

**This is an electronic reprint of the original article.  
This reprint *may differ* from the original in pagination and typographic detail.**

**Author(s):** Jäppinen, Aini-Kristiina; Ciussi, Mélanie

**Title:** Collaborative leadership as the lens for co-creating an innovation - A curriculum reform in management education

**Year:** 2013

**Version:**

**Please cite the original version:**

Jäppinen, A.-K., & Ciussi, M. (2013). Collaborative leadership as the lens for co-creating an innovation - A curriculum reform in management education. In R. Smeds, & O. Irrmann (Eds.), CO-CREATE 2013 : The Boundary-Crossing Conference on Co-Design in Innovation (pp. 213-224). Aalto University. Aalto University publication series. Science + technology, 15/2013.  
[http://orbit.dtu.dk/fedora/objects/orbit:122935/datastreams/file\\_05062a44-a954-43fe-a85d-4d8050af07f9/content](http://orbit.dtu.dk/fedora/objects/orbit:122935/datastreams/file_05062a44-a954-43fe-a85d-4d8050af07f9/content)

All material supplied via JYX is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the repository collections is not permitted, except that material may be duplicated by you for your research use or educational purposes in electronic or print form. You must obtain permission for any other use. Electronic or print copies may not be offered, whether for sale or otherwise to anyone who is not an authorised user.

# Collaborative Leadership as the Lens for Co-creating an Innovation – A Curriculum Reform in Management Education

Aini-Kristiina Jäppinen

*University of Jyväskylä, Finland, aini-kristiina.jappinen@jyu.fi*

Mélanie Ciussi

*SKEMA Business School, France, melanie.ciussi@skema.edu*

## ABSTRACT

*The paper presents collaborative leadership to create a curriculum reform in management education. In our case study, a particular business school wanted to re-modify its curriculum according to turbulence coming, first, outside of the school in terms of increasing complexity in business life and, second, from inside in terms of a large merger. As a consequence, in the co-creation process, a socially-mediated perturbation process started in the school in order to answer the turbulence. According our preliminary results, this kind of process seems to be multilevel and multiphase. It requires new attitudes and a change of the mindset to see management education containing not only knowledge but also the whole doing and being of a student. In sum, the co-creation process appeared to be crucial to foster the change and manage perturbation.*

## KEYWORDS

*Management Education, Curriculum, Collaboration, Turbulence, Perturbation, Disruptive Innovation*

## INTRODUCTION

The turbulence in current business life shows no signs to decrease. On the other way round, it seems to accelerate. Beabout (2012, pp. 17-18) defines turbulence as

“the creation of increased uncertainty [...] not necessarily denoted by measurable changes in environmental conditions [...] a human perception of this possibility”

Due to turbulence, management education of today faces severe challenges. One of them concerns the schools’ and students’ abilities to adapt to the

unpredictable changes and bind management education in a new and more tightly way to the reality of the working life. Consequently, many scholars have questioned the current curricula and started to argue that novel and innovative approaches to educate young managers are urgently needed (Axley & McMahon 2006; van der Coff 2004; Gosling & Mintzberg 2004; Kane & Goldgehn 2011; Muff 2010; Thomas & Mengel 2008). In other words, a curriculum reform has been required.

Education is considered as a rigid and culturally bound system. This also concerns management education that normally has strong and long traditions within diverse cultures, learning environments, and contexts. Thus, to really change or renew something and create an innovation is a highly demanding task and particularly requires new beliefs and new understanding (Fullan 2003). Although the slowness of changes in education can be sometime considered as a protection towards too hasty and prejudicial decisions, a wide consensus exist that real and durable changes as fruitful innovations are still too rare and difficult to be executed (Altrichter 2005). Moreover, the educational systems involve diverse sub-systems that make the innovations difficult to treat. All these facts then increasingly complicate to implement those changes that are required, indicated and recognized crucial, and even accepted amongst the stakeholders. Consequently, diverse questions arise both from the society and the management education itself: What has to be changed in management education in order to answer to the current social, economic, and political demands? What is even possible to be changed? How to implement the reform in order to productively response to the increasing complexity in the society and in the world of work?

