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RESEARCH ARTICLE

Teaching for creativity: from sage to guide to meddler

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This paper serves three purposes. First, it makes a case for seeing creativity as a key learning outcome in our times, and thus the core business of education. It then goes on to examine the nexus of creativity and pedagogy, showing the conceptual work done to demonstrate creativity as a learnable set of dispositions and capabilities. Finally and most importantly, the paper argues the value of a pedagogical approach the author calls "Meddling-in-the-Middle", in augmenting and enhancing the repertoires of "Sage-on-the-Stage" and "Guide-on-the-Side" in order to build students' creative capacity. Examples are given of what these meta-approaches might look like in relation to the teaching of Shakespeare. The author concludes by arguing the important connection between Meddling pedagogy and creative capacity building.

Keywords*:* creativity, pedagogy, learning, teaching, creative disposition.

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Introduction

Pedagogy matters. In whatever historical time, what actually happens in the classroom can make or break the disposition to learn that is so fundamental to a young person's future social, economic and civic participation. In this century, formal teaching is, paradoxically, both important and irrelevant. Teachers are important because of what they can contribute to the development of a highly educated 21st century citizen, someone with a breadth and depth of literacies (scientific, print, digital) and an expectation that learning will be life-long and life-wide. However, teachers become irrelevant when their pedagogy is limited to inculcating routines of thinking that were markers of the Industrial and/or the Information Age.

Why creativity now?

According to Daniel Pink, author of *A Whole New Mind* (2004), we now live in "The Conceptual Age". It is unlike the "Information Age" or the "Industrial Age" because its core business is no longer the routine accessing of information to solve routine problems. Instead, the Conceptual Age invests in, and springs from, new cultural forms and modes of consumption that will continue to surprise us. Thus many of our predictions from the past will turn out to be wrong, as they already have—the millennium bug, the paperless office, more leisure time, and so on. Meanwhile we will continue to see crucial changes which few of us anticipated—how e-mail would reshape our work, how the Internet would make for a very different social and commercial world, how much time young people would spend texting each other, how a Stanley knife could be used as a weapon of mass destruction.

If we cannot trust to time-honoured habits of thinking and doing in such a world, then how should we understand the nature of teaching practice? What should teachers be thinking and doing? This paper argues the value of extending our meta-categories of pedagogy to include teachers who prioritize the building of creative capacity in students, with "creative" being understood here as a propensity for *epistemological agility* (McWilliam, in press), rather than a propensity for artistry, although the former may well include the latter.

"Second-generation" creativity

Recent scholarship has sought to unhook creativity from *"artiness"*, *individual genius* and *idiosyncrasy*, rendering it *economically valuable*, *team-* or *community-based*, *observable* and *learnable* (see McWilliam, 2007; also McWilliam, Dawson, & Tan, 2009, for a summary of this shift). This scholarship has moved us on from the romance of the remote artist-in-a-garret genius who has no need of pedagogical support, to focus on creative ways of thinking and doing that are observable and replicable processes and practices in daily economic and social life. Always and inevitably complex, creativity is becoming less mystical, and once rendered less mystical it can be engaged intentionally as an outcome of pedagogical work. Put another way, we do not have to wait for the field to be more coherent and self-disciplined to get on with teaching for creativity.

In broad terms, we have seen two traditions of thinking about the nature of the processes that make for more creative capacity—that it is either an outcome of individual processes of intuitive, subjective ideation, or an outcome of social processes with generic applicability. These traditions of thinking are reflected, in turn, in two "generations" of understandings held by contemporary teachers. Research into the beliefs of award-winning academic teachers (McWilliam & Dawson, 2008) shows that many teachers hold a mixture of "first-generation" (individualistic) and "second-generation" (social, pluralistic) understandings, with the latter providing a more useful platform for developing and documenting effective teaching and learning strategies (Table 1).

