

Teachers who initiate curriculum innovations: Motivations and benefits

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unpublished doctoral thesis

Excerpted from Chapter Eight, Conclusions

Introduction

How can work be made
more humane, more creative, and more meaningful?
(Csikszentmihalyi, 2009)

This question, written for a general interest publication, could have been one that the teachers in this study could have written. How can I make my students' work of learning more meaningful? How can I inspire my students to enjoy learning? How can I make my own work more interesting and more compelling to enjoy for the long term? The teachers interviewed for this study inadvertently asked and answered these questions through creating their own classroom innovations.

The main aim of the study was to explore the views of South Dakota teachers concerning their involvement in initiating curriculum change. The study began with the theoretical perspective that teacher-initiated innovations might be explained through motivation theory which explains high-engagement computer games (Malone & Lepper, 1987), particularly the ideas that appropriate degrees of challenge and control contribute to higher user engagement. Other theories of motivation, such as self-determination (Martin & Dowson, 2009), action-control (Gerjets & Scheiter, 2003), and flow (Csikszentmihalyi, 1990) also contributed understanding of teachers' self-initiated innovations. These theories shared motivating elements such as challenge and control. The explanation was enhanced through understanding teachers' career cycles and values as explained in the holistic research in teachers' lives (Day, et al., 2007; Huberman, 1993; Jerslid, 1955; Lortie, 1975).

Two studies in teachers' lives (Day, et al., 2007; Huberman, 1993) discussed teachers' career stages and elements of identity, both of which were found to have some bearing in this study, as is shown in the summaries of the findings chapters below. The existing literature and

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the results of this study together provide a body of information on teachers and innovations which has implications for schools at the local level. The results also provide suggestions for school administrators in how to address local issues of teacher quality and teacher retention.

The Context of the Study

The study participants were K-12 (ages 5-18) and university teachers in and near a large market town in eastern South Dakota, in the northern Great Plains of the United States. The larger area is socially stable and rural; residents are mostly whites who tend to live in the same community in which they work.

Teachers in the study self-initiated a variety of innovations. These innovations included projects, dramas, laboratories, and student-written mathematical investigations; 22 teachers were already in the process of innovating when the study began. Another 8 teachers were followed during the course of the study, through a series of interviews as they innovated with the Storyline curriculum planning and teaching method. Storyline was chosen as the common context for the innovations because this method relies on a narrative mutually created by the teacher and his or her students and therefore is quite different from the usual textbook-suggested teaching alternatives.

The Gap in the Existing Literature

Teacher-initiated innovation appears to be a rarely investigated field. Whether the analysis is of educational systems over the course of a century or the analysis is of investigations into one teacher's experience, studies on education and change generally have been centred on change initiated by those other than teachers. There is a lack of study in the area of teacher-initiated innovation, particularly where teachers also satisfy policy mandates. This lack is intensified when questions involve the effect of innovations on teachers' identities.

Although there are many volumes written on curriculum theory, curriculum planning, and effective teaching, at the early part of the current decade few studies were available on K-12 teachers who write their own curriculum (Keys & Bryan, 2001). That situation did not change much during the course of the past decade, and the lack of literature includes a lack of research on university teacher innovation. As a result, it is difficult to determine from the literature how widespread teacher-initiated curriculum change is.

Rationale

There are three elements of the study which were not only foundational to the study design but which also formed the rationale for the design and methodology. First, there is a lack of research in the area of teacher-initiated curriculum change, as mentioned above. Second, there is a lack of research in the Storyline approach to curriculum design. The third rationale for the study as conducted is that the literature search uncovered no studies in which teachers from primary, secondary, and tertiary school systems were present in the same study and acted in the role of learner using the same innovation.

The Study Methodology

The term “what works” in education is currently popular in political rhetoric and appears to demand positivistic-style research evidence. However, answers to questions in educational research may depend not only on the people involved and their contexts but also on understanding which processes work and how people adjust their processes in the presence of changing conditions (Johnson, 2009). In terms of this study, the processes under investigation were teachers’ innovations and how they adjust them to situational and professional demands.