In our paper, we aim at giving some answers or at least insights to these questions in terms of a curriculum reform. First, we argue that it does not help only to change some practices or study contents although they are essential parts in the curriculum reform. A *real paradigm shift* in management and business education is required. Second, we argue that in the paradigm shift, there is a question about to *change the very mindset*, the way how to think about management education for tomorrow. Finally, we argue that to really change the mindset makes the innovative reform highly demanding. For treating this, we will apply the concept of *disruptive innovation*, created originally by Christensen (1997). Finally, we will indicate the special nature of a management education curriculum reform and consider *collaborative leadership* both as a tool and the fundamental target of the changed mindset. In sum, we suggest that the idea of

collaborative leadership within the curriculum reform is actually a disruptive innovation that would make the paradigm shift possible.

In order to give some answers or merely insights to the questions above, we will exploit a real-life long-term curriculum reform in a business school. By means of the first results of the on-going innovation process, that is, the analysis of an ideal curriculum and several interviews of the participants and observations of the reform process, we will highlight some central issues that we consider crucial to be understood and treated if a real paradigm shift as a change of the mindset is wished to be happened.

## THEORETICAL BACKGROUND

In our paper, we consider collaboration as a central tool to response to the demands for creating innovations and change the mindset within management education. As Goldstein, Hazy and Lichtenstein (2010, p. 1) argue, innovations are crucial because firms that cannot innovate will go to the way of dinosaurs. In addition, we suggest that due to increasingly complex and turbulent working environments, collaboration itself is one of the main mindsets to survive (Goldstein et al. 2010; Lichtenstein, Uhl-Bien, Marion, Seers, Orton & Schreiber 2006). That is to say, the fundamental prerequisite is to change the way of thinking towards collaboration as the basis for co-creating innovation. However, before describing what we understand with collaborative leadership, perturbation and its relation to turbulence will be introduced (Beabout 2012).

### **Turbulence and perturbation as to the curriculum reform**

Although agreeing with the central need for an innovative management education reform and admitting what issues are crucial to be changed, fewer are able to say what issues are actually possible to be changed and even fewer how to do it in reality. However, some rigorous theoretical considerations of educational change in turbulent situations have been currently published (Altrichter 2005). For example, Beabout (2012) discuss how the schools should exploit *perturbation* while minimizing the harmful consequences of turbulence. He (*ibid.* p. 17) defines perturbation as a *collaborative process* when people come together to answer the question “What’s next?” Educational change can now be characterized as the cycle of turbulence and perturbation when crisis and disruptions are perceived. They will be then either ignored or responded with perturbation (*ibid.*).

Turbulence can be intentional or unintentional. However, it is structurally or environmentally related. Turbulence is the perception of potentially

disruptive forces in an organization's environment or operating conditions (Beabout 2012, p. 17). In our case, turbulence refers both to the increasing complexity in business life and to the merger of the business school in question. Perturbance is then socially mediated.

“It is a social process in which people respond to turbulence by considering organizational practice” (*ibid.*)

In our case, we consider as perturbation the multiphase co-creation process of an innovative curriculum reform by an expertise community in a certain business school. This process will be explained later. According to the existing research, a theory of change should center and concentrate on the authentic human experiences and concentrate on learning through interaction and on changing existing patterns of understanding. The following components are found to facilitate conditions for the change and contribute perturbation in these kinds of contexts (Beabout 2012, p. 19): *Dissatisfaction towards the status quo; Proven leadership; Stability of finances; Enough time and resources; Valuing individuals as people and for their contribution to others; Valuing and belonging to a group; working as a team; Valuing security; Valuing openness.* We will return to them when introducing our analyses and preliminary research results.

### **Collaborative leadership**

When representing collaboration's role in the change of the mindset, our conceptual choice is based on the argument that collaboration should be at the center of the skills that tomorrow's business workers and leaders possess in order to manage uncertainty, adaptability and creativity (Goldstein et al. 2010; Lichtenstein et al. 2006). As Goldstein and others (2010, p. 1) suggest, innovations are not possible without creative collaboration and functional and flexible relations and networks.

