



Learning to prescribe - Acquiring competence in an interprofessional context

Tim Dornan



Why is conversation so easy?

Garrod and Pickering 2004

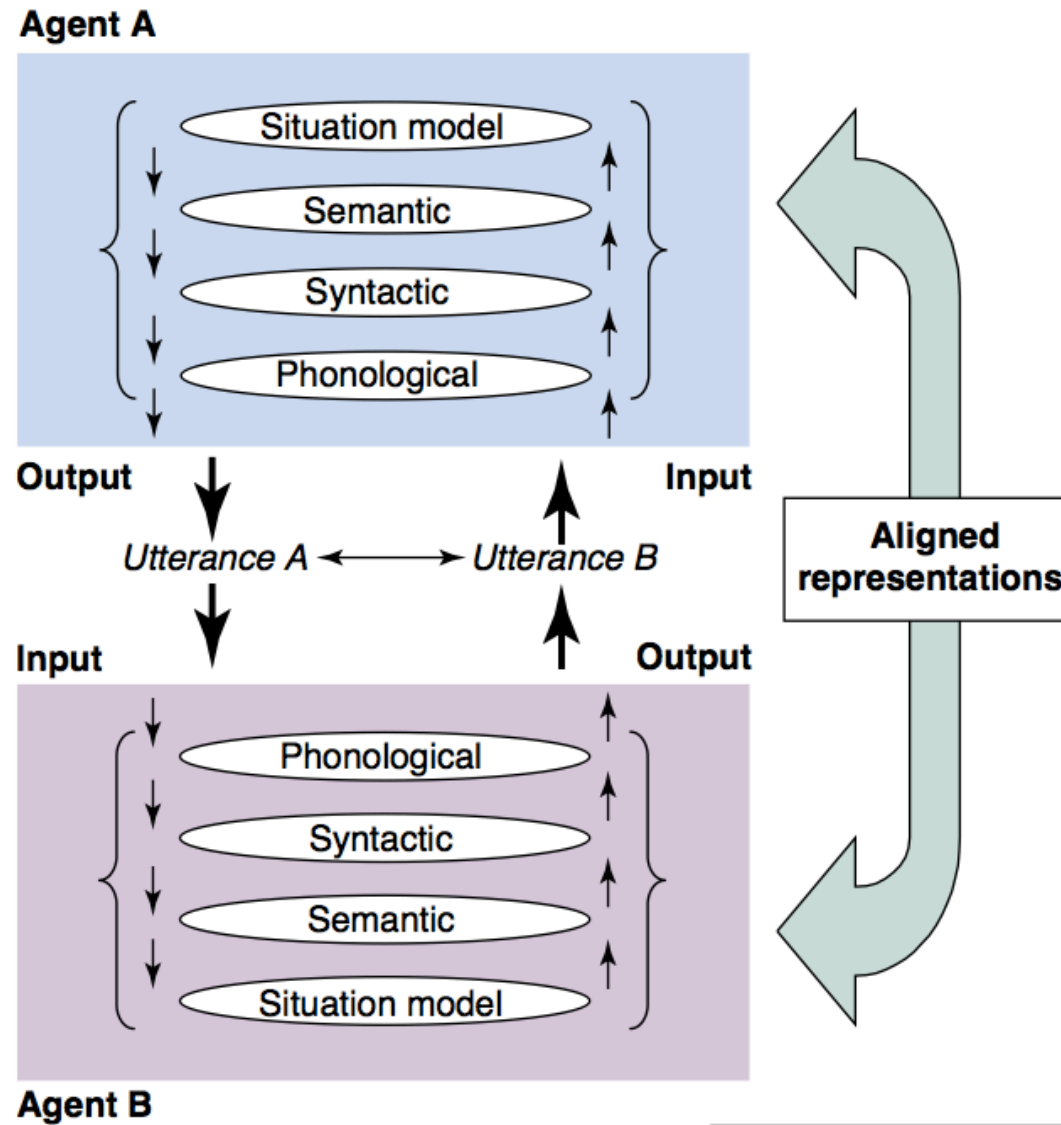
Consider spending 20 minutes:

- Conversing with ..
- Addressing ..

.. one or more other people

Which is:

- Easier?
- More complex?
 - Task switching, multitasking, timing etc



TRENDS in Cognitive Sciences

Conversation is so easy because ...

Garrod and Pickering 2004

... humans are “designed” for dialogue rather than monologue

Consider how children learn to speak

Interprofessional education

Interprofessional education



National

Ups and downs

What's going on with house prices
guardian.co.uk/money

Junior doctors make errors in 8% of prescriptions

Sarah Boseley
Health editor

Junior doctors make mistakes in about 8% of the prescriptions they write for hospital patients, but generally pharmacists save the day by spotting the error before it can cause harm, research finds.

