Review of Robert Martin's book, *Connect and Involve*

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ABSTRACT

A review of the book *Connect and Involve: How to Connect with Students and Involve Them in Learning* by Robert Martin. 180 pp. Rowman & Littlefield.

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The cybernetician, Gordon Pask, the creator of 'conversation theory' and one of the pioneers in developing adaptive teaching machines, often said that 'teaching is the control of learning' (Pask, 1960, 1975). For 'control', one could equivalently say 'facilitate', 'manage' 'foster', 'encourage'. He was one of the first theorists about the processes of education to bring cybernetic thinking into the classroom. Robert Martin, an educator and cybernetician, has written a book aimed at teachers to help them learn and perfect their craft. Martin's book is, in fact, a handbook for acting with cybernetic awareness in any activity involving change management and governance, whether it is of oneself, other individuals, or whole organisations. It will be useful for anyone giving presentations and running workshops, whatever the topic addressed. It has broad application for anyone aspiring to be part of a learning community. (See, on this theme, Scott [2002].)

The book is written with exemplary clarity, both in terms of 'local' aspects (sentences, paragraphs) and of more 'global' structures (chapters, sections, and the book as a whole). The writing style is very user-friendly: it is very readable and avoids technical language, so much so that the only mentions of cybernetics explicitly are in the references, listed at the end of the book: Maturana and Varela (1992), Foerster and Poerksen (2002), Foerster (2014).

As another example of best practice in communication, Martin's introduction provides 'advance organisers', devices that prepare the reader for what is to come. Martin outlines six themes that will be addressed in the chapters that follow. I will list them here, briefly.

Theme one: Make small changes, small enough to eliminate any fear or anxiety in those being managed.[1] Put first things first. This requires forethought about the goals one wishes to accomplish, and prioritising tasks to be carried out.

Theme 2: Connect with students and involve them in learning. This means getting to know students personally and showing interest in them as individuals: learning about their interests and their strengths and weaknesses and helping them see what the lessons (changes in practice) offer. This conversation with the students should become an ongoing part of all interaction with them from then on.

Theme 3: Design one's teaching based on key ideas and key skills.

Theme 4: Teach procedures. By this, Martin says one should identify lower-level, repetitive behaviours that can become automatic. This means they do not interfere with the process of learning high level concepts and skills.

Theme 5: Practice key skills. These may include writing, listening, speaking, describing, explaining, analysing, contrasting, organising and synthesising. Make conversation, with and between students, part of this practice. Involve students in the creation of presentations and demonstrations.

Theme 6: Encourage students and yourself by starting with low hanging fruit. Set tasks a little beyond current capabilities, to be carried out at a reasonable pace so there is a high expectation of success. This requires adapting to the performance of each individual student, increasing or decreasing the difficulty of tasks as necessary. Strategies for change should be simple, doable and measurable.

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1   For a teacher, this will be the students for whom they are responsible. For a manager, this will be the community within an organisation, some of whom may be their subordinates, peers, or seniors in rank.

The book has 12 chapters, each with recommended further reading and activities. The chapters contain a wealth of good advice and examples, including templates to help organise one's practice. Here, I try to give a sense what each chapter is about.

Chapter 1. Act, observe, reflect, choose. Strategies provide direction; procedures specify action. Cognitive and behavioural aspects of change should both be considered. One may change one's behaviour or change (reframe) one's perception depending on how the situation presents itself.

Chapter 2. Connect through getting to know the students. Make it a goal to converse with and involve every student. Praise their strengths. Ask them to write or talk about their views of the subject being taught. Get to know the contexts in which they live, study or work: their neighbourhoods and communities. To have time to observe, one should over-prepare the lessons so the content does not take up too much of one's attention. Be supportive, empathetic; provide supportive feedback. Carry out brief evaluations of progress to learn about the students. Do not put them under pressure.

Chapter 3. Connect through helping students make choices. In this chapter, Martin draws on Glasser's choice theory (Glasser, 1999). Glasser identifies five basic needs: survival, belonging, power, fun, and freedom, that apply to both adults and children. Survival refers to the basic physiological needs for safety (security), food, and shelter. A student may be hungry; an adult may be worrying about her job security. If these needs are not met, engagement in learning is difficult to achieve. Belonging refers to the human need to feel part of a community, to be loved and respected by one's peers, to be loved and respected by those in authority, to be loved and respected by those over whom one has responsibility. Power refers to the human need to feel in control of their own actions. Success in learning is empowering and motivating. Fun refers to enjoying what one is being asked to do. Success in learning is pleasurable. Freedom refers to building choice into the learning process. This gives the learner a sense of control over what is happening and can be both engaging and motivating. Students can be motivated to make good choices, if they are encouraged to ask the questions: What do I want? Is what I'm doing working? If not, what can I do about it and when? How did it work? Doing this adds to the student's sense of agency and ability to self-regulate, to become a self-organised learner. (For more about self-organised learning, see Harri-Augstein and Thomas [1991].)