Collaborative leadership is here understood in a very specific way pointing out to the *learning process* of a professional community (e.g. Bandura 1997). In this kind of realm, collaborative leadership has proved to have several attributes (Jäppinen 2012; Jäppinen & Maunonen-Eskelinen 2012): *participation of all the people involved, productive interaction and dialogue, shared expertise, flexible actions, commitment to the common actions, responsibility for them, negotiation in combining different interests, multiform decision-making, balance between confidence and control, and multiform evaluation.* Thus, collaborative leadership is not only about leaders or followers although they are naturally involved in it. Collaborative leadership is about all the elements within collaboration: individuals, roles, duties, tasks, behavior, instruments, technical and

psychological tools, practices, measures, activities, results, and contexts (Bass 2008). In sum, collaborative leadership is not about traditional leading or managing but focuses on how a group of people in education as teachers, students, and working life representatives, *work synergistically in organizational contexts* (Hutchins 1995; Surowiecki 2004).

Although collaborative leadership mainly indicates the mindset of a synergetic work, it surely also involves interactive (Goldstein et al. 2010; Schyns et al. 2011, p. 397). Thus, collaborative leadership is both thinking and doing, in this order. Actually, the process that generates collaborative leadership represents the cycle of turbulence and perturbation when the people turn towards each other and together respond to the disruption or crisis. In this way, they generate both new understanding and activities (Beabout 2012). Ultimately, collaborative leadership refers to a continuous and conscious learning process when diverse individuals share common endeavors in engaging in a goal-oriented action and creating synergetic something novel from the existing constituents. The novel that arises is more than the sum of its parts. It will then serve as the root for disruptive innovations.

### **Disruptive innovations**

The term 'disruptive innovation' was originally created by Christensen (1997). We mean here with disruptive innovation the curriculum reform that is processed as the cycle of turbulence and perturbation. Nevertheless, as Beabout (2012, p. 16) explains, disruptions alone in terms of crisis and turbulence are not very effective at supporting desirable educational changes. He suggests that instead of concentrating on disruptions themselves, the focus should be on *resolution* of disruptions. Here, fostering collaborative leadership provides such a resolution. That is, disruptive innovation as a change of the mindset involves more sophisticated pedagogies, practices, structures, and technologies that will modify the learning environment according to the unavoidable change.

In sum, we apply the term of disruptive innovation in meaning an innovation creation process that offers a novel and radical course-free curriculum, valued in emerging markets within the complexity in business life and remote from the main-stream of the traditional business school models. In this sense, the disruptive innovation of a curriculum reform is examined by collaborative leadership within a community that requires generate new understanding, new working practices, and adequate collaborative structures for the increasing complexity. Educational change is a complex process and the management schools should engage both in

coherence and competence building by way of disruptive innovations. That is to say, disruptive innovations are not normally meant for lower-order changes, for merely technical or practical improvements, but for high-order changes as a paradigm shift when the people reconsider their beliefs, attitudes, and understanding, that is, their mindset.

## METHODOLOGY AND DATA

In order to answer the challenge for a curriculum reform in management education, an expert community within the particular business school started two years ago to design and collaboratively create an innovative and novel study program needed in the increasing complexity of the current business life for the new student generation. The community in question involved professors, teachers, working life representatives, and a student. The novel curriculum was considered to be able to radically change the values, mindsets, and practices that were so far understood as workable in a more traditionally oriented management education.

When the one-year process was over, the management of the school, in spite of considering the ideas within the renewed curriculum as valuable, reconsidered the possibilities of its immediate application, mainly due to finances, resources, and organizational reasons (a merger was meanwhile happened) and postponed its implementation. This novel curriculum then remained an ideal basis for the future development. The follow-up of the reform process went on during the next academic year when an extended group of experts started to collaboratively create an implementable curriculum. When the plan was ready to be piloted, again the implementation of the whole curriculum was postponed and only a part of it was decided to be executed. This third phase of the curriculum reform process will start during the next academic year when with 1000 students as newcomers an experimentation of communities of learning will be done.

