

Achieving transformational or sustainable educational change

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Introduction

Researchers and practitioners often feel that the demonstrated merits of their work should be sufficient to drive adoption by others. However, in practice, in education, new research findings or even best practices spread slowly, if at all. Achieving significant adoption usually requires a project specifically addressed to this: a change project. Even when change is explicitly called for and funded, only some projects can truly be characterised as change projects. Many others claim this while retaining a structure which only leads to research outcomes. Research and change projects have different goals and therefore must be constructed quite differently. The aim of a research project is to establish new knowledge, whereas the aim of a change project is to persuade people to change their practice based on existing knowledge. We discuss seven major decisions that shape a true change project.

One decision concerns the level at which the intervention to promote change is applied. While some suppose that in education, transformational change requires interventions at the institutional policy level, this chapter argues that achieving educational change across a whole institution is not always done by directly intervening at that level. Many of the most far-reaching change initiatives have been driven from other levels. Six levels are considered, with examples of success or failure at each: the individual learner, the individual teacher, the course, the institution, the discipline, and the sector.

The main activity in a change project is persuasion: almost all the project has to do is to persuade a range of people that the project is worth doing; that is the main deliverable. Success depends on the prior assembly of resources on which to base the persuasion and then the implementation or the changes envisioned. The main barrier to these is generally disciplinary differences which, as elaborated later on, almost entirely make it difficult for academics to appreciate that educational innovations in other disciplines are relevant to their own.

Background

This chapter derives from our attempts to generalise from the institution-wide change at the University of Strathclyde achieved by the REAP project (Re-engineering assessment practices in HE) (Nicol 2011). It started with the redesign of assessment and feedback practices in nine departments across five faculties, and with student numbers ranging from 190 to 560. Of the 10 redesigned modules, six showed measurable gains in student test results, and all showed high student satisfaction and positive staff attitudes about the teaching benefits to the department. Some redesigns showed reduced teacher workload, and none increased it, after allowing for the cost-to-change. Indicators of wide-spread organisational change were the take-up of the project ideas in other departments beyond those funded by REAP, the incorporation of the REAP principles of assessment and feedback into a new university-wide project, the continuing reference to the ideas and principles in reporting documentation, and a ‘feedback as dialogue’ initiative designed and developed through the student union.

This chapter is a companion piece to Draper and Nicol (2006), and Nicol and Draper (2009). The latter analysis gives more details of REAP, is structured around Lindquist’s (1974) barriers to institutional change, and offers seven principles for constructing a project to achieve such change. Readers are referred to it for example cases of course designs, REAP’s list of 11 design principles, and further discussion of rhetorical resources. This chapter develops that theme in a different way, asking what the key decisions are in shaping any such project.

Seven big decisions in shaping an educational change project

In this section we identify seven of the biggest decisions taken, whether explicitly or not, in shaping an educational project intended to change practice significantly. (And we invite the reader to consider, for any project that seems to have omitted some of them, whether it might have been more successful if it had addressed them.) They will be illustrated mainly in relation to the REAP project summarised above, and Twigg’s Programme in Course Redesign (PCR).

The PCR, conceived and directed by Carol Twigg (2003) and funded by \$8.8m from the Pew charitable foundation, ran 1999–2002 and gave \$6m to 30 course teams in HE across the USA to introduce redesigned courses. They spanned many disciplines (including English, Maths, Chemistry, Psychology), and institutions of many kinds from community colleges to private four-year universities. All 30 showed significant cost reductions, and 25 showed significant measured improvements in the learning outcomes.

It achieved its strategic purpose of demonstrating, contrary to what almost everyone in HE, particularly researchers, had assumed: that it is possible to reduce costs and raise learning quality simultaneously in HE. This fundamentally breaks

the assumption of an inevitable trade-off between cost and time: in particular, that raising quality requires increasing costs. The PCR also, we believe, showed that in educational designs you achieve only what you aim for. Many projects have taken (and achieved) the use of new technology as the goal but it seems that unless you have the explicit and consistently pursued goals of reducing costs and raising learning quality, then you do not get them in course redesigns. Potential benefits are not normally, let alone automatically, realised.

