

A Whitepaper for Effective Action

Transforming Higher Education Without Tears

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Introduction

For many years, the urgency of change in higher education has been recognized in a string of reports and white papers. Meetings have been held. Whole new departments and programs have been started. Funding agencies in countries around the globe allocate millions of dollars, euros, pounds, yen, yuan, pesos, and reals to bring about what is widely recognized as substantive and substantially overdue change. Yet, despite the talk, despite the expenditures, and despite the widely recognized urgency of the matter, as the French say, *plus ça change, plus c'est la même chose*, the more things change the more they are the same. The purpose of this whitepaper is to outline an approach to maximize the success probability of transformation efforts through the adoption of *deep transformative change methods*.

In the remainder of the whitepaper, we start by examining why change is being undertaken now and why normal change efforts fail so often or are otherwise disappointing. The whitepaper continues by considering *deep transformative change* at the level of organizations and *deep development* at the level of individuals in three phases. It then examines two foci of deep change: (1) the fundamental mechanism of *unleashing*, and (2) the Goldberg-Laffer curve describing the economics of student engagement. The whitepaper concludes by examining why the change support services needed for effective transformation are so often lacking in a university context.

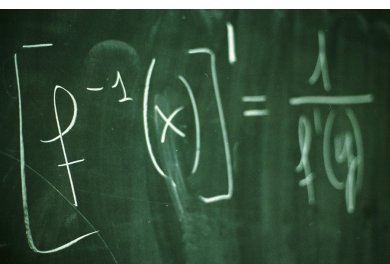
Why Change, Why Now?

There are many reform efforts underway around the world, but in a certain sense, this is a bit puzzling. The university is an old institution, dating back to 1088 with the founding of the University of Bologna. Being a professor is an old and venerable profession and in many ways there has been a long consensus about the role of such experts in the creation of knowledge, its transmission, and the vetting of new experts. Why all the fuss now about reform and change?

The short answer is that the whole notion of expertise—in both the classroom and in the laboratory—is being challenged by resources available on line. For example, 14-year old Jack Andraka (<http://bit.ly/WzLbly>) was able to invent a pancreatic cancer detection strip by himself starting from work in his high school biology class and continuing with reading of papers online, only because information is so widely accessible to so many through the power of the web. When he sought the help of a professor, he needed only that prof's lab space and equipment, not the professor's expertise.

The stunning and rapid growth of MOOCs—massive open online courses—through EdX, Coursera, and Udacity, to name a few, is also challenging the usual notion of professor as expert lecturer everywhere in almost every subject.

Given that higher education is led by a certain kind of trained expert to educate a certain kind of disciplinary trained expert, the stunning reduction in information asymmetry that is now attacking the very notion of expertise should be expected to upset the applecart for students, professors, administrators, and other stakeholders alike. Moreover, these forces are working very quickly, at rates the usual organizational apparatus in universities is largely unable to accommodate. This difficulty is briefly addressed in the next section.



Why Normal Change Fails: The Tick-the-Box Change Response

Many efforts have been made to fundamentally change higher education and many, if not most, of these have failed to bring about the desired reform. This section briefly examines the ways in which normal change is initiated and how the reaction of those steeped in the current culture resists that call for change.

Fundamental conundrum of normal change. The fundamental difficulty in transforming an organization successfully performing a routine task is that the bureaucracy assumes that normal bureaucratic procedure or minor modifications to that routine procedure can be used to modify the organization. **This assumption is false.** *Bureaucracies are largely adept at making small changes to routine procedures and have difficulty responding to calls for large change.*



Typical result: Tick-the-box change response. When a bureaucracy attempts to use “normal change” procedures for large-scale transformative change, this works (a) hierarchically, (b) through extant chain of command, (c) from the top down, and (d) through the issuance of largely uni-directional change orders.