(Table 1)

While popular notions of creativity continue to reflect first-generation understandings, second-generation creative capacity is being acknowledged by scholars worldwide as a valuable component of social and economic enterprise, and as fundamental to an increasingly complex, challenge-ridden and rapidly changing economic and social order. As Mihalyi Csikszentmihalyi puts it, creativity is increasingly held to be "*no longer a luxury for the few, but…a necessity for all*" (2006, p. xviii). A further important perspective has been added through Csikszentmihalyi's insistence on the community, not the individual, as the higher order unit of analysis when seeking to foster creativity. This proposition challenges conceptions of creativity that

are limited to individualistic psychological traits, and this has pre-empted a shift in scholarly interest from the creative individual to the creative, dynamic team.

Second-generation creativity works as both a way of thinking associated with intuition, inspiration, imagination, ingenuity and insight, and also a novel and appropriate response to an open-ended task (see Byron, 2007). Stephen Bowkett (2005), author of *100 Ideas for Teaching Creatively*, provides an interesting take on this, by aligning himself with Kieran Egan's view that creativity may mark a fifth "phase of life" category beyond *Somatic*, *Mythic*, *Romantic* and *Philosophical*—an *ironic* phase of examining, questioning, doubting and reconstructing frameworks in a spirit of curiosity, playfulness and experience. This has resonances with what Greene (2001) names as the "paradox balancing models" of creativity, in that the "combining of opposites" (p. 12) that characterizes this "type" of creativity is also the marker of the ironist, one who enjoys demonstrating that both and neither of two apparently contrary propositions are necessary and true (Rorty, 1989).

Creativity, then, may be argued, among other things, to be evident in the capacity of an individual or team to perceive a problem in two habitually incompatible associative contexts (Koestler, 1964), making it possible to select, reshuffle, combine or synthesize already existing facts, ideas, faculties and skills in original ways to serve new social, economic and civic purposes. David Perkins (1981) has argued that skills like pattern recognition, creation of analogies and mental models, the ability to cross domains, exploration of alternatives, knowledge of schema for problem solving, and fluency of thought, are all indicators of creativity at work.

With global trends towards sustainable and responsible economic growth, policymakers worldwide are now looking to this type of creativity—epistemological agility, or the capacity to work productively across knowledge domains—as an engine of future productivity and social dynamism. People who possess such agility are highly employable as "symbolic analysts"—the imaginative and creative thinkers who build the capacity of an organization to compete in a highly demanding global environment. Symbolic analysts add value to an entrepreneurial organisation through their capacity to:

- theorize and/or relate empirical data or other forms of evidence using formulae and equations but also innovative models and metaphors;
- see the part in the context of the wider and more complex whole;
- intuitively or analytically experiment with ideas and their products;
- collaborate with others to increase opportunities for successful innovation. (Yorke, 2006, p. 5)

The trend to value creative capacities over narrow instrumental skills is reflected in employers' demands for "multi-competent graduates" (Yorke, 2006, p. 2) who have "high-level expertise…emphasising discovery and…exploiting the discoveries of others through market-related intelligence and the application of interpersonal skills" (p. 5). Underneath these trends is a more fundamental recognition that productivity in the 21st century requires "a deep vein of creativity that is constantly renewing itself" (National Center on Education and the Economy [NCEE], 2007: 10). This sort of creativity is not limited to the creative industries but includes all those employed in a wide variety of professional work, including computing, engineering, architecture, science, education, arts and multimedia. *All* educated young people, as potential future "creatives" (Cunningham, 2006; Florida, 2002; Pink, 2004), will be performing work that is less focused on routine problem solving and more focused on new social relationships, novel challenges, and the synthesising of "big picture" scenarios. It is unsurprising therefore that of the qualities employers are seeking in graduates, "imagination/creativity" is on top of the list (The Pedagogy for Employability Group, 2006).