The main research question was, “What explains teacher-initiated curriculum innovation?” In order to investigate this question, I chose to include two perspectives: one from teachers who had already innovated (Phase 1 of the study), and the second from teachers as they worked through an innovation totally new to them (Phases 2 and 3 of the study). The participants were teachers whose experience ranged from a student teacher to a teacher with more than 40 years’ experience; the participants’ students ranged in age from 5 through adult.

Storyline served as the format for the Phases 2 and 3 innovations because of three main factors which Storyline provided:

- the participants were all unfamiliar with Storyline’s narrative format which teachers use in organising, thinking about, and presenting curriculum;
- the Storyline structure can be adapted by teachers in most teaching situations; and
- Storyline requires the teacher to use creativity and flexibility during both planning and teaching, factors which increased the demand on the teacher for innovation in the course of teaching.

In order for the study to be as informative as possible, the innovation elements of newness and of adaptability were essential. Storyline's narrative structure provided this. The requisite creativity on the teacher's part emphasised each participant's ownership of the curriculum change.

The study relied on recorded, transcribed, and coded interviews with the participants. Each of the 22 Phase 1 participants was interviewed once in semi-structured situations in early 2008. During these interviews my role was one of interpretation. I became an agent of change when I introduced Storyline to the 8 Phases 2-3 participants in June 2008. This role changed into the role of interpreter (not the evaluator of implementation) as I interviewed these participants multiple times in both individual and group settings between June 2008 and October 2009. The multiple-case interview approach allowed for contextualised, in-depth probing and let teachers' thoughts lead our conversations. Interviews allowed teachers to have a "voice" in the research, which was quite appropriate to the purpose of discovering teachers' motivations and experiences. Based on these interviews, the findings chapters were divided into three sections: why teachers innovate, how they do so, and issues in sustaining innovations.

Findings: Why Teachers Innovate

Participant teachers were asked the open-ended question, "Why did you begin this innovation?" Catalytic events usually precipitated innovating for all teachers in the study. For two-thirds of the teachers, catalysts were formal learning experiences of the teacher's own choosing; the realisation of personal boredom was an influential catalyst for nearly half the teachers. Two small groups of teachers mentioned conversations either with another teacher or their own children as catalysts for innovations. Other catalysts existed but were not common to the participants.

Motivations to innovate were more general reasons to innovate, outside of particular events identified as the catalysts. Teachers were not motivated to innovate for factors of career advancement or meeting standards, but slightly more than half did mention the positive influence of a social-professional outlet opportunity in connection with the motivation to initiate their innovation. The teachers were not motivated to innovate by monetary reward, public recognition, promotion opportunities, "group think," or a sense of elitism. Most teachers innovated because they expected the innovation would help their students learn better, but almost as influential was the idea that an innovation would help the teachers add to their own enjoyment of their work and avoid personal boredom.

Some teachers said they were simply oriented toward enjoying and creating change, but more than half the teachers mentioned a boredom factor as influencing their decision to innovate. Two-thirds of the boredom-recognition group recognised the boredom issue within their first three years of teaching. Three-quarters of the teachers communicated that they wanted personal “fun” within the classroom environment.

For nearly half the teachers, these two factors of student learning and personal enjoyment were related to the failure of the available textbook in areas either of quality or of failing to address educational standards. Teachers simply felt they could do a better job than could the published material.

Findings: How Teachers Innovate

The most relevant question to this set of findings was, “What is the impact of self-initiated innovation on a teacher’s identity?” This could also be worded, “How does making curricular innovations affect a teacher?” The findings in this chapter were drawn from interviews with the Phases 2-3 teachers, who were in the process of initiating innovations with the narrative curriculum planning and teaching method Storyline, which was new to them.

Whilst planning their innovations, teachers anticipated both benefits and difficulties in objective areas of teaching, such as providing for course needs, and in affective areas, such as providing personal encouragement for themselves. The teachers found that the benefits they anticipated did occur. They began with doubts in some areas, but they had confidence that their innovations would result in enough benefits that the difficulties would not overwhelm their innovations. University and kindergarten teachers alike held doubts as to whether the imaginative, narrative Storyline method would adapt well to their learners’ ages, since Storyline appears at first glance to be best suited for the ages 9-11 group. They discovered that Storyline worked well for their own classes.