A. Selecting the project research type, and its consequences for cost and quality control

The most basic, and the first, decision for an educational project is where you intend it to lie on a generalised pure-applied spectrum running from pure research through development to 'rollout' (i.e. spreading a new practice). Shayer (1992) characterised a version of this as a developmental sequence of educational project types: studying the primary effect (establishing that with the new method a gain is possible at all), replicating it without the original researcher, and finally demonstrating that teachers who were not volunteers can get the same effect.

Projects at different points on the spectrum have different characteristics and purposes that must be clearly acknowledged and not conflated. This chapter is concerned only with achieving widespread change, i.e. essentially with rollout projects, which differ from other educational projects. For example, an experiment to test the value of introducing a novel teaching method or technology, while perhaps being mindful of costs, should not have this as the driving criterion, but should be concerned with studying the primary effect. In contrast, rollout is generally only worthwhile or even permissible if costs and quality are favourable. Almost certainly, then, any large-scale change needs at least to contain and preferably to reduce costs; and similarly at least to maintain or preferably to raise learning outcomes. However, Twigg's PCR showed that these requirements will not be met unless they are explicitly required and designed for in every case, a lesson the REAP project followed. Consequently, the decision to aim for widespread change immediately entails making cost and learning quality explicit and high-priority requirements, with pervasive consequences for the project. It is this which makes the selection of the project type the first and most important decision. Failure to recognise and act on this will usually doom a project, like so many others, to being (despite any intentions to the contrary) not a rollout project but at most a demonstrator with no sustained change achieved.

B. Select the level at which to apply the primary lever for change

Even if the project purpose is to change a whole institution, that does not necessarily mean that the institutional level is the one to which to apply the lever, only that it is the level on which final success or failure is to be judged. As an

analogy: to bring down a dam (the intended ultimate, but perhaps indirect, effect), is it most effective (as a primary direct action) to blow it all up, or to drill a small hole in it somewhere, or to knock a small gap in the lip and let erosion enlarge it? In many ways the second biggest decision about method which a transformational project takes is what primary change (direct intervention, as opposed to indirect but intended effect) it will attempt, and the major part of this decision is selecting which level to act upon. Six levels are discussed here.

The level of the individual teacher

Very many people (funders, pupils, parents) clamour for training of teachers (i.e. in HE, academics) as an important way to improve learning quality and quantity. Introducing more teacher training is in fact a common indirect institutional intervention. Evidence from learner ratings of teachers tends to support this (Gibbs 2010). However, the evidence based on learning outcomes suggests *no* effect from the quality of the teacher's training (Chingos and Peterson 2011) in the school sector, still less in HE. This seems to imply no effect of training on learning outcomes (although there may be an effect of practice initially). In the field of feedback, there are many sets of published advice for teachers on how to give better feedback, but we know of no studies showing whether this translates into better learning outcomes for students. The first job (research) would be to demonstrate that such interventions affect learning outcomes at all. It would then remain to be proven that this could be a successful level for rollout.

This section mentioned conflicting primary evidence about effects at this level, and an absence of primary evidence about feedback changes applied at this level. If primary evidence emerges, then a rollout project could be planned at this level.

The level of the individual learner

Interventions at the level of the learner but independently of normal classes may certainly be powerful: for example, prior selection for IQ or academic achievement is the biggest single factor predicting dropout rates. After entry, training students in study skills is another example of this kind of intervention. In the field of feedback, requiring students to specify what feedback questions they want answered (elective feedback, see Draper 2011) is a promising method. If strong primary evidence for this effect (not just student approbation but learning outcome improvements) emerges, then a rollout project would be worthwhile at this level.

The course level

Many research projects, including interventions detailed in some chapters of this book, have demonstrated that the course design level can be effective in changing

learning outcomes significantly and repeatedly. Twigg's PCR and REAP selected course (re)design as the main lever of change, and thereby demonstrated that this level can be the basis for successful rollout.

The institutional level

However, the above levels are far from the only possibilities on the face of it. For example, we could imagine a university introducing a policy that required that all course proposals, including renewal of approval for courses, produce both direct evidence from test outcomes and student feedback, and evidence from the published educational literature to justify each course's learning and teaching design. This would transform learning and teaching into an evidence-based activity from the current folk medicine/'traditional practice' basis. The field of medicine illustrates both how slow this shift is in coming, but also its benefits. Another example would be the University of Surrey's Professional Year Programme, an institutional policy from its founding, which now sees 80 per cent of students across all degree programmes include a sandwich year (between their second and fourth years) of professional training placement outside the university.