The call to more creative outcomes from our education systems is a strong theme in the report from the U.S. National Center on Education and the Economy—*Tough Choices or Tough Times* (NCEE, 2007). This report argues that more of the same education will not be sufficient to equip youth for their living, learning and earning futures. Not only will they "participate in work teams that are truly global" (p. 5), but

they will also find many of the routine jobs that were once available in abundance no longer exist. The report stresses that the next generation of employees will need a powerful disposition to learn far beyond one specific trade and expertise, and will need to draw on much more than one discipline. It says:

> Line workers who cannot contribute to the design of the products they are fabricating may be as obsolete as the last model of that product…auto mechanics will have to figure out what to do when many of the computers in the cars they are working on do not function as they were designed to function…, software engineers who are also musicians and artists will have an edge over those who are not as the entertainment industry evolves…[and] it will pay architects to know something about nanotechnology and small business people who build custom yachts and fishing boats will be able to survive only if they quickly learn a lot about the scientific foundations of carbon fiber composites. (p. 7)

The value of creativity is not limited to the 21st century workplace. It is also increasingly necessary to a planet where a high degree of scientific literacy is important to civic participation in mitigating global climate change. In a recent book, *The Meaning of the 21st Century*, James Martin (2007) presents a strong argument that our current generation of young people is the "Transition Generation" responsible for implementing those changes that will ensure the sustainability of the planet. They will be unable to do so without a strong skill base and also a capacity to work across disciplinary domains. Thus creativity—as epistemological agility—is not garnish to the productivity roast but fundamental to an increasingly complex, challenge-ridden and rapidly changing climatic, economic and social order. Little wonder then that a recent report issued by the European University Association (EUA, 2007) directs the higher education sector to consider creativity as central to their research and their teaching:

> The complex questions of the future will not be solved "by the book", but by creative, forward-looking individuals and groups who are not afraid to question established ideas and are able to cope with the insecurity and uncertainty that this entails. (p. 6)

If Mihaly Csikszentmihalyi is correct when he insists that creativity is "a necessity for all" (p. xviii), then it follows neither "back to basics" nor "the shelter effect" of staying longer in formal education will be sufficient guarantees of employability or of civic responsibility. Being educated is crucial, but it is the kind of educational experience rather than the number of years spent in formal education that makes the real difference for engaging successfully in the higher order analysis that is needed in 21st century economic and social life.

How creativity now?

It is one thing to acknowledge the value of epistemological agility to our climatic, social and economic future; it is quite another to understand how such agility might be fostered through the work that teachers engage in. There is little doubt that new digital technologies can be invaluable as teaching and learning resources for generating and completing creative thinking and activity. The following is an example of the sort of ICT-based complex thinking-and-doing task that is relevant to second-generation creativity:

> Students are told they are Rangers for a National Park experiencing a dramatic increase in the population of hares that threatens the ecology of the park. They are asked to decide whether or not to introduce more lynx into the system, and if so, how many? Students receive, respond to, and initiate simulated communications with other Rangers who are working on the project, and have specialised knowledge of the situation. Students receive, respond to, and initiate simulated communications with other Rangers who are working on the project, and have specialised knowledge of the situation. They search the World Wide Web to find relevant information on both hares and lynxes. They organise and analyse this information and evaluate its quality. They make predictions on the basis of this analysis, test their predictions with modeling software, and analyse the results, as represented in graphs, tables and charts. They integrate these findings with information from other resources and create a multimedia presentation in which they make and defend recommendations, and

> communicate these to others. (Quellmalz & Kozma, 2003, as cited in Intel, Microsoft and Cisco Education Taskforce, 2008, p. 13)

The above example indicates how digital tools can provide the means for teachers and students to cross disciplinary boundaries, aggregating skills and capacities in order to solve authentic 21st century problems. In doing so, they bring the disciplines out of their silos and into a real world of knotty problems and exciting possibilities. What this example also demonstrates is how such tasks need to be tweaked for a particular cultural and geographical context. We should not presume that all students—and certainly not students living and learning in the Asia-Pacific region—would be familiar with either hares or lynxes.

