

The Learning Curve



A regular feature sponsored by the Central Council Education Committee
www.cccbr.org.uk/education/

Getting it together

In August, *The Learning Curve* discussed ropesight, ending with a promise to look at other important ringing skills.

Knowing and doing

In April 2005 (Volume 3, Chapter 16), *The Learning Curve* identified 'knowing skills' (eg knowing that you should be dodging 3-4 down) as different from 'doing skills' (making your bell strike in the corresponding places). That rather simple distinction is useful to highlight the importance of the doing skills, and the gulf between what you 'do' when you ring, and what you think about when learning a method. But the doing skills themselves are quite complex, involving continuous cycles of perception, decision and action, as shown in Figure 1.

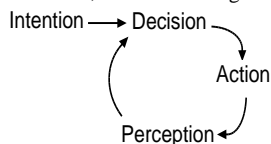


Figure 1: Bell control loop

To turn the intention to ring in a particular place into an action, you need first to know where the bell actually is. For example, in Rounds, the intention is to stay in the same place, but the action depends on whether the preceding blow was too close, too wide, or just right. When hunting, you have to superimpose any corrective action to make up for an imperfect previous on top of the main action of (say) moving down a place. In fact, as well as perceiving any errors in your previous blow, you also need to know your current actual speed, since the two together determine where the bell will strike if you 'do nothing'.

This combination of where you intend to strike, and where you perceive that your bell currently is (and is heading) drives the decision about how and when to apply force to the rope, which is the action. Of course, the action may not be perfect, which is why you must continue to monitor what the bell is really doing.

Don't worry if this description sounds complicated. When you learn a physical skill, a lot of detail gets internalised so that you don't consciously think about it. In fact you use a similar cycle when riding a bike, driving a car or walking. The key difference between ringing and these other activities is in how you perceive what your bell (or bike, or car, ...) is doing, and the action that you take to control it.

Perception skills

When ringing, you can draw on three separate perceptual senses:

- Looking – As discussed last month, ropesight is useful for knowing what is going on around you, and checking what you **should** be doing. It is crude and inaccurate as a means of judging exactly when your bell strikes in relation to the

others, but it can help you get to roughly the right place if you are a long way out, or if the striking is very confused.

- Listening – This is the only way to know where your bell actually strikes, but it is a harder skill to develop, and always gives you information after the event,

- Feeling – You must learn to feel what the bell is doing on the other end of the rope in order to ring efficiently and accurately, as discussed in *The Learning Curve* in March 2005 (Volume 3, Chapter 15),

- Rhythm – Rhythm is a hybrid skill. Mainly we think of it as a motor skill, but it is also the means we use to sense the pulse of the ringing – a bit like having a clock to detect the passage of time.

Ringling Skills discusses these skills in depth. Here we can look only briefly at them.

Listening

In many ways, listening is the Cinderella skill of ringing, but it is one of the most important if you want to ring well. As ringers, we perform in order to make a sound, and the quality of our performance is the accuracy of the striking. If you don't listen to the sound, then you can't know whether you are striking in the right place. So you probably won't be for some of the time.

Effective listening requires several contributory skills: being able to hear rhythmic irregularities in the sound, being able to diagnose what is wrong when you do hear them, and most important, knowing where your bell sounds, and then being able to tell whether it is contributing to the problem.

The trouble with listening is that it gets neglected for all sorts of reasons.

- Many ringers are taught on a silent bell, and get no idea that the critical moment is three quarters of the way through the bell's swing. If their first introduction to bell sound is with all the bells going, the confusion makes it hard for them to realise where their own bells strike.

- Many ringers are taught to ring rounds by 'pulling after another rope'. This promotes ringing as a visual activity. Sound isn't mentioned (much), and they get the impression that it isn't important.

- Many ringers are not encouraged or coached to develop their listening skills. There may be vague exhortations to 'listen to it', but that doesn't help if they don't know how.

- Learning to listen to ringing with the required precision is quite hard, and if it doesn't come naturally, the easy option is to give up.

- Humans are mainly visual animals, and for many of us, vision tends to dominate. Under stress, listening degrades in favour of looking.

With so many negative factors, it isn't hard to see why poor listening skills are so common. *The Learning Curve* discussed listening in January, with some practical advice.

Rhythm

The other core ringing skill is the ability to ring rhythmically. In other words, being able to make your bell strike accurately with a very even rhythm, and being able to vary that rhythm when required by precise amounts. This requires both good bell control, and the ability to sense the rhythm. When you consider the mechanics, you can see it is quite a feat. The bell is heavy (so it is hard to change what it does) and the rope only gives you limited control (you can pull but not push, and half of the time it is slack anyway). On

the other hand, the weight, and the way bells are hung, give the bell a natural rhythm if left to itself. Harnessing that natural rhythm gives you a baseline from which to adjust – a bit faster or a bit slower.

Putting them together

No single skill can produce good ringing. Each must complement the others. Good ringing is based on rhythm, and the accuracy of the striking must be checked by listening. Feeling the bell enables you to anticipate any unexpected changes in the bell's response to your actions, and ring more economically.

Ropesight can be used in several ways, but should never be used to undermine the core process of rhythm and listening. Ropesight can give you a lot of information about what is going on around you. It also provides a very useful safety net if for any reason the core process breaks down – like safety wheels on a child's bike – but don't let yourself get into the habit of permanently relying on the safety wheels, ie following ropes by eye, rather than using rhythm and listening.

The real world

Ideally, everyone would learn to ring with a good band, surrounded by a good rhythm, which would help learning to ring more rhythmically. But for many ringers, reality is rather different. A struggling band does not have the luxury of surrounding a learner with stable, rhythmic ringers. Even bands that are not struggling may have ringers who themselves either can't, or don't bother to, ring rhythmically, and get used to so-so striking.

Can you ring rhythmically when those around you aren't? It's harder, and the result won't be so good, but it is always worth trying to do so. Then you will be a stabilising influence on the ringing, rather than adding to the instability. But you do need to make some compromises.

- If the overall rhythm is jerky, then the goal posts for your next place keep moving. So even your best effort may not be quite right. You may be more accurate than the others, but you will need to keep correcting for small inadvertent errors.

- Hearing whether you are striking correctly becomes less reliable when you don't have a steady pattern to compare your bell's sound with. You will instinctively put more reliance on the visual input of how you fit in with the other ropes.

- In a complete mix up, you may make no sense of the sound. But in a mix up, many of the other bells are in the wrong place anyway, so rope following will mostly lead you astray too. Place your next blow(s) as well as you can by rhythm, and try to work out which of the other bells look as if they might be near their right places, to help you keep in step with them.

- Whenever the ringing improves enough, try to get back to listening more, and relying on ropesight less.

After a touch that could have been better, a very competent ringer recently told the band to 'wind up the rhythm a bit, and wind down following the other bells'. That is good advice for many situations.

Tail End

The Learning Curve – Volume 3: 2004-2005 and *Ringling Skills* are both available from CC Publications.

Reprinted from *The Ringing World* 5th October 2007. To subscribe, see www.ringingworld.co.uk/ or call 01264 366620

Collections of monthly *Learning Curve* articles from 1999 are available from CC Publications www.cccbr.org.uk/pubs/ See advertisements in *The Ringing World*.