The General Medical Council commissioned the study because of allegations that newly qualified doctors, straight out of medical school, were making large numbers of prescribing mistakes and endangering patients.

There were 11,077 errors in 124,260 prescriptions across 19 hospitals. Of those,

2% were potentially lethal, and included incidents of trainees failing to check on patients' allergies and prescribing drugs that were dangerous to them.

A further 5% of the mistakes were potentially serious, involving, for example, prescriptions for drugs with a dosage that was too low or too high.

It was found that 53% of the errors were potentially significant. Many of these were failures to prescribe all the drugs a patient was already taking before admittance to hospital (patients and relatives often fail to bring in the regular medication and can not remember the names). The remaining 40% of mistakes were minor.

After falls, medication errors are the

second biggest reason for patients being harmed in the NHS, according to the National Audit Office, and they account for 7% of all incidents.

In September, the National Patient Safety Agency said it had received reports of 86,085 medication errors in 2007; 100 of these caused serious harm or death. Only a minority of mistakes, perhaps just 10%, are reported to the agency, however.

The GMC report suggests doctors' prescribing mistakes are usually caught in time, though the study captured only those errors spotted by pharmacists checking all prescriptions on a specific day. Some of the tragic errors occurred later in the chain, like the case, for instance, of Wayne

Jowett, a teenager from Nottingham, who died after cancer drugs were injected into his spine instead of a vein.

The GMC study, led by Tim Dornan, professor of medicine and clinical education at Manchester University, found that foundation year-one doctors, in their first year in hospital, made mistakes in 8.4%

of prescriptions, which was no more than that of more experienced doctors. The error rate rose to 10.3% among second-year hospital doctors, but dropped back to 8.3% among registrars with more than three years' experience, and then to 5.9% among consultants.

The peak among second-year junior doctors, said Professor Peter Rubin, chair of the GMC, could be due to their being less on their guard or because they had to make more difficult decisions.

The GMC recommended that all prescription charts, which are often filled in by doctors, be standardised so that doctors are not confused by the format when they change hospital.

5%

Proportion of mistakes being made by hospital medical staff that are considered potentially serious for the patient

Conversation 1 – in “reality”

“...the Registrar came, reviewed him and said, “No, no we should give Tazocin, penicillin.” And, erm, by that stage I'd forgotten that he was penicillin allergic and I just wrote it on the chart without thinking. I say without thinking, cos it, I had thought of it already, but, erm, I suppose it was because of the security of thinking, “Gosh, someone’s finally come to help me with this patient,” I just, kind of, and did as I was told and, and, you know, didn’t look at the allergy box for a second time.”

EQUIP 2009

Conversation 2 – in simulation

N1 and Physician are monitoring the patient: Applying oxygen on a masque, adrenalin inhalation, and an i.v. syringe.

- N1: Do you want me to prepare medicine for extraction?
- P: I think we should infuse saline. And monitor the patient.
- N1 calls for N2.
- N1: Would you please put on some monitoring device on the patient. She is pregnant, 31 weeks and has been stung by a bee. She has a bit of stridor.

(The patient gets more dizzy and tired)

P is listening to the patient's chest sounds.

- P: Let's do an ABC. We are dealing with an A-problem.
- N1 (interrupting): She is having an anaphylactic reaction. I'll give some Tavegyl 1 mg i.v.

Charlotte Paltved and Peter Musaeus, Århus, DK

Interprofessional education

Identity...