While digital tools have enormous pedagogical potential, it needs to be said, however, that the capacity to solve 21st century problems is not achieved simply by adding technological affordances to the classroom. As Saskia Sassen (2004) points out, digital technologies of themselves cannot be depended on to produce the new social dynamics that are needed to make the massive culture shifts towards sustainable futures and collarless workplaces. Such technologies could be simply derivative of existing social relations, or even tend to reproduce them. We know from contemporary studies of the introduction of new technologies into classrooms that, while they can in certain circumstances complement traditional pedagogical repertoires, there is no guarantee that fundamental classroom change will result. Indeed, there is mounting evidence that they are likely to be underutilized (Cuban, 2001; Warschaeur, 2008), or utilized in ways that replicate narrowly transmissive modes of pedagogical instruction (witness the shift from OHTs to PowerPoint) in teacher behaviour and/or allow students to substitute simplistic tasks (cut and paste, for example) for higher order ones (Ware, 2008; Warschauer & Grimes, 2008).

As Warschauer points out elsewhere (Warschauer, 2007), we live in paradoxical times—variously described as "The Late Age of Print" (Bolter, 1991) or the "Post-Typographic Society" (Attewell & Winston, 2003)—in which information literacy still depends to a large extent on print literacy. He asserts that "competence in traditional literacies is often a gateway to successful entry into the world of new literacies" (Warschauer, 2007, p. 43), citing American high school research into student use of computers and the Internet in defence of this claim. In doing so, he refutes the "romantic notion" that many reform advocates have of the "empowering potential of learning and new media" (p. 44) in and of itself. The ability to create multimedia presentations with the latest digital tools, or to fast text one's friends, or to play online games to a high level, can too easily be misrecognized as epistemological agility. It is not enough for a young person to spend a great deal of time at a computer screen. This is corroborated by the OECD (2006) finding that, while more experience with computer use is valuable, more frequent use does not necessarily lead to better performance on standardized assessment tasks. The 2003 PISA study into computer use found that moderate users performed better than students who were not using computers, using them rarely, or using computers very often. Thus, while the capacities associated with "going digital" are useful and important, they are insufficient to the sort of creative capacities needed for higher order symbolic analysis.

A further point needs to be made in relation to "going digital". It should not be assumed that because a young person is highly digitally literate, s/he therefore knows how to optimize digital technologies for academic purposes. A key conclusion of a University of Melbourne study (Kennedy, Krause, Judd, Churchward, & Gray, 2006) concurs with the findings of a U.S. study of freshman students (Katz, 2005), that in their first year, many students struggle not to make technology work per se but to make it work for *academic* ends:

> It is not that first year students are incapable of using technology for specialized, context-appropriate purposes; indeed many would have recently had these experiences at school. The critical point is that while first year students might use technology in a range of ways and may, apparently, be digitally literate, we cannot assume that being a member of the 'Net' Generation is synonymous with knowing how to employ technology-based tools strategically to optimise learning experiences and outcomes. (Kennedy et al., 2006, p. 16)

The pleasure of rigour

If digital affordances and digital smarts are being shown to be insufficient in themselves to building creative capability, then the means of making the difference, unsurprisingly, lies squarely with pedagogy—in David Lusted's (1986) terms, teaching, learning and the social relationships they produce. This fact does not imply either more or less investment in new technologies, but the extent to which a young person is introduced to the pleasure of the rigour of highly complex thinking and doing.

While most educators would agree in theory on the importance of both pleasure and rigour in formal learning, we seem still to be living through a historical time in which many young people in Western countries are being rescued from rigour in the interests of guarding their self-esteem. High challenge can be difficult for those unused to staying in the grey of knowing—it is not only uncomfortable but time-consuming for a generation used to timely turnarounds and fast-paced solutions. It is hard to value the instructive complications of error-making where "having fun with maths" has never pushed on to an induction into the pleasures and affordances of numerical thinking. Fun is important but of itself, it is unlikely to result in a sustained passion for problem solving and a willingness to wrestle with ambiguity and complexity. It may be a starting point on the journey but it is not in itself adequate as a pedagogical destination.