There has been a recent flurry in the UK of institutions imposing a policy about uniform deadlines for the return to students of feedback (e.g. two weeks). However, this seems to be aimed at improving NSS ratings, rather than learning outcomes. It is also unrelated to both the two relevant times for receiving formative feedback. The first is immediately upon completion of the work, when the student's mind is filled with the whole exercise, and which can be achieved, for example, by online testing software, or by an assessment being marked on the spot in the same session by displaying the right answers and having students mark the work. Two weeks is four orders of magnitude slower than this. The second relevant time is when the student is attempting the next similar piece of work, which might be three months later for a termly essay, and earlier delivery is irrelevant to the feedback being applied by the learner.

It seems that this level could be successfully used for rollout, although in many cases it has not been.

The disciplinary level

Still more interesting because it seems so indirect, yet has some of the best evidence of success in improving learning, is the strategy embodied in Hestenes' work. Hestenes invested considerable person-years of work in developing the Force Concept Inventory (FCI) (Hestenes *et al.* 1992), a test for physics students that shows what qualitative understanding they have of some basic (HE year 1) topics. He did not primarily develop and promote any new ways of teaching, no new learning activities, no special teacher training. Nevertheless the FCI led to some of the biggest published educational improvements in HE (e.g.

Crouch and Mazur (2001) who report a near-tripling of the amount learned on a course).

We might view this, after the fact, as a remarkable transformational strategy: the FCI has such tremendous ‘face validity’ that academics teaching relevant courses simply cannot bear it when they see the poor results their own students manage on the test. The FCI worked by delivering a simple tool by which each academic can measure the effectiveness of their own teaching, both before and after any change of method. Subsequently they have then either devised new methods, or sought to adopt others’ methods that have shown success at this. Hake (1998), in his noteworthy paper drawing on 62 courses with 6,542 students, reports the success following on from this due to the spreading adoption within HE physics teaching of new methods. This is the educational equivalent of a medical project which, rather than developing a single new treatment, simply collects and publishes reliable cause-of-death statistics, or five-year survival rates for different cancer treatments, thereby establishing a measure plus benchmarks that all researchers and practitioners can use.

The CLA (Collegiate Learning Assessment; Klein *et al.* 2007) is another interesting example of a measure already in existence, offering a test for graduate attributes such as problem solving. A suggestion for other disciplines might be to devise and publish measurement instruments based on ‘threshold concepts’ (known problem barriers for learners) for that discipline. The spread of Problem Based Learning (PBL) in medical schools amounts to a different kind of example of disciplinary level transformational change. Note that in the UK this was initiated only after heavy pressure from the disciplinary licensing body (the General Medical Council).

Rollout has certainly been demonstrated at this level, and might perhaps be applied to feedback. Disciplinary level standards of feedback to students certainly exist (and so could be the object of change projects): for example, in teacher training, requirements for reflection by trainees on their practice, or for observation of their practice by supervisors or mentors.

Sector level

Twigg’s longer term strategy is to bring about sector-level change using a course-level primary intervention, and for the PCR and successor projects to spread the ideas now convincingly demonstrated. (She therefore selected a wide range of disciplines and of types of institution so as to demonstrate the sector-wide implications of her project.) Sector-level primary interventions can and do occur in terms of government policy and funding changes, but have more often concerned broad curriculum specifications (i.e. which subjects get funded) than learning and teaching methods. It could be argued that the assessment and feedback subscale of the NSS is a sector-level intervention that has brought widespread change, in that feedback return deadlines have been introduced in many HEIs, although as noted above their educational effectiveness may

be disputed. Rollout of rather different content (e.g. curricula) has certainly occurred at this level, and it seems a possibility for feedback projects.

Summary

Thus there are in fact a range of quite different strategic approaches for bringing about educational change. REAP demonstrated an institutional-level *effect*, but using a course-level primary *intervention*. PCR demonstrated a sector-wide effect, again using a course-level primary intervention. Hestenes precipitated a discipline-level effect, from a discipline-level primary intervention. Requiring (more) teacher training in a HE institution (e.g. a university) attempts an institution-level effect from an individual teacher-level intervention.