The curriculum was analyzed by the qualitative content analysis (Elo & Kyngäs 2007; Hsieh & Shannon 2005). The qualitative content analysis is a method to analyze communication messages as a systematic text analysis and interpretation. We aimed at finding out such fundamental elements that would be capable to respond to the requested change and new paradigm. First, the words and phrases of the curriculum text were distilled according to the attributes of collaborative leadership (Jäppinen, 2012) as sub-categories having the same meaning. Then, based on these sub-categories, generic categories were formed. Finally, the fundamental elements for the curriculum reform as the main category were created. Due

to the limiting writing space, we are able to introduce only one element that we consider the most fundamental as to the disruptive innovation of a novel management education curriculum. (Jäppinen & Ciusi, in preparation.)

The other part of the data consists of four in-depth interviews of the participants in the reform's first stage. The interviews were merely open discussions, conducted according to the attributes of collaborative leadership (Jäppinen 2012). Then the tape-recorded interviews were transcribed and analyzed by the qualitative concept analysis (Creswell & Plano-Clark 2007) and investigated through the special indicators of contributing or hindering perturbation, introduced in the theoretical part of this paper. In addition, field-notes and observations were exploited that supported the interpretation of the analysis process.

Some interviews and observations have already been done from the second phase of the curriculum process and their analyses are currently in process. During the next academic year, a questionnaire to the students and the teachers will be also launched and new interviews and observations done. These results are supposed to enrich our understanding of creating and implementing a disruptive innovation for changing the very mindset of the novel management education curriculum for the next generation.

## FINDINGS

### **The main element in the paradigm shift**

We named the most essential element in the mindset of collaborative leadership as **KDB**. It refers to a fluid entity of “knowledge-ability”, know-how as “doing”, and “being”. That is, it is **Knowledge plus Doing plus Being**. KDB is a unique way to interconnect knowledge taught in classes and doing and being learned in student-life and students' associations. The paradigm shift is about the interconnections between KDB and business life experiences, through co-created contents and informal knowledge evaluation. KDB includes multiform interconnections, such as inter-campus collaboration, contacts with the partners, and interpersonal communication. It encompasses connections between subject knowledge and its concrete applications. In this way, undesirable fragmentation of knowledge can be avoided and connection with the real world established. The significance of collaboration and working together is in focus. This means identification, enrichment, and cultivation of the working habits and comportment within a group and ensures communication as the basic element of the future manager's success. KDB involves sense making and understanding of rationality and points out participatory, interactive, and



interdisciplinary courses. KDB builds concrete links between the disciplines and the realities of working life. It also means integration within curriculum when small groups with a facilitator may have, for example, regular workshops. Finally, KDB ensures synergy between courses using various tools, such as templates for questions, student-teacher discussions, or collective questions about the students' dossiers.

**Facilitating the change and contributing perturbation**

Our preliminary results indicate that there was really a question about to change the mindset and re-modify the pedagogical culture towards KDB. This was seen, for instance, in the two postponements of the curriculum implementation and the ambiguous development process. Although the quotations in Table 1 only represent a sample, there was clearly a tendency to facilitate perturbation in terms of increasing dissatisfaction with the status quo, emphasizing proven leadership, valuing others and their contribution, valuing the group and team work, and in a trustful and open climate. However, strong issues preventing perturbation were shortage of finances, time, and other resources. Moreover, despite of several expressed values towards individual and group contribution, also many alarming opinions were presented. Only as to the safe and open climate, very few impeding opinions were expressed. We have highlighted in italics in the Table 1 those places where the change of the mindset was the most evident.