The sort of pedagogy that is likely to achieve creative capability may not be technologically driven, but it is nevertheless responsive to the new ways that young people learn (Hartman, Moskal, & Dziuban, 2005). Their preference for "hands on, minds on, plugged in" engagement is very much a preference for what John Seely Brown calls "*learning to be*" rather than "*learning about*" (Seely Brown, 2006). Generation C's propensity to participate actively rather than passively watch and listen serves to blur the boundaries of stage and audience, whether they are at a Blue Man Group concert or in an online chat room or part of the dynamics of a "real" classroom. According to a large research study conducted in the USA by John Beck and Mitchell Wade (2006), young people playing online games are much more likely than their baby-boomer predecessors to jump over preambles and introductions and are much less anxious in the absence of top-down rules. While the gamer environment is not an unregulated environment, gamers do have "systematically different ways of working…systematically different skills to learn, and different ways to learn them" (p. 2). They learn to use a meta-map or to operate without one, rather than to take instructions from "outside" the subculture.

There is a powerful myth lurking behind our habitual thinking that the teacher is the Knower who ought to be providing all the maps in the learning process. The myth is that we can and should keep up with the knowledge explosion, becoming a more and more knowledgeable society with each new generation (Leadbeater, 2000). If knowing means being intimately familiar with the workings of the technology we use in our daily lives, then, as Charles Leadbeater asserts, we have never been more ignorant. He reminds us that our great-grandparents had an intimate knowledge of the technology around them, and had no problem with getting the butter churn to work or preventing the lamp from smoking. Few of us would know what to do if our mobile phones stopped functioning, just as few have familiarity with what is underneath or behind the keys on our computers. Nor, indeed, do many of us want to. But this means that we are all very quickly reduced to the quill and the lamp if we lose our power sources or our machines break down. This makes us much more vulnerable—as well as much more ignorant in relative terms—than our predecessors. Put another way, the gap between the knowledge embedded in our everyday environment and what we individually know is greater than ever. While teachers need knowledge, this should not be confused with a powerful memory or the capacity to seem all-knowing. It is much more important to model how to be usefully ignorant, and to assist students who fear not having all the answers all the time. A pedagogy focused solely on achieving the highest possible test scores is unlikely to deliver this, particularly when the test itself depends almost exclusively on memorizing facts.

Sage, guide, meddler

What can teachers do to build epistemological agility? They could extend the repertoire of their pedagogical repertoire, beyond "Sage-on-the-Stage" or "Guide-on-the-Side", to include a third role for the 21st century teacher as a builder of creative capacity—that of "Meddler-in-the-Middle".

"Guide-on-the-Side" has come to cover a vast and daunting panoply of activities from close engagement to disengagement and all points in between. The difficulty with "guiding" or "facilitating" is that it can become, at worst, an excuse for passivity on the part of the teacher after tasks have been allocated. Many of the teachers who see themselves as Guide are as unlikely to be "fascinating" as they are to be "challenging". In reality, we have seen the high ground of "guiding" too easily collapse into passive child-minding and worksheet distribution. When this occurs, Guide-on-the-Side becomes a high moral-ethical excuse for the teacher to "step out" of the main game of teaching, and to sit at the margins of the physical, mental and emotional activity that is so vital to learning.

Both Sage-on-the-Stage and Guide-on-the-Side have their place in the complex landscape that is teaching. As the Singapore-based work led by Allan Luke (2004) has demonstrated, teachers often make explicit connections across different knowledge domains, "weaving" their pedagogical practices together, and making judicious choices about when and how to move to another type of interaction or mode of engagement. In other words, the meta-categories "Sage" and "Guide" can themselves be representative of a complexity of pedagogical moves, not a simple formula.

What follows is the description of a third meta-category geared up for creative capacity building—that of Meddler-in-the-Middle. This meta-category is descriptive of active interventionist pedagogy in which teachers are mutually involved with students in assembling and/or dis-assembling knowledge and cultural products. Meddling is a re-positioning of teacher and student as co-directors and co-editors of their social world. As a learning partnership, meddling has powerful implications for what "content" is considered worthy of engagement, how the value of the learning product is to be assessed, and who the rightful assessor is to be.