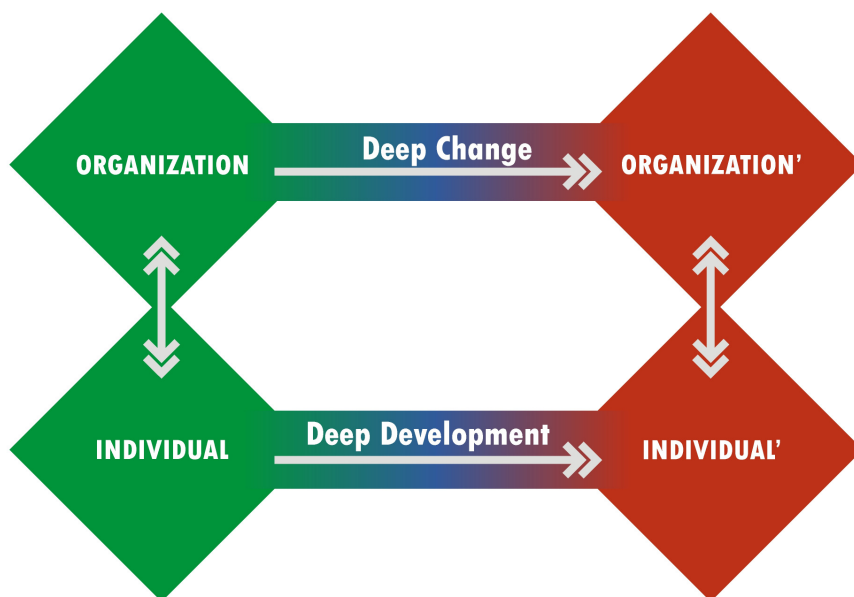
Upon receiving orders that exceed the capacity of the organization to change, lower level actors in the system respond rationally by first recognizing that the probability of success in achieving the changes through normal change methods is very low, and second, by spending large amounts of energy and time trying to show how the existing status quo or minor modifications to the existing status quo satisfy the change order.

The resultant is what we call the *tick-the-box* or *check-the-box* change response in which lower level actors devise sophisticated reporting schemes to map the status quo or somewhat modified status quo to the articulated elements of desired results of the change order. The result is an increased reporting effort to show that orders have been complied with. In such circumstances *minimal compliance* is the order of the day, the spirit of the transformation is largely ignored, and even the changes that are realized, are much less than was imagined and often at risk of not being sustained. **Result:** *Most transformative change efforts are disappointing and yield much less real change than desired at the outset.*

From Tick-the-Box → Deep Change

Thus, the culture of an organization is like an immune system, viewing change orders as something of a harmful infection, and without a systemic approach to change, change efforts, even those with the best of intentions, are likely to disappoint.

Deep Transformative Change. To make deep changes, we must recognize that the existing bureaucracy cannot be relied upon alone to implement the change. Moreover, we must recognize that the process, unlike normal change, is not only a rational process, but that it fundamentally depends on emotional, cultural, structural, and institutional factors at two levels (see below).



In particular, to make the kinds of change necessary, there must be both training of individuals to prepare them to play different roles than previously, what we call *deep development*, and a change in the organization to support the activities of these actors in their new roles, what we call *deep organizational change*. The good news is twofold: (1) transformative development is well understood in the burgeoning practice of *executive coaching*, and (2) transformative organizational change is well understood in the growing practice of *corporate change management*. **Challenge:** *Academic institutions have evolved incrementally since their establishment in the 11th century. Universities have little or no culture of organizational development, coaching, or training in practice.*

Solution. Successful transformative change in higher education must be undertaken with processes sufficiently complex and rich to move both individual mindsets and organizational culture to the new position. Moreover, these processes should be informed by a deep understanding of the academy by change agents with experience in successful transformative change. To highlight the difficulty, we contrast normal change with deep transformative change in the table below:

Table 1: Comparison between Normal & Deep Transformative Change

Normal "Tick-the-Box" Change	Deep Transformative Change
Change, even transformative change, is believed to be possible within existing system.	Change, especially transformative change, is believed to be beyond the capability of existing bureaucracy.
Change is primarily a list of desired learning outcomes or competencies.	Change requires reflection on both learning outcomes and the process for bringing about change, both.
Change comes from the top.	Change is initiated anywhere and is ultimately embraced throughout.
Change is usually one-shot of planning followed by open-loop execution.	Change involves planning, effectuation, and iteration from pilots, followed by scale up.
Change is strictly a rational process.	Change is a complex combination of rational, cultural, emotional, & institutional processes.
Change involves administrators & faculty alone.	Change involves all stakeholders.
Change is driven by external factors.	Change is driven by external & internal factors, & is inherently reflective.
Change is attempted within existing reporting lines & organizational structures.	Change is accompanied by new structures that are necessary to incubate, pilot & diffuse transformation.
Change is performed at scale from the get go.	Change is a series of little bets that are scaled after they prove out.
Change is controlled top down.	Change is collaborative and is diffused middle out.
Change is viewed as largely bureaucratic and can be performed by existing personnel with existing training.	Change is viewed as complex organizational and individual process in which new personnel may be needed and existing personnel may need to be retrained.
Change focuses primarily on content & curriculum.	Change in content & curriculum flow from the possibilities of unleashed learners.
Change in what teachers do is most important.	Change in what students do is most important.
Change in pedagogy is viewed as a set of techniques & tricks to be mastered.	Change in pedagogy is viewed as a deeply held personal set of beliefs that helps faculty learn to trust students & believe in their resourcefulness, creativity, & wholeness as human beings.