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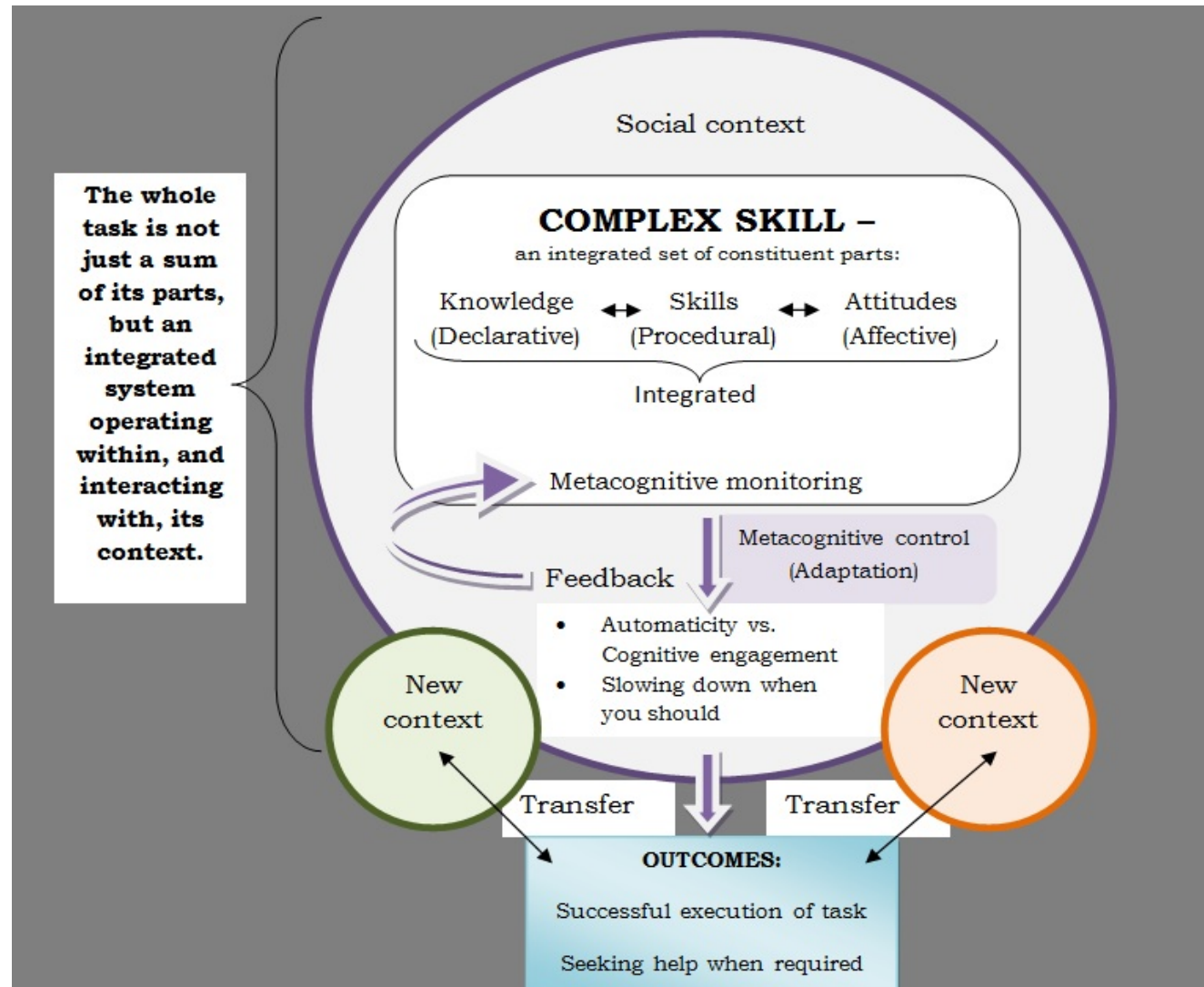
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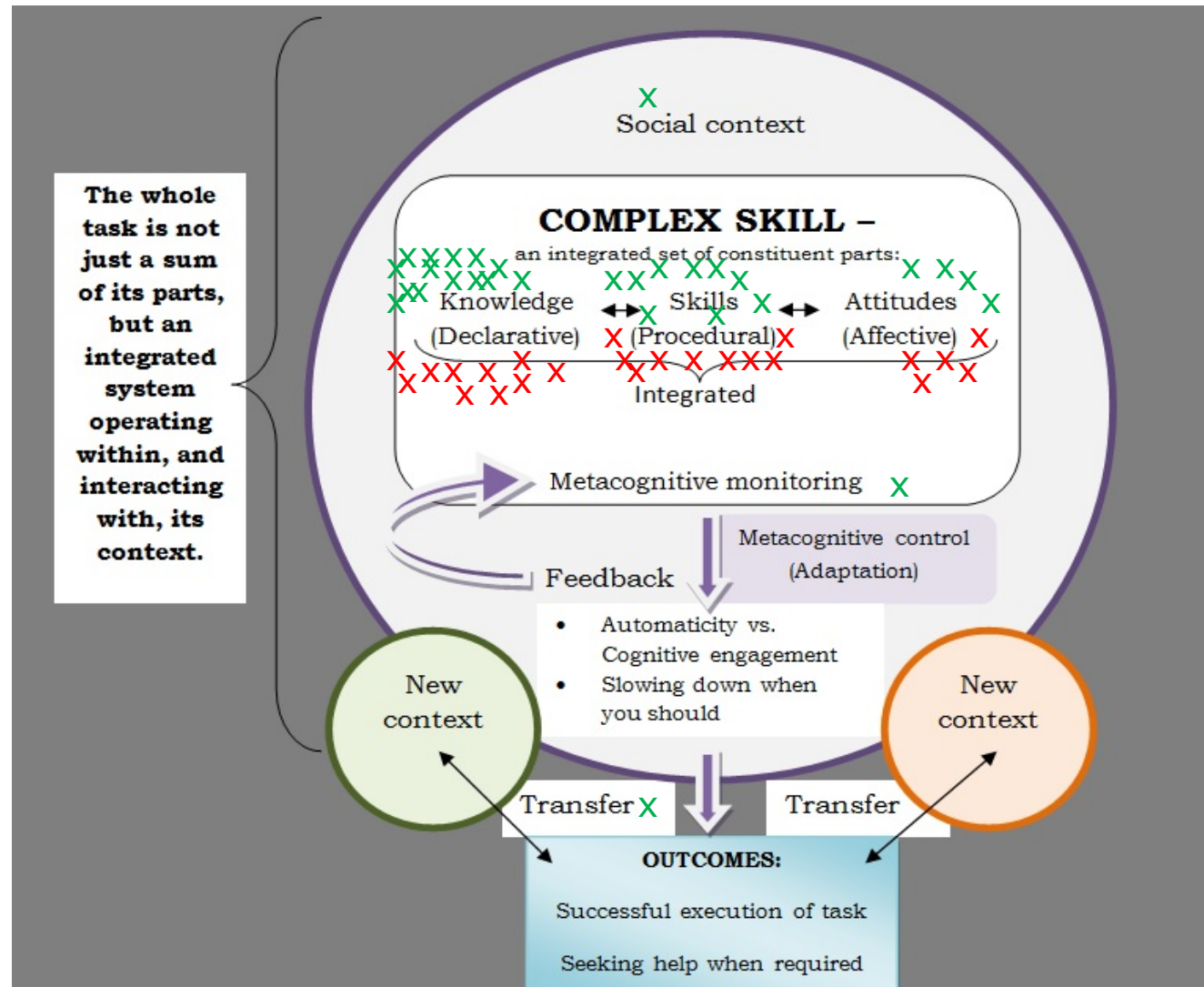
What is the task of prescribing?