In pedagogical terms, this is how a series of lessons introducing Shakespeare's *Macbeth*, for example, might be approached by a Sage, a Guide or a Meddler. The usefulness of taking a lesson on Shakespeare as an example is that Shakespeare may well be regarded as old hat in the context of a generation active on Facebook and YouTube. Yet the richness of its observations about the human condition retain their power if and when students can access them. It is the responsibility of the teacher to design a learning experience that makes such access possible while ensuring that it has to be worked for. In this way both pleasure *and* rigour are available simultaneously. For the Meddler-in-the-Middle, digital is optional and useful but engagement and challenge are mandatory.

The Sage is likely, first and foremost, to value Shakespeare and expect it to be mandated in any English literature course. The pedagogical approach is likely to depend heavily on the teacher's reading and explaining of the text, with students following the printed version in front of them on their desks. A powerful drama teacher can perform this pedagogical work in ways that are exciting to a number of students who might otherwise have missed any opportunity to engage with Shakespeare, and through that to the big issues that Shakespearean tragedy puts under scrutiny. A not-so-powerful Sage can be the reason why so many young people think of Shakespeare as boring and indecipherable, including the more accessible plays like *Macbeth*. Whether the teacher is charismatic or not, the student remains passive in both cases while the teacher is the expert.

The Guide is more likely to be ambivalent about the presence of Shakespeare in a 21st century curriculum, and may have already called for its replacement with something more contemporary and better suited to the interests of the students, in her view. Perhaps through her own student experience of Sage

pedagogy, she may anticipate that the bulk of her students will not welcome Shakespeare in any form, and so making it relevant and engaging could be a real struggle. Because she wants any and all of her teaching to be relevant and engaging, she focuses on how they might experience it in more ways than through listening to the original text read by the teacher. Fortunately, in the media age, she can access a legal copy of Roman Polanski's film *Macbeth* from the school library's AV section. She is also fortunate enough to be able to access a worksheet devised for the purpose of *Macbeth* film comprehension. Because she is diligent enough to want the worksheet to be meaningful to the age and stage of her students, she edits the worksheet so that it is relevant to her current cohort. The students spend an afternoon watching the video, filling in the worksheet, and then getting into groups to share answers before sharing them with the class. While some student "activity" may well be in evidence towards the end of the process, once again, the dominant pedagogical mode is generally passive, with the TV "delivering" and the teacher out of the action unless distributing or collecting worksheets. As an international study by Law, Pelgrum and Plomp (2008) has found, the three most common pedagogical practices across five continents are: requiring students to fill out worksheets, working at the same pace, and sequence-and-answer tests. This is a matter of concern to those who anticipate much more from 21st century learning and teaching.

A Meddler-in-the-Middle likes the possibilities Shakespeare opens up for rigorous thinking (as a Sage may well do), but also shares the Guide's concerns about possible disengagement. Meddlers are clear about the importance of "low threat, high challenge" pedagogy, and will pursue this end in ways that make active student engagement the norm in their classrooms. Below is the report given by a "Meddler-in-the Middle" of a pedagogical approach to teaching *Macbeth* in which students are required to be actively processing information, co-theorizing and solving puzzles, rather than being passive recipients of information, either from a teacher or a film.