As with the doubts about the age group appropriateness, teachers found that most difficulties they anticipated did not become actualities. Only one of the eight teachers had foreseen that honouring student contributions to the co-constructed “stories” might be difficult, but all the teachers discovered some difficulty with this issue. The teachers tended to see the difficulties as comical rather than as problematic.

The teachers discovered many unanticipated benefits to their innovations, in both objective and affective areas. These included increased depth of student understanding and

student initiative, as well as positive developments in student interactions. The participants did not anticipate that they would use words like “excited” and “fun” when describing their teaching. They also found that they developed questions. The participants spontaneously formed their own professional learning community to share their delights and frustrations with each other. All the Storyline teachers were surprised with the results of their innovations, particularly in the affective areas of their classes – the areas of student interactions, motivation, and feeling tone, as well as the teacher’s own attitude toward class.

Findings: Sustaining Innovations

How do teachers sustain self-initiated innovations? This was the question examined in this chapter. Teachers in all phases of the study were included in this section.

Teachers who sustained innovations first of all needed to be convinced of the worth of their innovations; they most often used their own observations of students and student feedback as evidence to encourage second iterations of the innovations. Teachers also needed to have stability in their identities; teachers who changed schools or who had major personal changes expected that the complexities of these situations would stabilise; they decided to wait for stabilisation before pursuing the innovation further. Teachers who did not experience identity instability pursued innovations into subsequent iterations and adapted their original plans for new groups of students, sometimes adapting or improving to quite a substantial degree.

Teachers cited administrator support and trust as supports for their innovation. Teachers of all age groups needed to be trusted to teach the standards as identified for their topic area. All said they had the trust of their administrator, and some also had school district money to attend professional development experiences of their own choosing or money to purchase materials they needed in order to implement their planned innovations. Many of the teachers mentioned that funds for professional development had decreased, and they also noted the need for planning time, particularly when working with innovations. Other situated supports, such as close colleagues, were helpful but not necessary. Personal supports, such as friends and family members, were not generally influential.

Support groups and professional learning communities were not necessary for the teachers in this study to innovate. However, teachers who were involved in more major changes, such as the primary school mathematics teachers and the Storyline teachers, sought out professional learning community experiences. These teachers did not see geographic or learner

ages as barriers to sharing practice.

The Storyline participants (Phases 2-3) spontaneously created their own professional learning community. This was an unusual situation in which primary through tertiary teachers shared practice in wholly collaborative meetings with equal interest displayed in hearing of each other's work. They were learning from each other as they had conversations about "real" education as enacted in their classrooms. The university teachers were no less willing than were the other teachers to admit where they had questions and where they were unsure of their next steps to take as they led their classes.

Nearly all the teachers in this study talked of difficulties or frustrations which extinguished, threatened, or limited sustaining self-initiated innovations in their classrooms. Most of these were related to professional factors outside of their control, such as changing standards or preparing students for standardised tests. Irritations with reforms which threatened previously used innovations were almost entirely limited to teachers with more than 16 years of experience in the classroom. However, teachers were not asking for a reduction in the complexity of their jobs.

Discussion: Implications for Practice

Teachers of students in all the age groups in this study (age 5 through adult) highly valued several aspects of their jobs:

- Relationships with students,
- The professional trust given to them by their supervisors,
- Professional development opportunities of their own choosing, and
- The opportunity to use their own ideas both to increase student learning and to keep themselves interested in their jobs, thus increasing both complexity and meaningfulness.

These points lead to suggestions for schools and school administrators. In order to find vitality in their jobs, the teachers needed the opportunity to pursue professional development and planning time to incorporate new knowledge into existing courses. Allowing teachers time to research, develop, and reflect upon innovations would help change the education focus from isolated events in practice to the teachers' lives in the classrooms: what do the teachers themselves determine as needful, and what solutions can they research and then attempt?