These differences are significant, and to a certain extent the failure of normal change is one of attempting to accomplish something complex, too simply, and this recalls Einstein: “Everything should be made as simple as possible, but not simpler.” Successful transformative change requires additional complexity over normal change, although we would like minimal additional complexity and a path toward adding the needed elements.

Fortunately, effective transformative change can be accomplished in a straightforward way with appropriate sequence and emphasis of activity. ThreeJoy Associates, Inc. brings experience in deep academic change going back more than 20 years with recent assignments in the US, Asia, South America, and Europe. The next section summarizes the phasing required for effective change.

3 Phases: Initiate, Effectuate & Activate

3 keys to effective transformative change are as follows:

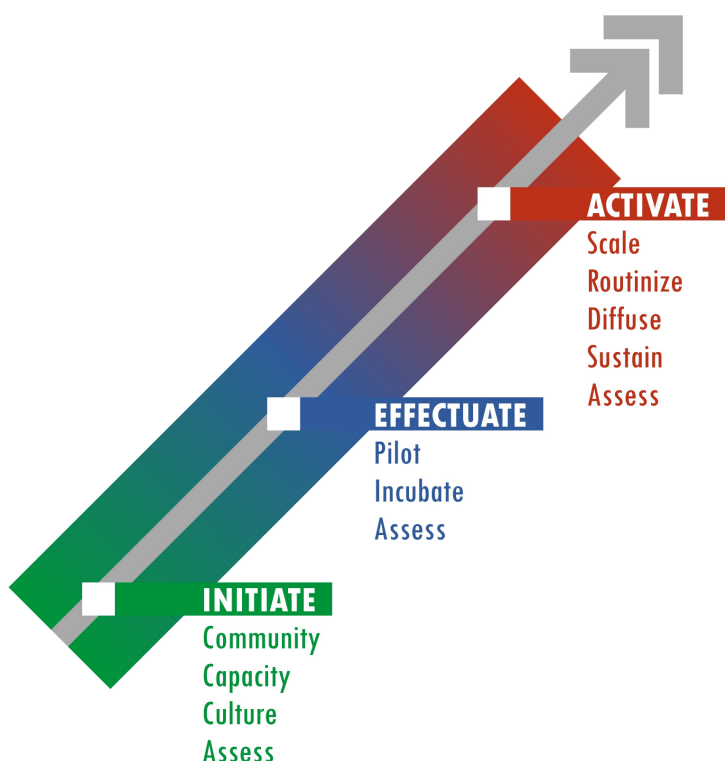
- **Initiate.** Spend time upfront building culture, community, and individual & team capacity.
- **Effectuate.** Develop new courses, content & program elements through small pilots and opportunistic experimentation (effectuation).
- **Activate.** Progressively scale & activate permanent program elements following successful incubation pilots.

These phases can be rolled out in parallel for all years of the curriculum, sequentially from first to fifth year, or some combination of the two strategies.

A common difficulty of tick-the-box change in the context of educational reform is that the effort rushes headlong into content-curriculum change without adequate emotional-cultural preparation and without

adequate understanding of the ways in which the current situation is not serving stakeholder needs, particularly students, employees (past students) & employers. Without adequate cultural reframing, the effort is likely to replicate past inadequacies. Without adequate understanding of the ways in which current efforts serve and don't serve key stakeholders, the effort is likely to direct significant resources at areas that won't substantially improve educational outcomes.

Proper phasing of the effort starts by laying the groundwork at the level of individuals and the organization by getting emotional and cultural factors moving prior to programmatic elements. This sets the stage for (1) design of programmatic elements with the right stuff for high levels of student engagement and (2) the ability of current faculty and staff to execute those plans from a place that believes in students.



An effective effort continues by recognizing that the current system has limited or no experience generating the kind of unleashing experiences needed for effective educational transformation. Thus, the ability to predict the educational outcomes of planned reforms is limited, the process is inherently uncertain, and requires a prototyping phase that deals well with uncertainty. As such, the usual process of planning is replaced by a more entrepreneurial process of effectuation, couched in small-scale pilots and systematic incubation.

