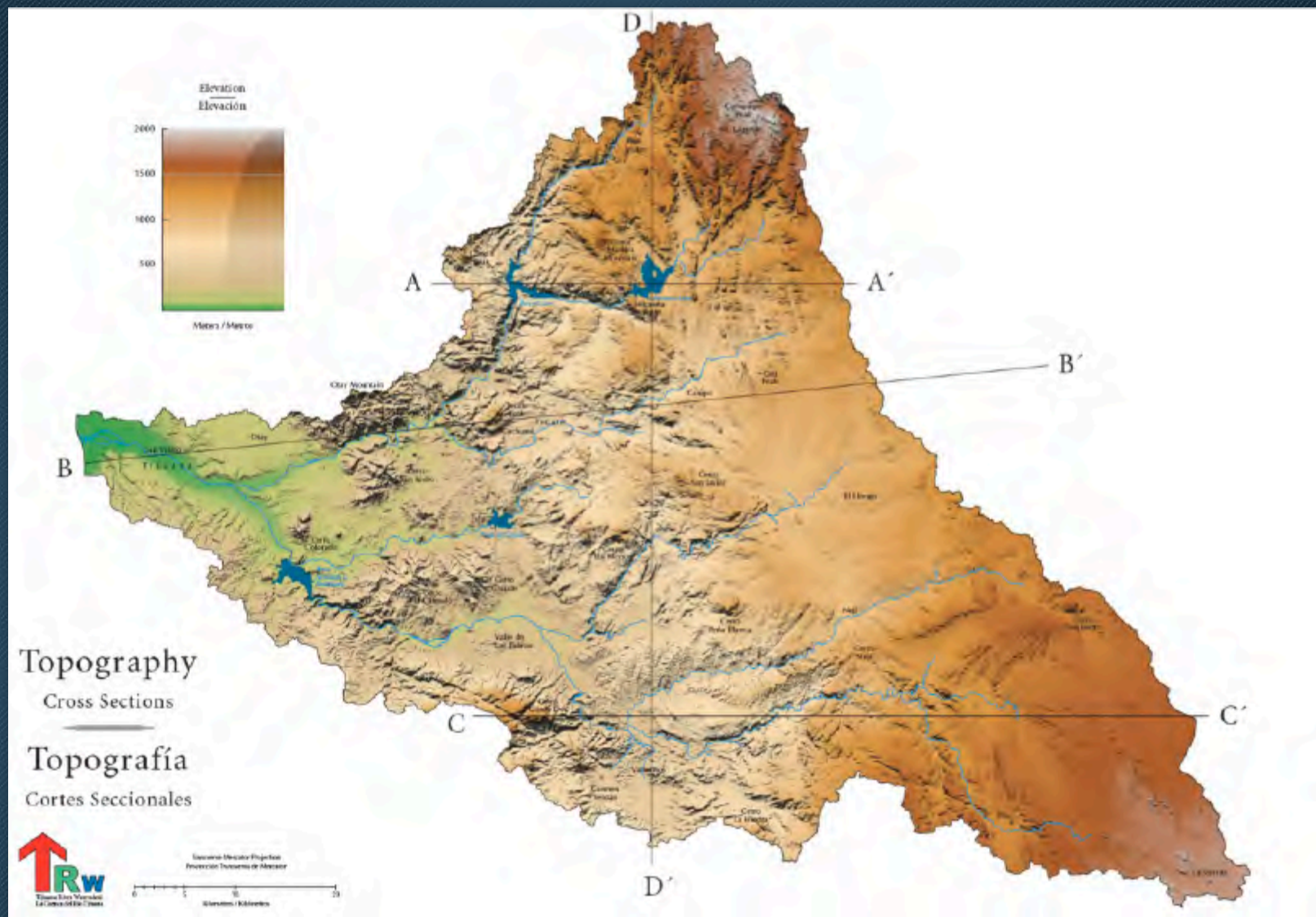
cultural resources



human resources

tijuana river national estuarine research reserve

we also bring the conversation to the benefits we receive from Mexico – the cultural resources (food always hits home with people), and the human resources



tijuana river watershed

binational inputs

And we step back and look at this in a broader geographic context – we can see that fully 3/4 of the tijuana river watershed is in mexico, so we simply cannot address these issues without international cooperation.