FACILITATING PERTURBANCE	PREVENTING PERTURBANCE
<b>The stance towards the status quo</b>	
<p><i>They knew something was wrong and wished to advance</i></p> <p><i>Awareness and a desire for a big change</i></p> <p>The most important factor for the change was the five campuses</p> <p>The brand is the courses, of what you learn</p> <p>With the merger it was hard to control this part</p> <p>A lot of teachers participated in. So it adds value to the outcome ...as a distinctive resource</p> <p><i>You must adjust with something more dynamic, more participative, collaborative, because in the real work, in the real world, collaboration is a basis of the work today</i></p> <p><i>Not necessarily people who saw things in the same way, but all the people who were interested in moving forward in some way</i></p>	<p>Most people at that time, their idea of giving a course was standing in a room and reading notes. And as technology progressed, then it became standing in a room and pressing slide</p> <p>They don't know what innovation is and they would much rather that everything stayed the way it has always been</p> <p>To try to make the project accepted. It's difficult. It is a generational problem. It would be difficult because "I don't want to change everything at the end of my career"</p> <p>We didn't maybe have as much impact as we would like to have had</p>
<b>Proven leadership</b>	
<p>Everybody has to have this mindset. <i>If you want people to adopt in your mindset then you really have to make them feel that they are crucial</i></p> <p>You do feel if the organization is giving you some kind of recognition. It's more motivating than if they don't</p> <p>We are a global movement and it depends on some willingness from the top management.</p>	<p>Afterwards when this thing was presented, they all in the management said, "Very nice, very good but that this won't work. We can't do that. That's very good. Well, it's a very nice idea but of course we can't do it"</p>

<p>You need some acknowledgment, some kind of reward. If you do the process, you must be organized by your management</p> <p><i>The top management is trusting enough</i></p> <p>It is interesting to be optimistic, you have to be, but it depends on the boss</p>	
<b>Financial issues</b>	
<p>By some miracle we were actually paid a bit of time for these meetings</p>	<p>Times are very hard. All these things cost money. How do you make improvements without it costing more?</p> <p>The most difficult is the budget</p>
<b>Time and other resources</b>	
<p>It was not a waste of time</p>	<p>We didn't have enough people from different curriculum areas</p> <p>The feeling of being in two different worlds. I mean some discrepancy between the world of the project and the real world</p> <p>In terms of time, I remember it was very short. We had to improve quickly</p> <p>We never had time with the team to do really that kind of thing. We were all most of the time under time pressure</p>
<b>Valuing individuals as people and for their contribution to others</b>	
<p>The people in the group were ready to listen and contribute</p> <p>The group was generated by itself, upon the good willing of different people</p> <p>The management recognized that it has a talented pool of people. If it gives them a free rein, they will come up with some really interesting ideas which may be a bit crazy but which will serve in the future to make something really innovative and change things. That's the nice picture</p> <p><i>We built the vision all together.</i> But in the other campus people had the same vision as well even if we never worked with them</p> <p>There are allies <i>who are always open to new stuff</i> and who are always encouraging</p> <p>Certain ideas were very easy to get accepted like communication</p> <p>If we don't do it, no one else is going to do it</p> <p>The group itself was very productive. But I think it's because you are dealing with people who are all motivated and interested and have no real reason not to welcome other ideas</p> <p>Everybody was listening to everybody</p> <p><i>The power would be just with whoever happened to be having the latest good idea. If you're useful, if you're contributing then you have the power. If not, well, maybe then it's your turn to listen</i></p>	<p>Nobody listens to you because you are not a real professor. You don't have the status, a million and one titles and degrees. You might have some but whatever it is, because it isn't in management science, it's just not important</p> <p>Sometimes I was thinking, "Okay, you are saying that because in your discipline this is like that but it's not representative of my discipline, so maybe it's difficult to do"</p> <p>The cynical picture is that the management had this group of professors who will not just shut up, who will not really take the line. And who will always need to feel that they are being useful and they need to feel they are creative but they are bloody nuisance actually. "So, what shall we do, we'll give them a thing to do, we'll give them something really fun: invent a new pedagogical model. You never know, something might come out of it. They'll probably think of something that we can later shape the way we want and it will be great"</p> <p>People who are not that interested in new stuff and encouraging</p> <p>If they don't have to do anything extra; they'll always come on board a moving train but they won't help it to move</p> <p>We also knew that in all likelihood the management would turn around and say "Very nice but we can't do it". I don't think we were that bothered. We also knew that whatever we propose is likely to have to be modified again. It doesn't necessarily cancel out what we might have decided because it all has to remain incredibly flexible</p> <p>Some teachers don't change a lot. They follow the same line they had when they started the</p>