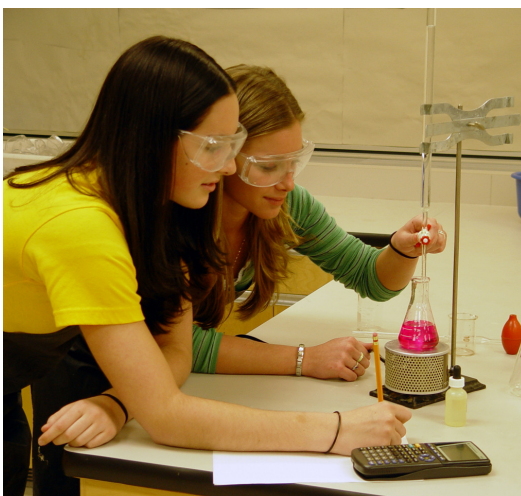
Finally, efforts developed successfully during the second phase are scaled economically to the whole curriculum. This requires a method that achieves significant student engagement and intrinsic motivation without large new investments in faculty size. In research-engaged institutions this can be particularly difficult because of the tug-of-war on a faculty member's time to both (1) teach effectively and (2) bring in research funding and write peer-reviewed research publications. This requires a brief discussion of student engagement and the economics of scaling.

The Fundamental Mechanism of Student Unleashing

There is a tendency in the literature of student engagement to speak in code words, words such as *active learning*, *experiential learning*, *problem-based learning*, and so on, and there is nothing wrong with these discussions; properly done these techniques for student engagement can unleash students, enriching their self-efficacy and ability to learn on their own.

Having said this, however, the idea that these methods are rationalistic procedures misunderstands the fundamental emotional mechanism by which these methods work. A student becomes unleashed in a particular sequence of *emotional* events. First the student is *trusted* by a teacher, parent, or even him or herself. The student then *believes* that he or she is trusted. The student then has the *courage* to take action repeatedly until he or she succeeds. The key formula here may be written as follows (where S = Student):

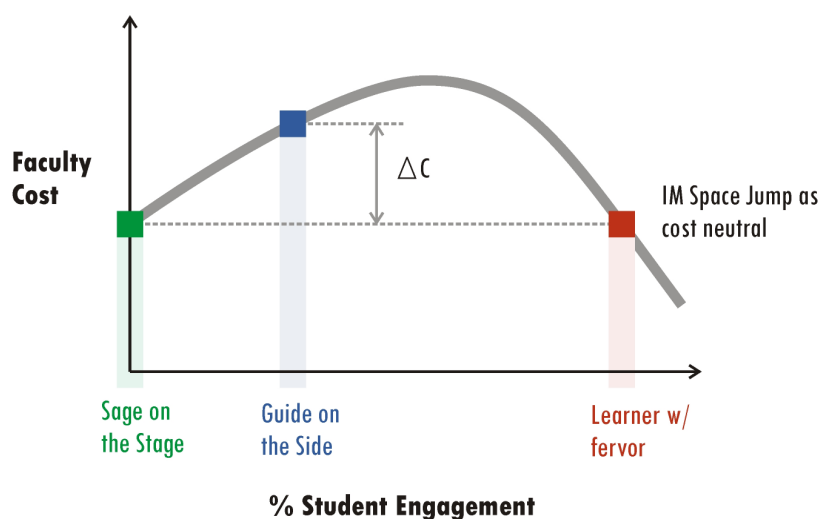
Trust S → S believes he/she trusted → S gains courage → S takes iterated action



The key point to take away is that the good stuff in a 21st century education comes about, not mechanistically, but through a complex of emotional interactions, interactions that must be genuine to be effective. A key focus of change efforts needs to bring about individual and organizational change to support the necessary trust & courage.

The Economics of Student Engagement

One of the problems of achieving high student engagement is that many of the techniques that are known to work well, scale poorly. This is illustrated below in what has come to be called the *Goldberg-Laffer Curve*. In the 1980s, economist Arthur Laffer suggested that at ever increasing rates of taxation, governments tended to collect less revenue. Whether this is true or not is not of concern here. Taking the shape of Laffer's famous curve as a starting point, we replace government revenue vs. percentage taxation with the axes of faculty cost and percentage student engagement as shown below.