C. The recognised problem area

The next crucial choice for a project is that of the ‘issue’: the widely recognisable educational problem to be tackled. In the context of this book, it is ‘feedback’, an issue widely seen as poorly handled in HE. This is important in getting immediate recognition from others of the relevance and importance of the project. Funding is often tied to initiatives defined by such pre-recognised issues. We could say this is the level of the apparent problem, of ‘symptoms’: like the ‘black death’ as opposed to identifying the plague bacillus.

REAP’s choice was ‘assessment and feedback’ for this decision; while Twigg’s choice was cost-benefit ratios with new learning technology. Any tour of recent funding initiatives throws up many alternative candidates, e.g. student retention, flexible learning, graduate attributes, etc.

D. The educational aspiration

Popular perceptions of problems, however, correspond to symptoms, and may not turn out to correspond to underlying causes (diagnoses). An important feature of a good project will be a less obvious idea about educational good that can serve as the source for innovative suggestions about new learning designs. In Twigg it was ‘active learning’; in REAP it was ‘self-regulation’, i.e. the idea that the real aim of feedback should not be correcting the current product (e.g. an essay) but making the learner increasingly able to detect and remedy their own errors in the discipline. Without an aspiration of this kind, a project could have a collection of traditional remedies to draw upon, but would be less likely to achieve significant learning gains beyond the norm of current practice.

E. Design principles

Even given a target symptom and a putative diagnosis, there is still a large gap before arriving at a plan of action that is practical in a specific context, and can

be communicated to the people who must carry it out. REAP's approach to this was to have a set of 11 'design principles' prepared in advance of the project. These are short (6–14 words long) action-oriented heuristics, designed to start the process of bridging between abstract theory and practical action (e.g. 'Provide opportunities to act on feedback'). From the viewpoint of communication, they need to be ready in two forms: the short principles themselves, and slightly longer descriptions that clarify their meaning and head off any misinterpretations that the slogan form may allow, and to have justifications prepared in terms of published evidenced – see below.

Design principles play the role of families of remedies or treatments (cf. pain-killers, anti-inflammatories, antibiotics), as opposed to specific remedies (cf. aspirin, penicillin) which are analogous to specific learning designs from the library discussed in the next subsection. Design principles are also comparable to Alexander *et al.*'s (1977) 'patterns' in the field of architecture, in that they do not specify a whole design or solution, but express a functional element that is common across many different good designs. Clauses of the Feedback: Agenda for Change, which encapsulates the ideas on which this book is based, would provide a design framework.

F. A library of learning designs to suggest

In both REAP and PCR a crucial part of the project was discussions of course designs between project members and course teams. For this, another resource was vital: having key project members know about a large set of possible designs, mainly from the literature. Thus if a client says, 'The principle of "Encourage teacher-student and peer dialogue around learning" sounds good, but how could that be done?', then the advisor might suggest feedback vivas (where students must discuss feedback with staff in interviews), or EVS-mediated class tests. (For descriptions, see Draper 2011.)

Experience both within REAP, and in REAP-based talks to other audiences, shows how important such a 'quiverful' of designs is to the dialogue that is triggered, and to the inspiration they give to audiences. The nearest this resource came to a written form in designing the REAP project may be the literature review (Nicol and Macfarlane-Dick 2006); but it could also be embodied in a repository of 'interesting' designs like the one generated during the REAP conference (Nicol 2011). In REAP, at least, this library was not a resource finalised in advance so much as one constantly expanded and updated during the project.

G. The role of evidence

Published evidence in the literature from past work is also important to persuading some people. This is an overlapping set with the previous one of learning designs, but by no means identical since learning designs are often published as

'how-to' accounts, with little or no substantial evidence of their effect on learning outcomes. Having evidence to hand can be important in persuading clients.

Another major decision is whether to invest resources in collecting and publishing evidence of the effect of the project on learning outcomes. It is a decision, not a detail that can be left for the project to decide later, because it takes resources: hiring people to collect and process data, extracting commitments from clients to support this. (PCR and REAP both found that it was advisable not to pay clients anything until the evaluation data was supplied.) However it is also an important decision because evidence has a large effect on persuasion, both within the project (convincing course teams) as well as externally, and for persistence i.e. sustainability (why should newcomers to a course team maintain the change in future?).

Barriers to direct action

Two barriers to the easy spread of research findings to widespread uptake in education are now discussed, which in part explain why rollout requires major additional work in order to succeed.