	<p>job. They don't make the students participate</p> <p>To learn how to deal with professional life because it's completely different. It's not theory. You have to make it concretely</p> <p>Everybody is supposed to contribute and you can actually see 'the rockets', people saying things very politely, but you can feel it</p>
<b>Valuing and belonging to a group; valuing working as a team</b>	
<p>It was also an occasion to know better each other</p> <p>There was a good commitment of among the group members to the project with a lot of enthusiasms, dynamics</p> <p>People were very dedicated because it's our very life, the teaching</p> <p><i>It wasn't a question of power.</i> It wasn't a hierarchical power bestowed from outside the group. The power, such as it was and the control such as it was, was intrinsic to the group</p>	<p>The people who were not represented or we met afterwards listened very nicely and then "That was very interesting but we can't do it"</p> <p>The only voice that was not heard was the people that didn't want to come</p> <p>How it is possible to transfer our enthusiasms, our work to the other professors, what we are doing, to change behavior and to change some knowledge? This could be for others, for implementing</p> <p>There are a few voices in the wilderness who are very happy to be on board, but others are a million light years away from us</p> <p>Not necessarily a hundred per cent interested in the pedagogical side of things</p> <p>People would jump on the band wagon because it gives them a certain amount of importance</p> <p>We didn't discuss that with the rest of the group. It didn't come out of the group</p>
<b>Valuing trust and openness</b>	
<p><i>It doesn't matter if the idea was crazy, "Let's try!"; just a mentality</i></p> <p><i>We had freedom to imagine anything</i></p> <p><i>There was no hierarchy...</i> didn't feel that people were holding back because somebody was going to say "I can't do that" <i>...very egalitarian and people felt totally free to say what they wanted.</i> Sometimes we agreed, sometimes we didn't but never to the extent that people wouldn't speak because they were inhibited</p> <p>Sometimes it was a bit more difficult to have common understanding on the issues. But I don't think we left anything along the road. And so, we were able to solve all the issues we had</p> <p>We had the feeling to be a small community</p> <p><i>So it was very open-minded. It was easy to share, to exchange, and to have stupid ideas. It was possible to trust each other</i></p> <p><i>We were not controlled.</i> It wasn't chaos because the people weren't chaotic. We had a job to do, we weren't there to dissipate. We knew what we did</p> <p><i>We had the recommendation of the management. They said "You can do whatever you want to address". And we were free without any constraint from the management</i></p> <p>It was a peer to peer discussion, very open</p>	<p>If you begin to envision something new and already people have given you the constraints, it kills the creativity</p> <p>I'm a bit frustrated because we have not yet implemented it. This is also another frustration that we didn't first try to figure out what it could be without selecting what we will do with it</p>

**Table 1 Analysis sample of the results**

## CONCLUSIONS

In our case study, we wanted better comprehend how to be able to exploit collaborative leadership as a support for disruptive innovations. As Beabout (2012, p. 17) states, schools of today have to deal with constant disruptive forces. This is certainly one reason they are so resistant to change. To support disruptive innovations, we argue that collaborative leadership is an essential element, specifically in the co-creation process to foster change and manage perturbation. In addition, it is certainly one of the reasons why the particular project as curriculum reform was being achieved.

In order to understand the change process and the role of collaborative leadership within, the conceptions of turbulence and perturbation were exploited. Although we are able to present only preliminary results, turbulence coming from outside the school seemed to push an expert community to start to co-create a new kind of management education curriculum. There collaborative leadership in terms of the entity of knowledge, doing, and being as KDB would be in the centre. Another source for turbulence seemed to be the merger resulting in a multi-campus business school. Consequently, a perturbation process to change the whole mindset towards collaborative leadership started in the particular school. However, perturbation is not ever an easy process and needs time, new attitudes and collaborative work to get an innovation to be accepted.