Chapter 4. Design learning starting from the big ideas and key skills. This chapter is concerned with mapping the curriculum to prioritise the big ideas and skills and to be aware of how they are assessed. To do this effectively, one needs to identify students' prior knowledge and skills. A 'big idea' is defined by Martin as a network of concepts, facts, and applications that constitute an understanding of that big idea. A key skill is what the learners expect to be able to do with a big content idea. For example, describe, explain, compare, organise, apply, synthesise, evaluate, make decisions.

Chapter 5. Design lessons starting from the big content ideas and key skills. In this chapter, Martin emphasises that planning lessons is not just a listing of content and things to be done. Critically, it is about planning learning. Break goals down into short presentations followed by an activity of some kind and then have students talk, write, or apply what they have learned. This both embeds new content in a larger web of ideas and makes the new content memorable. Martin also recommends designing for 'self-regulation skills'. By this, Martin means helping students understand and use different learning strategies and to monitor their effectiveness. Learning strategies

include creating overall descriptions of what is to be learned and then focusing on how to master specific topics. (See Scott, 1993).

Chapter 6. Use scoring guides to increase quality work. This chapter is concerned with using evaluation effectively. As Martin puts it:

> If only the teacher uses the scoring guide, it may improve evaluation but it doesn't necessarily improve learning. The real power of using scoring guides comes from having students use scoring guides to evaluate examples and their own work, especially if they are allowed to revise their work. (p. 57)

Chapter 7. Motivation Follows Action. In this chapter, Martin's theme is that, "Motivation and learning are intertwined; the relationship is one of circularity. When we involve students in learning, they feel more motivated and connected. When students feel more motivated and connected, they are more willing to become involved" (p. 67). Martin goes on to say, "to get students motivated, get them to act." This chapter focuses on quick and easy ways to induce action. Each of the remaining chapters goes into detail regarding specific topics: procedures to automate actions, practice and revision, team learning and practice, conversation, and presentations that involve students.

Chapter 8. Increase learning by teaching procedures. Martin advises that, "Effective learning is built on lower-level procedures that help learners focus on more complex tasks. Like all skills, procedures are best taught through modelling, practice, and monitoring" (p. 79). Martin defines procedures as follows, "a procedure is a schema—a set of behaviours that allows us to perform complex tasks that we do automatically and hardly ever think about (such as walk, run, type, write, read, and so on).

Chapter 9. Help students learn through practice and revision:

> Practice needs to be meaningful, frequent, and focused; it needs to concentrate on what learners cannot yet do. Practice needs to be challenging without becoming discouraging—neither too difficult nor too easy. All this is a tall order, which is why as teachers we are continually learning how to design procedures that engage students in effective practice. (p. 89)

Chapter 10. Use teams to increase practice:

> In well-managed team activities, students can increase both their skills and their understanding. Using team learning enables teachers to provide more practice time because students in small groups can be practicing skills simultaneously. Also, successfully managed team activities increase cooperation and community. This keeps students working, especially students from cultures who prefer cooperation over competition. (p. 101)

Chapter 11. Plan projects that use teams. Until students have enough practice, team learning can be less productive than you would like. The secret is to start with simple procedures and use them over and over until students can do them. Then, while continuing to use the first procedure, teach a new procedure and practice that until students can use it efficiently and productively.

Chapter 12. Use conversation to increase learning and build community:

> Having conversations is a theme that has run through the book...
> Conversations build vocabulary, funds of knowledge, language skills, and
> the ability to think—all of which are necessary for building reading and
> writing skills. Especially when working with students who lack these skills
> at the level necessary to do well in your class, conversation is essential in
> building them. (p. 125)

Chapter 13. Involve students in your presentations. "When we present, we want
students to pay attention and to actively process what we're saying. Create
involvement and accountability and you can achieve this. Direct instruction refers to a
method of teacher-guided learning that uses presentation, practice, and assessment"
(p. 135). "Paying attention to everything, reflecting on what we've observed, and then
deciding what to do next is the road to learning to teach effectively" (p. 143).

Afterword:

> Teaching and learning are all about details, and the details of learning are
> embodied in the procedures we and our students use. Procedures free us
> to pay attention to what is around us, to think, to have conversations, to
> be creative. Once we become aware that we live in a sea of procedures
> and that those procedures can be designed and redesigned, we have a
> powerful way of using the fruit of observation and conversation. (p. 147)

I have been involved with cybernetic practice for many years. I have also worked as
a teacher, trainer and change agent in a variety of settings and at all levels of the
education system in the UK. Reviewing Martin's admirable book has been a great
pleasure. It has also been a somewhat sad and salutary experience, as I have found
myself thinking that, had I had access to the book earlier in my life, it would have
saved me from many unfortunate experiences and would have helped me become
a competent practitioner more quickly. I taught in three different schools in three
years, prior to training as an educational psychologist. The hardest challenge for me
was achieving and maintaining good discipline in class. There was no advice about
that when I was doing teacher training. One colleague told me I should not smile for
the first six months! In retrospect, I wish I had spent more time getting to know my
students.

COMPETING INTERESTS

The author has no competing interests to declare.

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