This study can also help teachers know what to expect when they plan innovations. Teachers could be coached to identify predicted areas of benefit and difficulty, which would help

them plan for the anticipated events. Teachers could also develop realistic timeframes for their innovations and evaluations which might identify for themselves their progress. During and after the course of the innovation, teachers could be encouraged to recognise the realised benefits and difficulties, which may be quite different from those which were anticipated.

One result of this study was evidence it provided on the narrative Storyline method of curriculum planning and teaching. This is an area of little research, and none of the existing studies or commentaries focus on teachers using Storyline. The participants of this study who used Storyline found:

- more benefits in the objective realm than teachers anticipated;
- many more benefits in the affective realm than teachers anticipated, including personal fun and increased positive student interactions;
- they had concerns before beginning the Storyline, particularly in the affective areas, but only one of those concerns was realised; and
- most did not anticipate the difficulty of honouring student contributions, but most experienced this phenomenon.

Conclusion

The sparse but consistent research literature has repeatedly noted that teachers value creativity and that when they teach for understanding, they find more meaning in their work. Taken together, flow theory ideas about creativity and meaningfulness appear that they could have grown from studies of teachers.

Along with their desire to help their students learn, the teachers expressed as motivators both boredom and the desire to have fun in their teaching. Some expressed discouragement from NCLB and the related increased demands and directives. Although formal professional development of their own choosing proved influential for many of them, some innovations were inspired simply through conversations with their own children or with colleagues.

Teachers approached their innovations intentionally and thoughtfully. They weighed perceived benefits and difficulties; they spent extra hours working with their innovations in order to make them as useful as possible. Once used, the teachers continued to adjust their plans for maximum student benefit.

What teachers did not tend to predict is how many benefits would result from their innovations. Primarily the teachers appeared oriented toward objective benefits, particularly

better student understanding. Whilst planning innovations, teachers did not appear to be oriented toward affective benefits which did result, such as their own personal fun, higher levels of student initiative, or higher parent involvement.

In the end, what did the teachers in this study communicate?

- Teachers are interested in increasing student understanding of the content and are willing to exert much effort to make content more easily learned.
- Teachers have a need to enjoy their work and are willing to exert a great amount of effort in making their work even more complex through initiating innovations.
- University teachers could adapt a narrative and imaginative teaching method from K-12 education and find it effective, engaging, and fun for both teachers and students.

It is possible that if the message from these teachers is taken seriously by administrators, that teachers will experience satisfying careers which have as a result thoughtful students who have developed deeper understandings academic subjects.

References (for this excerpt)

- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row, Publishers.
- Csikszentmihalyi, M. (2009). The pleasure principle. *Holland Herald*, 45(11), 22-25.
- Day, C., Sammons, P., Stobart, G., Kington, A., & Gu, Q. (2007). *Teachers matter: Connecting lives, work, and effectiveness*. Maidenhead, England: Open University Press.
- Gerjets, P., & Scheiter, K. (2003). Goal configurations and processing strategies as moderators between instructional design and cognitive load: Evidence from hypertext-based instruction. *Educational Psychologist*, 38(1), 33-41.
- Huberman, M. (1993). *The lives of teachers* (J. Neufeld, Trans.). London: Cassell.
- Jerslid, A. (1955). *When teachers face themselves*. New York: Teachers College Press.
- Johnson, R. B. (2009). Toward a more inclusive "scientific research in education". *Educational Researcher*, 38(6), 449-457. doi: 10.3103/0013189X09344429
- Keys, C. W., & Bryan, L. A. (2001). Co-constructing inquiry-based science with teachers: Essential research for lasting reform. *Journal of Research in Science Teaching*, 38(6), 631-645.
- Lortie, D. C. (1975). *Schoolteacher*. Chicago: The University of Chicago Press.

Malone, T. W., & Lepper, M. R. (1987). Making learning fun: A taxonomy of intrinsic motivations for learning. In R. E. Snow & M. J. Farr (Eds.), *Aptitude, learning, and instruction* (Vol. 3: Conative and affective process analyses, pp. 223-253). Hillsdale, NJ: Lawrence Erlbaum Associates.

Martin, A., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research*, 79(1), 327-365.