Disciplinary differences

Although this section of the book is about institutional change management, as if a university were the natural unit of organisation, in reality HE is fundamentally cross-organised by discipline. Even at the level of first year students, a literature student learns and is taught in fundamentally different ways from, say, a chemistry student. The lives of the academic staff are much more bound to their discipline than to the HEI. Their next job is either in another HEI, or depends upon publications in journals controlled not by the HEI but by their discipline. More fundamentally, their ways of learning themselves and of teaching others, both good and bad, come from their discipline and not from any general theory or practice of education. It is because of this that the institutional level is not the only possible way to initiate transformational change: it has been done at the disciplinary level (among others).

It also means that even when an educationalist finds a concept about learning and teaching that applies across disciplines, academics will not recognise its meaning in their own discipline. At the simplest level, if we give a talk, we have to illustrate each method or idea with both an example from an essay based-discipline and one from a calculation-based discipline, or else the other half of the audience will shake their heads politely and say the idea is not relevant to them. If we simply talk in our own, to us natural, disciplinary language of education, then no-one at all other than educationalists will understand us. This matters to a change project when (like REAP) it needs to enlist staff across disciplines as fundamental participants. In that case, the problem of translating

ideas across disciplines is fundamental to both the design and execution of the project. Thus a rollout project usually has to support the work of translating educational ideas between disciplines, and/or via the educational literature.

Constructivism applies to rollout projects

As discussed in Nicol and Draper (2009), in REAP we repeatedly experienced that at the end of presentations, people would approach us to discuss ideas they had had about applying the ideas in their own contexts, and that these ideas would go beyond what we could have suggested ourselves. This means that to communicate across disciplinary divides, we need not simple precision but a suggestive lack of exactness that draws the recipient into the process of making practical sense of the ideas. Thus something more than just ‘translation’ is involved. We find we must apply constructivism not just to basic teaching of students, and not only to feedback (i.e. get away from prescriptions about feedback as if this were something teachers must do to passive students), but also and most radically to our interaction with colleagues in rollout projects. This cannot be ‘staff training’ or instruction. Simple assertions are not what bring about the desired effect. It is about trying to combine general educational ideas with knowledge of the course specific context: the discipline, the particular set of students, the existing learning and teaching practices there. Thus, again, the work of transfer or translation, i.e. re-construction of an idea in a new context, is substantial, and is a major part of the work of a rollout project.

Many rollout projects consist of persuasion

Some strategies for large-scale change avoid a focus on communication difficulties. Hestenes, by addressing the discipline level, did not need to work on cross-discipline translation. Furthermore, by providing a validated test instrument, he did not even rely on convincing colleagues either by theory or by his own evidence: he manoeuvred them into themselves collecting the data that would convince them from their own classes. (Advanced constructivism is the facilitation of the ‘autonomous’ learning you wish to come about!)

However, projects such as PCR and REAP which address the course level must get large numbers of people to change their ideas and behaviour in response to the project. This is also true of many other rather differently structured projects, e.g. redesigning a university course database. That would involve enlisting those in central university units (registry, room bookings, etc.). All such projects must get large numbers of people to change their ideas and behaviour in response to the project. Consequently they are necessarily mainly about persuasion and communication, as opposed to producing some object or piece of software or new knowledge.

In the light of this we can review the seven project design decisions, and see that most of them are each associated with a resource for persuasion and

communication. The relationships of decision steps and resources, and some aspects of the resources that need to be managed in a project, are illustrated in Table 16.1. The parenthesised row numbers refer to rows in the table; for example '(row 5)' refers to whether the resource is updated during the project. The following bullet points are steps in the argument about the relationships amongst project design decisions, persuasion, and rhetorical resources.

