NAVIGATING COMMON OBSTACLES TO CHANGE IN HIGHER EDUCATION

Overview

Since the inception of the NSF Revolutionizing Engineering Departments (RED) Program in 2015, RED teams have worked to implement significant changes in engineering education at their institutions. Along the way, they have encountered numerous obstacles, ranging from changes in institutional and/or project leadership and support, to lack of policies and procedures to support the proposed changes, to lack of buy-in from colleagues and students. This Tip Sheet identifies some of the common obstacles that RED teams have experienced while advancing their change projects.

The experience of the RED teams suggests that change agents should anticipate some of the obstacles proactively, but remain flexible to respond to unanticipated challenges, and use this process to identify new opportunities for growth along the way. Additionally, change agents should consider obstacles from multiple perspectives as this can help them obtain a deeper understanding of how different organizational elements interact, and how proposed changes can impact or be impacted by the institution (Vuori, 2018).

Obstacles including rules, goals, policies, and technologies

The research data collected with RED teams suggests that the teams are encountering many obstacles related to existing institutional structures, policies, and processes which inhibit or prolong the change process. Examples of those include, among others, processes for changing curricula involve too many stakeholders and take too long; existing promotion and tenure processes don't support teaching innovation with junior faculty; frequent changes in higher-level administration often have direct impact on academic change projects as teams can lose advocates and have to rebuild support from administration.

TIP: When encouraging others to support a change effort, consider whether the existing institutional processes and policies make your request reasonable. For example, are existing promotion and tenure processes or reward structures designed to encourage innovation? If not, and if the support of specific groups is critical to the success of your project, consider building partnerships with those who have the power to influence changes to the procedures and policies that currently act as obstacles.

Obstacles involving needs, skills & relationships of the people in organization

RED teams commonly face obstacles related to relationship building and people management. For example, a lack of collegiality and collaboration can make the process of building strategic relationships harder, which can inhibit change across departments. Another obstacle is a lack of leadership and/or management training for change agents who want to lead others in a large change effort.

TIP: Spend time to understand the people who will be impacted by your project, within and outside of your team. Understand what motivates them, what causes them concern, and what they need to be successful. You can formulate better strategies for obtaining their support and trust if you understand what the underlying issues are.

"Yeah, I just wanted to offer some encouragement to everyone and I know how difficult this can be especially when you realize that there are pressure points from this side of STEM. If it can help anyone, it was part of my job to set up meetings - just listening meetings, nothing earth shattering, just to sit down with some lecturers from chemistry, math and physics. That's what I did last semester and it was so helpful. You get to actually meet the lecturer and you see the way they teach these courses and ask them about their approaches. The most important thing I learned was what they found to be their most difficult challenge in helping students succeed. It was really invaluable feedback ..." (RED project coordinator)

Obstacles involving cultural aspects of an organization

Obstacles related to institutional culture and values can be the most difficult to overcome. RED teams have had to manage many obstacles in their attempts to change the culture of their unit or institution, including managing different understandings of how things should be done, or what is valued across different units in an institution.

TIP: Consider and articulate the cultural norms and values that shape the decisions and practices of those around you who will be impacted by your change. Seek ways to address deep cultural shifts through the change making process.

"This is something that our team has worked on continuously since the beginning of the project. There's been a lot of time and effort just spent on getting people to understand each other in the room, our theoretical background and assumptions, and in terms of our, even among the engineering education researchers on our team, people are coming with different theoretical assumptions. So we've spent quite a bit of time, very worthwhile time, coming to a common understanding. And dealt with it by, on different projects, there is one person taking the lead and we have conversations and try to come to some consensus and then the lead author takes the lead from there in terms of how we are approaching it." (RED project social scientist)

References:

Bolman, L. G., & Deal, T. E. (2008). Reframing organizations: Artistry, choice, and leadership (4th ed.). Jossey-Bass.

Vuori, J. (2018) Understanding academic leadership using the four-frame model. In Pekkola, E., Kivistö, J., Kohtamäki, V., Cai, Y. & Lyytinen, A (eds.): Theoretical and Methodological Perspectives on Higher Education Management and Transformation. Tampere : Tampere University Press.