In the usual low student engagement setting, the traditional professor or *sage on the stage* goes into class with 20-year old course notes and delivers lectures to largely disengaged students. In response to low engagement, administrators ask the “sage” to become the *guide on the side* by adopting problem-based learning (PBL), active learning, or some other pedagogical method. The faculty member perceives that should he/she comply that this would result in an increase in faculty prep and other time, which the faculty member perceives as a cost, ΔC . Faced with this increased cost, the faculty member has 3 choices. He/she can reduce the highly valued research activities rewarded by the university, work more hours, or simply ignore or evade the administration's request. Although there

are some who take the request for reform seriously, the usual case is stiff resistance to such calls, in part, because of the economics of the situation.

Scalable solutions to this problem recognize that as student engagement increases, students can take on more of the costs of their education. Ideally there exist a place on the cost-engagement curve that is neutral with respect to faculty time, and the *learner with fervor* is achieved at no net increase in faculty cost with substantially higher student engagement.

In practice, such boosts in student engagement have been achieved, and doing so requires attention to the fundamental mechanism of unleashing discussed earlier. It also suggests that scalable solutions will almost always involve a higher degree of student involvement in the transformation effort than is tackled in normal change approaches.

Supporting Your Change Initiative

In the corporate world and the world of government, it is routine to have large organizational development (OD) staffs to help with coaching, training, and change management. Moreover, the rise of executive coaching over the last two decades is a global phenomenon and it is the rare leader in industry who has not received the aid of a trained coach (<http://coachfederation.org>). As such, these organizations are well positioned to deal with new challenges as they arise, and existing OD or human resources (HR) departments can help the organization respond quickly and effectively.

The situation in academic circles is much different. Human resources departments in colleges and universities tend to concentrate on routine employment and benefits matters with little or no focus or capability in training, coaching, or facilitation. During the nearly 10 centuries of relative stability in the academy, especially given its individualistic nature, this approach has served reasonably well; however, during the upheaval of the current era, the continuing lack of investment in organizational development is starting to hurt.

Given the lack of change knowledge inside the university at present, and without robust internal external resources to draw upon, it may be helpful to hire external consultants and coaches to assist with a deep change effort. The world's most dynamic organizations are supported by these kinds of resources and as higher education works to reform itself, it will be increasingly common to turn outside the organization to support effective transformation. Broad categories of services that may be helpful include the following:



- Strategic & tactical change management consultation, planning, and execution.
- Communications, social media, and inspirational speaking.
- One-on-one coaching for effective change leadership.
- Team coaching for change team effectiveness and high performance.
- Team building & facilitation for building team best practices.
- Culture and program assessment to understand situation & change dynamics.
- Specialized training programs for personal and organizational change.

There are many firms that offer these kinds of services, although the number of firms with experience in higher education is small. Furthermore, the challenge of bring effective change management from the strict hierarchy of the corporate world to the mixed administrative-faculty governance model in the university requires special attention to the institutional and cultural differences of academic life.

To discuss the issues in this whitepaper as well as success possibilities for your change initiative, contact Dave Goldberg at deg@threejoy.com or by phone +1-217-621-2645.



David E. Goldberg

David E. Goldberg is a leading speaker, author, strategist, trainer, and coach with experience in helping to bring successful change to both academic institutions and academic careers around the globe. Toward the end of a 27-year distinguished academic career in which Dave achieved renown for his path-breaking work in artificial intelligence, he founded the iFoundry incubator for educational change at the University of Illinois. iFoundry's success in unleashing students was so startling, that in 2010, Dave resigned his tenure and a distinguished professorship to start ThreeJoy Associates, a change consulting, training and coaching firm for transforming higher education. Work at Illinois, Olin College, NUS (Singapore), UFMG (Brazil), and other innovators led to the development of the SmoothChange™ method for transforming higher education, featuring rapid innovation and respect for faculty governance.

In 2012, Dave founded Big Beacon as a non-profit organization for transforming higher education. Today, Big Beacon gathers students, innovators, and employers together to learn from each other and to advocate for transforming higher education. In 2014, he co-authored the groundbreaking book, "A Whole New Engineer: The Coming Revolution in Engineering Education," available in hardcover and all major e-book formats.

Dave maintains an active correspondence with many of the world's top thought leaders in educational and organizational change; he is constantly on the look out for new ideas, thinkers, and practices that lead to success in transforming higher education. He is co-host of Big Beacon Radio, Transforming Higher Education, a regular radio program on VoiceAmerica.com.

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