- All seven are decisions that need to be taken (**shows as ✓ in row 1 of the table**) and together largely shape the project (1).
- Inducing people to collaborate with and in the project is a task of persuasion. The decisions define the nature of the project, and people are persuaded to the degree these features of the project coincide with their existing interests, and/or are convincing to them.
- While one source of persuasion is evidence and reasoning, short memorable phrases expressing powerful ideas can be important as well (e.g. 'self-regulation', 'feedforward', 'time on task'). Like symbols and proper names in general, they may attract attention and convey some meaning before the recipient properly understands them; they are helpful in manipulating the idea as a chunk in thinking and planning; and they may be recalled after recipients have forgotten the detail of the explanation that originally convinced them. They are therefore 'rhetorical' devices in that they are important to persuasion in a way beyond naked evidence or logic, but not in the sense of being insincere. This is in line with Putnam's (1975) argument that ordinary people (including ordinary professors of philosophy) do not in fact themselves know exactly what they mean by the most ordinary words such as 'water' or 'gold', but ground their meaning in what other experts mean by the terms. Inventing or selecting such phrases can be important work in achieving persuasion that persists.
- A persuasive resource may thus be classified (row 2) into whether it is a **memorable phrase**, or an **explanation** ('making plain in detail') such as a case study or evidence. In the case of design principles, both are needed: both a summary slogan, and a longer, clarifying description. In other cases, the idea may be generally well understood and neither slogans nor evidence required. (A wish for this chapter is that it will make phrases such as 'rollout project' more recognisable; cf. table row 2, first two columns.)
- When a resource is explicitly assembled for the project, then a feature of it is its degree of novelty: whether invented, or taken as-is from the literature, or an intermediate case where a term is taken but a particular definition of it is developed for the project. In the case of evidence, both existing evidence and new evidence of the project's own successes are important. In brief: whether the resource is **adopted**, **adapted**, or freshly **created** (row 3).
- When a resource is explicitly assembled for the project, then at least a nucleus of it may need to be ready in advance (row 4).

Table 16.1 An example of the relationship of design decisions to resources for persuasion in the course-level REAP project (this kind of table would aid planning this kind of rollout project)

Aspects of persuasive resource creation	Project design decisions / steps						
	Rollout project type	Level of the intervention	Problem area	Educational aspiration	Design principles	Learning design library	Evidence
	A	B	C	D	E	F	G
1 Decision? ✓	✓	✓	✓	✓	✓	✓	✓
2 Memorable phrases and/or explanations	(?)	(?)	M- phrase	M-phrase	M-phrase; and explanations	Explanations	Explanations
3 Created, adapted, or adopted	Adopted (cost, quality)	Adopted	Adopted	Adapted	Created	Adopted; some adapted or created	Adopted; created
4 At least a nucleus ready in advance	✓	✓	✓	✓	✓	✓	✓
5 Update during project ✓✓					(✓)	✓	✓



A resource may alternatively or additionally be updated during the project (✓ in table row 5 where it has been).

Thus the project design decisions mostly serve directly to promote the persuasion that is the heart of rollout projects like PCR and REAP. In those cases, communication with course teams across many disciplines is the biggest target, but other stakeholders are also important, e.g. HEI management, funding bodies, students. As sketched in Nicol and Draper (2009), the same resources can be used in different sequences and mixes for each audience. (Cf. Latour (1988) for a view of Pasteur's 'scientific' success in terms of progressively persuading ever more and bigger interest groups within French society to promote his programme.)

Assemble communicative resources before the project

The communicative resources required to change minds need to be largely assembled before the project begins. This is the reverse order to that in pure research projects, where evidence is a final product, along with catchphrases that improve post-project dissemination of new ideas that have been created during the project. Here, however, the persuasion needs to be the focus of not only action but preparation in a project like this, just as the experimental design and required equipment are in an experimental project.

This has implications for funding decisions. Judging project proposals by which has signed up the best clients means awarding money for nothing after the real work has been done, like increasing your advertising budget only after your sales have increased, not in order to bring them about. Conversely, funding a proposal that has not already assembled its rhetorical resources means that no persuasion will be done until after the end of the project. Creating the resources can be a project in itself, and has somehow to be funded separately. The need for communicative resources to be assembled largely in advance is another way in which rollout projects are quite different from research projects.

Conclusion

The most important message of this chapter is that rollout projects are quite different from research projects. Failing to understand the need for them, and their different nature, is a major reason for the common failure to achieve widespread and sustained educational change, which has seldom been effectively addressed and managed. Seven major decisions that feed into rollout projects are identified. The second message is the possibility, when planning to precipitate transformational change in education, of selecting a level for the intervention that may not be the institution at all. Alternatives are reviewed. Third, given that the main business of a rollout project is persuasion, the notion of rhetorical resource was discussed, and linked (in the table) to the decision stages.

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