

Creating the Conditions for Advising Redesign

The ultimate goal of technology-mediated advising redesigns is to fundamentally change the way college staff and students engage in advising and student support. But in CCRC's major study of the implementation of advising redesigns at six colleges, only half the colleges were able to use the introduction of advising technologies to facilitate a significant reform in their advising systems.

What were the differences between the successful colleges and the unsuccessful ones? CCRC's research identified several indicators of colleges' readiness for advising reform and important conditions that must be met for it to take hold successfully. Multitiered, aligned leadership has a particularly important role in the process of transformative change.

This is part three of CCRC's practitioner packet on technology-mediated advising reform. For an overview of what these reforms involve and evidence on their effectiveness, see *What We Know About Technology-Mediated Advising Reform* (part one). For discussion of what constitutes transformative change and examples of transformative and nontransformative advising reforms, see *Advising Redesign as a Foundation for Transformative Change* (part two).

Readiness for Technology Adoption

Implementing new advising technologies so that users thoroughly integrate the tools into their work requires technological sophistication and preparation, but the focus of reform cannot be solely on deploying information technology (IT). Technology can only lead to advising reform if a college is culturally ready to adopt the new technology into its daily routines and to revise policies, systems, and approaches to student support.³

Colleges that are both technologically and culturally ready to adopt a new technology can unleash its potential to transform advising. Both technological and cultural readiness must exist at two distinct levels, the institution level and the project level.⁴ CCRC's Readiness for Technology Adoption framework lays out the elements of technological and cultural readiness at each level.⁵

Colleges that are both technologically and culturally ready to adopt a new technology can unleash its potential to transform advising.

READINESS FOR TECHNOLOGY ADOPTION FRAMEWORK ⁶		
	Technology	Culture
Institution	Technological Readiness	Organizational Readiness
Level	 IT system maturity: Hardware, software, network capabilities, and human resource capacity can support the technology. IT system stability: The pace of introduction of new technologies does not outstrip the ability to incorporate new tools. Compatibility of new and existing IT: Systems allow seamless sharing of information. Current patterns of IT use: Staff have sufficient experience with technology. Past experiences with IT implementation: The college has experience in implementing technological tools. 	 Clarity of mission: Administrators and staff understand the goals of the reform and support changes. Communication: Open and active communication goes up and down hierarchies and across departments. Decision-making process: The process encourages input while maintaining momentum. Openness to change: Orientation toward change, attitude toward technology, and history support adoption.
Project Level	 Project Readiness Administrative and technical resources: Funding is budgeted for technology, project management, and staff time. Training: Workshops, vendor training, and trial periods are provided. Ongoing support: Questions that arise during rollout are addressed. Incentives: Signals are given that adoption is important. 	 Need for reform: The need for reform is clearly defined, and staff understand how the technology will address this need. Vision of benefits: End users have a sense of the specific benefits of the reform for their work. Perception of functioning: Users believe the college will be able to implement and support new technology.

Building Effective Project Teams⁷

Colleges that successfully implement reforms build multifaceted teams with members who can make decisions, communicate to the broader community, and get buy-in and feedback from important constituencies. Effective teams include three types of members:

- content masters, such as IT personnel and advisors, who possess necessary technical or process information;
- **influencers**, who include key personnel who are valued and trusted by project staff and the broader college community; and
- decision makers, who have the authority to move the project forward.

In the Field: How Technology Can Drive Change⁸

Though colleges often focus on technology implementation rather than broader reform at the outset, some colleges in our study found that advising tools could not be used efficiently without revisions to processes and structures. Thus, the technology sometimes drove reform even when broad reform was not the initial goal, because the success of the technology depended on underlying processes. This was especially the case at colleges that were more open to change (organizational readiness) and felt strongly that there was a need for reform (motivational readiness); these colleges were culturally poised to take on unplanned reforms to processes and structures that were necessary for the launch of the technology.

For instance, implementing a degree-planning tool forced colleges to systematize program requirements, course prerequisites, and the timing of courses within programs of study, and to determine if and how courses transfer. At one college, course requirements had initially been entered and modified in the student information system without any consistent approach or oversight, and the course-numbering system was confusing. The resulting complexity and ambiguity in program requirements meant that the program planning tool could not systematically help students create coherent programs of study. The college was open to change and committed to optimizing the technology; consequently, the college refined the course catalog before further deploying the tool.

What Conditions Influence Transformation?

As colleges begin to implement new technologies and rethink their approach to advising, they should keep in mind that successful colleges share a common set of conditions—some of which are present from the beginning and sustained throughout the reform process, and some of which develop over time. We found four relevant conditions at transforming colleges that differentiate them from colleges where the introduction of a new technology does not lead to transformation. These conditions touch all four areas of CCRC's Readiness for Technology Adoption framework—the organizational as well as the project-level, and technology as well as culture.

We found four relevant conditions at transforming colleges that differentiate them from colleges where the introduction of a new technology does not lead to transformation.

Successful Engagement With the Technology

At the institutional level, successful colleges focus on issues such as integrating new systems into the existing technology infrastructure, ensuring appropriate data-transfer procedures are in place, and maintaining compliance with state- or system-level technology requirements.

At the project level, product functionality and vendor support are essential to project success. E-advising tools need to be easily accessible to end users, reliable, and compatible with other systems. Reliable technology tools help generate end user buy-in and allow colleges to build new structures and processes that leverage the tools. Positive, flexible, and responsive vendor engagement is also important.

An Institutional Orientation Toward Student Success

Colleges engaged in transforming advising make student success a priority in their actions, not just their words. Their policies and practices put advising at the center of reform activities, and their personnel can articulate the broadly shared organizational mission.