McLellan et al 2012



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McLellan et al 2012



Conversation 3 – in Maastricht

LMcC and TD: How can we design a prescribing training intervention?

JvM and AdeB: Find how an expert does it and do a “task decomposition”?

LMcC and TD: Hmmm. Perhaps we could study F1s and F2s

JvM: That is like asking a pig to design a slaughterhouse

Conversation 3 – in Maastricht

LMcC and TD: How can we design a pre-training intervention?

JvM and TD: How does an expert do it and do a “task in position”?

LMcC and TD: Hmm. . . we could study F1s and F2s

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Conversation 3 – in Maastricht

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Some time later

LMcC: You know, I've been thinking about what Jeroen said. No one individual is the expert

TD: Aha ... Ahaa ... Ahaaa ... Ahaaa ... Ahaaaa ... etc

Later still in a northern UK city...

Norris et al in preparation

BN (Y4 medical student) does ethnographic research observing how Y5 medical students learn to prescribe in the shadowing period

- Sees them being left behind by ward rounds and learning fragments of the prescribing task in relative social isolation from ANYBODY

Identity development & emotions - 1

Pearson et al in preparation

- “Figured Worlds”
 - Identity theory
 - Discourse analysis
- 54 emotionally salient events in the daily learning lives of Y3 UK medical students (audio diaries and interviews)
- Who were the “figures” in medical students’ identity construction?

Identity development & emotions - 2

Pearson et al in preparation

... this GP really inspired me ... we went on a home visit to this patient, she'd just stopped taking all her pills, she was about 70 or 80 ... she was like don't stress yourself I don't care ... as long as you're OK and you're healthy and you're taking your medication ...

Identity development & emotions - 3

Pearson et al in preparation

... And it's really nice seeing how caring people can be and how you can still maintain compassion once you're a doctor ... I learned the most in that recent GP block ... cos she inspired me ... I was constantly motivated and engaged and I just sucked up knowledge

Interprofessional education



Interprofessional education

- Your education as a health professional?
 - Which decade was it?
 - In what culture was it?
- What identity were you educated into?
 - Individual or an inter-professional identity?
 - How hierarchical was the culture within/between professions?



To be grasped ...



- The (re)habilitation of learning by socialisation
- Inequalities of status and power within and between professions
- Developing individual vs developing collective identities
 - Social (Marxist) vs individualistic (capitalist) theories of identity



A point of clarification

- Interprofessionalism works brilliantly when it comes about naturally
 - Diabetes health care teams

In the meantime ...

- Keep conversing with enthusiasm and humility with anybody and everybody
 - It's easy!
- Keep doing the innovative educational work you're doing but don't be too starry-eyed about what you can expect to achieve in the short term
 - True interprofessionalism requires major social change