## LIST OF REFERENCES

- Altrichter, H. 2005. Curriculum Implementation – Limiting and Facilitating Factors, in *Context Based Learning of Science*, eds. P. Nentwig & D. Waddington, Waxmann, Münster, Germany.
- Axley, S. R. & McMahon, T. R. 2006. Complexity: A Frontier for Management Education, *Journal of Management Education*, Vol. 30, No. 2, pp. 295-315.
- Bandura, A. 1997. *Self-efficacy. The Exercise of Control*, W.H. Freeman and Company, New York, NY.
- Bass, B. M 2008. *The Bass Handbook of Leadership. Theory, Research & Managerial Application*, 4th ed., Free Press, New York, NY.
- Beabout, B. R. 2012. Turbulence, Perturbation, and Educational Change, *Complicity: An International Journal of Complexity and Education*, Vol. 9, No. 2, pp. 15-29.
- Christensen, C. M. 1997. *The Innovator's Dilemma*, Harper Business, New York, NY.
- Creswell, J. W. & Plano-Clark, V. L. 2007. *Designing and Conducting Mixed Methods Research*, SAGE, Thousand Oaks, CA.
- Elo, S. & Kyngäs, H. 2007. The Qualitative Content Analysis. *Advanced*

- Nursing*, Vol. 62, No. 1, pp. 107-115.
- Fullan, M. 2003. *The Moral Imperative of School Leadership*, Corwin Press, Thousand Oaks, CA.
- Goldstein, J., Hazy, J. K., & Lichtenstein, B. B. 2010. *Complexity and the Nexus of Leadership: Leveraging Nonlinear Science to Create Ecologies of Innovation*, Palgrave Macmillan, New York, NY.
- Gosling, J. & Mintzberg, H. 2004. The Education of Practicing Managers, *MIT Sloan Management Review*, Vol. 45, No. 4, pp. 19-22.
- Hsieh, H.-F. & Shannon, S. E. 2005. Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, Vol. 15, No. 9, pp. 1277-1288.
- Hutchins, E. 1996. *Cognition in the Wild*, The MITP press, Cambridge, MA.
- Jäppinen, A.-K. 2012. Distributed Pedagogical Leadership in Support of Student Transitions, *Improving Schools*, Vol. 15, No.1, pp. 23-36.
- Jäppinen, A.-K. & Maunonen-Eskelinen, I. 2012. Organisational Transition Challenges in the Finnish Vocational Education – Perspective of Distributed Pedagogical Leadership, *Educational Studies*, Vol. 38, No. 1, pp. 39-50.
- Jäppinen, A.-K. & Ciussi, M. in preparation. *Collaborative Leadership as a Bridge between Management Education and the Complexity in Business Life*.
- Kane, K. R. & Goldgehn, L. A. 2011. Beyond “The Total Organization”: A Graduate-Level Simulation. *Journal of Management Education*, Vol. 35, No. 6, pp. 836-858.
- Lichtenstein, B. B., Uhl-Bien, M., Marion, R., Seers, A., Orton, J. D., & Schreiber, C. 2006. Complexity Leadership Theory: an Interactive Perspective on Leading in Complex Adaptive Systems, *Emergence: Complexity & Organization*, Vol. 8, No. 4, pp. 2-12.
- Muff, K. 2012. Are Business Schools Doing Their Job? *Journal of Management Development*, Vol. 31, No. 7, pp. 648-662.
- Schyns, B., Kiefer, T., Kerschreiter, R. & Tymon, A. 2011. Teaching Implicit Leadership Theories to Develop Leaders and leadership: How and Why it Can Make a Difference. *Academy of Management Learning & Education*, Vol. 10, No. 3, pp. 397-408.
- Spillane, J. P. 2006. *Distributed leadership*, Jossey-Bass, San Francisco, CA.
- Surowiecki, J. 2004. *The Wisdom of Crowds. Why the Many are Smarter than the Few and How Collective Wisdom Shapes Business, Economies, Societies, and Nations*, Doubleday, New York, NY.
- Thomas, J. & Mengel, T. 2008. Preparing Project Managers to Deal with Complexity – Advanced Project Management Education, *International Journal of Project Management*, Vol. 26, pp. 295-315.
- van de Coff, L. 2004. A New Paradigm for Business Education: The Role of the Business Educator and Business School, *Management Education*, Vol. 42, No. 3, pp. 499-507.