> Teaching *Macbeth* was not going to work if I had to force-feed these kids on it. I didn't want to throw Shakespeare out of the curriculum, and I wasn't going to drag them through it—y'know, '*I know it's painful but it's good for you!*'
>
> I began with nothing in their hands or mine—no books, no pens, no notes, no Shakespeare. '*OK*', I said, '*a king has been murdered. You are detectives, and you have to solve the murder. That means you have to come up with the means, the motive and the opportunity. You can interview anyone who was at the castle with two exceptions. You can't interview the king's sons because they went off on horses during the night, and you can't interview the three old women who were hanging around last night because they have disappeared. Of course, the ones you can interview might tell you lies, but you are detectives and your job is to see through all that.*'
>
> I divided them into about six or seven rival detective agencies, each having to come up with their version of what happened. I gave them a list of names of who they could interview, and I went into whichever role asked. If they wanted to speak to Lady Macbeth, I took that on; if they wanted to speak to the porter I did that, too.
>
> Now the crime of killing Duncan, and the cover-up, are quite complex, as you would probably know. It involves a number of incidents and more than one individual, not just Macbeth. So coming up with Means, Motive and Opportunity is quite complicated. They listened, got together to theorise, and then asked some more.
>
> I let them try out their ideas when they thought they had it. I would not make it easy for them. Of course they wanted to know what actually happened pretty well straight away, but I was not letting them off the hook of the work of theorising. And I wanted them to do it together—to value each other's smarts, not just mine. I acknowledged it when they were moving in the right direction but would not give more—they struggled for every inch of the truth and it had to be right. They continued to ask to interview characters and I continued to play the parts.

> I knew I was getting what I wanted—their engagement with Shakespeare—when I saw a few boys trying to sneak a peek at the textbook under the desk. This was great—although I feigned annoyance that they were not on task.
>
> Eventually, after a few lessons, we got there. They had it all—and were pretty pleased about it to boot!
>
> After that, we moved on to riddles. '*If Macbeth will never lose his crown until the woods move to the castle, then what does this mean? If no man born of women shall harm Macbeth, then how might he die*?' And so on. They took a few wrong turns, and it was important that they should. Yep, Macbeth might be killed by a child, but this does not happen. Yep, Macbeth might fall over a cliff accidentally, but this doesn't happen either.
>
> But once they'd cracked the murder *and* the riddles, they had the play. What is most significant, I think, is that after this, none of the boys appeared to struggle in any really negative way with Shakespearean prose—they enjoyed it all thoroughly. They were proud of themselves for learning so much about something they presumed was 'way above' them—at least, this is what their parents and older siblings had told them: Shakespeare sucks and it's hard. I've seen teachers throw out these opportunities because they think the boys won't be able to cope. The fact is that they will if you give them access. That's the job of the teacher in my book—giving access, not dumbing down!
>
> *Macbeth* is a great play for adolescent boys. I could have put the DVD of Polanski's *Macbeth* on right at the start, and they would have immediate access, but this is too easy and too much is lost. The opportunity to struggle for it is just not there. Later, when the learning had happened through their deep and close engagement with the what, how and why, yes, then they watched the DVD – and yes, then they did enjoy the lovely young Lady Macbeth in a state of undress!
>
> A number of student teachers came in to watch these lessons. Later they said to me, 'It's terrific watching you do it, but we couldn't do it—we don't know the play well enough.'
>
> (McWilliam, 2008, pp. 113–115)

Meddlers have clear intentions about what they do, and they are energetically up and doing it. "Command-and-control" is not the ethos that drives their actions, nor is their teaching by any means laissez-faire. They provide support and direction through structure-rich activity in which they themselves are highly involved. They do not take over the work of thinking and doing, nor do they dumb curriculum down. The pedagogical approach illustrated in the above example is well aligned with the principles of creative organizational leadership, in that the teacher demonstrates the technical expertise of an experienced and capable teacher-as-leader, and puts into practice strategies that require both themselves and their students to stay in the zone of "sense-making and joint problem-solving" (Mumford, Hunter, Eubanks, Bedell, & Murphy, 2007, p. 404). The emphasis is on working in teams towards a specific outcome which the teacher/leader is hoping the students will achieve; that is, these teachers can envisage the "downstream consequences of successful implementation" (p. 404) of their pedagogy.