inspiring change

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- promoting action



this is what changemaking is all about, right? actually doing something. So how do we promote action?

they need **tools** and **attention**



in this case, by “tools” we really mean the knowledge – the content that we teach in our classes. The attention really translates to inspiration – we need to use the socratic method to make these issues plain to the students, and then what I often see is that the inspiration takes care of itself.

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fora/blogs/writing
assignments

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fora/blogs/writing
assignments



twitter

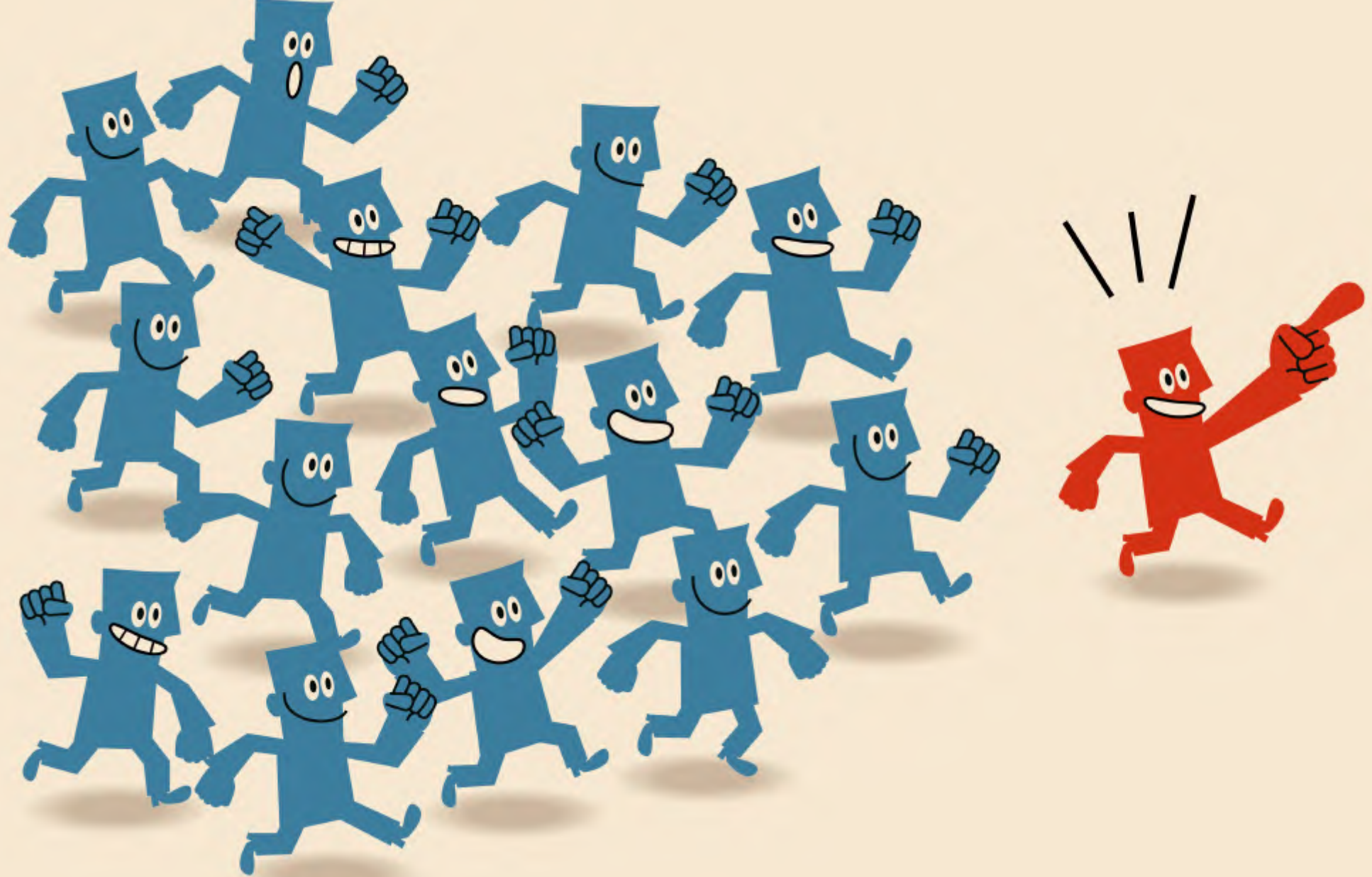
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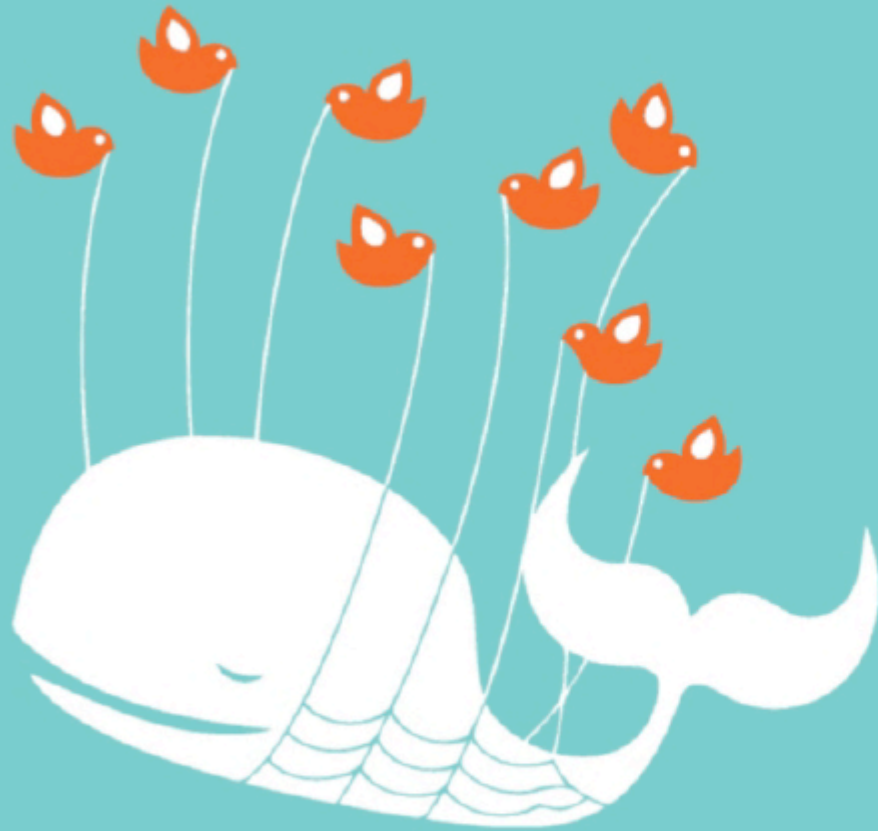
So, finally, why Ashoka? SO many of us do these things anyway, how will a label end up helping?



explicit shared goal, respected
and promoted at all levels

Because it is all about the power of a unified goal. Here, we have an explicit, shared goal, that is both respected and promoted at all levels in the university.

Fail Whale



fail at more interesting things

of course, these efforts are not always successful – some things are almost impossible to grade, for example. Some students (like some faculty) dislike social media, so efforts to integrate Twitter have been hit-and-miss. There are time trade-offs involved – it takes longer to develop ideas like this in a class than it would to simply keep on lecturing and running through more material. And, for