Moreover, stakeholders at transforming colleges see student success as the shared responsibility of everyone at the college rather than a fragmented set of activities. The goals of technology-mediated advising reform make sense to stakeholders and align with how they perceive their roles, how they conduct their work, and the types of changes they want to see in their institution. An administrator at one college summed up this orientation toward student success when she said in 2013, "We're all about students.... It's always, when a student calls, what barrier can we knock down?" In contrast, staff members at nontransforming colleges often view success efforts as a set of discrete functions.

A Clear and Actionable Rationale and Vision for the Project

Colleges engaged in advising reforms need a sense of urgency regarding reforms to improve student support services and completion rates. At transforming colleges, administrators and staff understand that advising and related student success reforms can improve college functioning and student success. Stakeholders are willing to modify their behaviors and support new organizational structures because they understand that, if the changes work, they will be better able to meet their organizational mission.

Transforming colleges are able to articulate a clear vision for reform and a unified understanding of the types of structures, behaviors, and attitudes that need to change in order for the college to leverage an advising redesign to meaningfully improve students' experience and outcomes.

In CCRC's study, nontransforming colleges did not have a clear vision for reform. At one school, the small group of administrators behind the project could not articulate what the tool was supposed to accomplish beyond improved efficiency—so neither could other stakeholders. If and how increased information and gains in efficiency would change advisors' or students' approaches to key advising tasks, such as planning and selecting degree-oriented courses, remained unclear.

Multitiered, Aligned Leadership

Leadership is key to transformative change. ¹⁰ But a college president cannot simply mandate change and expect it to happen, nor can advisors transform advising on their own. Instead, transformative change requires multitiered leadership with a commitment to a shared vision for the reform and its goals.

In our study, upper level institutional leaders and mid-level project leaders were both crucial in implementing advising reform, but they often had conflicting views about the degree of change it represented. Those who viewed the project as a relatively small, technical change had a limited vision of its potential benefits and approached their leadership role accordingly. Those who viewed advising redesign as a radical change to standard practices had a more holistic vision of its potential benefits and took what has been described as an adaptive leadership approach. Transformative change was most likely when both institutional and project leaders shared—or developed over time—a change-oriented vision of advising redesign.

Transformative change requires multitiered leadership with a commitment to a shared vision for the reform and its goals.

Summary

CCRC's research demonstrates that for colleges looking to substantially improve student outcomes through changes to student advising, launching new technologies in and of itself does not change the way students experience support. Instead, e-advising must form part of a broader reform strategy that encompasses both technology and culture, with buy-in from stakeholders throughout the institution. Transformative change is a bigger and bolder project than traditional, initiative-oriented reform, requiring shifts in organizational structures, processes, and attitudes toward student support. In short, successfully incorporating a new technology, such that end users adopt that technology into their daily work, is a major undertaking—but if approached thoughtfully, it may yield proportionate rewards.

CCRC's Readiness for Technology Adoption framework highlights a number of important areas that colleges should attend to as they undertake technology-based advising reforms. Setting the conditions for reform can mean the difference between a reform that is unsuccessful, or merely superficial, and one that is transformative.

Endnotes

- 1. Technologies should support advising that is sustained, strategic, integrated, proactive, and personalized (SSIPP). For details, see part one of this packet, *What We Know About Technology-Mediated Advising Reform*.
- 2. Karp, Kalamkarian, Klempin, & Fletcher (2016).
- 3. Fletcher & Karp (2015).
- 4. Karp & Fletcher (2014a).
- A self-assessment tool for colleges based on CCRC's Readiness for Technology Adoption framework is available (see Karp & Fletcher, 2014b).
- 6. Karp & Fletcher (2014a).
- 7. Fletcher & Karp (2015).
- 8. Fletcher & Karp (2015).
- 9. Karp et al. (2016).
- 10. Klempin & Karp (2015)
- 11. See Ronald Heifetz's theory of adaptive change described in his 1994 book *Leadership Without Easy Answers*.

Sources

Fletcher, J., & Karp, M. M. (2015). *Using technology to reform advising: Insights from colleges*. New York, NY: Columbia University, Teachers College, Community College Research Center.

Heifetz, R. (1994). Leadership without easy answers. Cambridge, MA: Harvard University Press.

Karp, M. M., & Fletcher, J. (2014a). Adopting new technologies for student success: A readiness framework. New York, NY: Columbia University, Teachers College, Community College Research Center.

Karp, M. M., & Fletcher, J. (2014b). *Evaluating your college's readiness for technology adoption*. New York, NY: Columbia University, Teachers College, Community College Research Center.

Karp, M. M., Kalamkarian, H. S., Klempin, S., & Fletcher, J. (2016). How colleges use integrated planning and advising for student success (iPASS) to transform student support. New York, NY: Columbia University, Teachers College, Community College Research Center.

Klempin, S., & Karp, M. M. (2015). *Leadership for transformative change: Lessons from technology-mediated reform in broad-access colleges*. New York, NY: Columbia University, Teachers College, Community College Research Center.

This research summary was prepared by Hoori Santikian Kalamkarian, Melinda Mechur Karp, and Elizabeth Ganga, Community College Research Center, Teachers College, Columbia University. Funding was provided by the Bill & Melinda Gates Foundation.

Suggested citation: Kalamkarian, H. S., Karp, M. M., & Ganga, E. (2017). *Creating the conditions for advising redesign*. New York, NY: Columbia University, Teachers College, Community College Research Center.



Community College Research Center Teachers College, Columbia University

525 West 120th Street, Box 174
New York, New York 10027
Tel: 212.678.3091 Fax: 212.678.3699
ccrc@columbia.edu
http://ccrc.tc.columbia.edu