As leaders of creative effort in the classroom, Meddling teachers are not easily seduced into praising, but when they give it—and they look constantly for opportunities to do so authentically—its effect lasts. When it is given, a student is told what it is for. That student will remember when and why because praise is not easily won and because it is related to a particular thinking achievement. A teacher who "meddles-in-the-middle" is active and engaged. They have high expectations and provide a high level of support, in the knowledge that neither of these dispositions by themselves will make for better learning outcomes. Meddlers anticipate that they have a responsibility to induct their students into communities of creative practice, regardless of their ethnic or social background or their past performance on standardized tests. They know that their students are smart, and they keep asking them to be even smarter. This is one of the reasons why they are likely to conduct lessons in which "no looking in your textbook" is employed often as a pedagogical strategy

(see Tapscott, 2009, p. 131), in sharp contrast with the Sage's preference for all eyes on the textbook, if not on the teacher.

Meddlers create opportunities for hands-on, minds-on and, where appropriate, plugged-in learning collaborations. They challenge more long-term notions of "good" teaching in a number of ways. Specifically, their pedagogy involves:

- Less time spent on transmission and more time spent on working through problems in a way that puts everyone in the thick of the action;
- Less time spent on risk minimization and more time spent on experimentation, risk-taking and co-learning;
- Less emphasis on teaching as forensic classroom auditing and more time spent on designing, editing and assembling knowledge;
- Less time spent on testing memorization and more time spent on designing alternative forms of authentic assessment;
- Less time spent on psychological counselling and more time spent on collaborative criticality and authentic evaluation.

There are many effective teachers who may be described as Meddlers-in-the-Middle. Some are innovators with digital technologies while others use more traditional tools, sometimes nothing more than an "empty armpit". The point is not that Meddlers will invariably be users of high-end digital technologies, but that they will be constantly surveying the pedagogical landscape for ways and means of bringing pleasure and rigour together, and at times that will mean "going digital".

Conclusion

"Do you get wetter in a rainstorm by standing or walking?" This deceptively simple question opens up a raft of experimental possibilities. The Sage-on-the-Stage is likely to give the answer and expect students to learn it and regurgitate it at exam time. The Guide-on-the-Side may become concerned if students begin to show stress when they can't find the solution quickly and receive praise for it. They may respond by giving lots of hints and suggestions. In doing so, they can unwittingly take the challenge out of the task. In doing everything but supply the answer, they can seem supportive, but they steal from their students the opportunity to struggle and make mistakes. The Meddler-in-the Middle does not rush to save students from the struggle that higher order thinking involves, by giving them either the answer or the template for finding it. They allow their students to experience the risks and confusion of authentic learning by allowing their students to stay in the grey of unresolvedness, supporting any and all attempts on the part of their students to experiment with possibilities in ways that put their ignorance to work. Moreover, they do not presume that the highest achievers in the class are the best learners. Indeed, they anticipate that many of the students who are on the margins of the school culture may have more to offer in terms of creative effort.

A culture of teaching that values obedient attentiveness or busy work for its own sake, rather than the attention and busy-ness that speaks of productive engagement, is death to proactive, self-managing learning. Fortunately, active engagement, rather than listening and regurgitating, reflects the learning preferences of the present generation of learners, who are more likely in informal environments to try things out rather than follow instructions "from above". If teachers can understand the value of being "usefully ignorant" about learning options and possibilities, at the same time as they are expert in their disciplinary field and their pedagogical practice, who are active and inventive in the classroom, who challenge and support, who do not make things too easy, and who are not the only source of authority, who use processes of discovery, critique, argument and counter-argument effectively, who enjoy learning themselves and who do not rush to rescue

their students from complexity—such teachers will contribute immeasurably to the creative capacity of their students now and in the future.

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Table 1. First- and second-generation creativity concepts.

First-generation creativity concepts	Second-generation creativity concepts
"Soft", serendipitous, non-economic	"Hard" and an economic driver
Singularized	Pluralized/team-based
Spontaneous/arising from the inner self	Dispositional and environmental
Outside the box or any other metric	Requires rules and boundaries
Arts-based	Generalizable across the disciplines
Natural or innate	Learnable
Not amenable to teaching	Teachable
Not amenable to assessment	Assessable

Adapted from McWilliam & Dawson, 2008, p. 4