The Power of Conversations:

Developing Adaptive Expertise through the Analysis of Practice

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Professional conversations form the oil that seeps through organisational activities, both creating and carrying meaning as it flows. Schools are places of intense activity and the interpretive conversations that accompany them largely determine whether these activities simply form part of the organisation's routines or form opportunities for those involved to learn and improve. The focus of this monograph is on designing conversations that promote professional learning in ways that impact on student learning and achievement.

Conversations need to be crafted carefully and deliberately if they are to realise their power in this professional learning role. One of the major challenges is to interrupt the flow of something so innate to our development. Through daily practice since childhood our neural networks have become patterned in ways that determine what we attend to and how we respond[1]. Changing the automaticity of our conversations requires changing this patterning – not an easy matter.

While this issue of interruption is common to all professional conversations, in this monograph I will focus specifically on crafting conversations around the observation of practice. The principles I outline are relevant to a wider range of conversations, but in the interests of clarity, the specific focus will be situations in which one professional (school leader, peer, or coach) has a professional learning relationship with another and seeks to develop that relationship through the observation and analysis of their practice.

Approaches to professional conversations abound in the literature so how is this one different? The approach is grounded in widely recognised theories of learning, of interpersonal effectiveness and of professionalism. In addition, it has evolved through a long term research and development programme specifically linked to substantial improvements in student learning and for those not achieving well in our education systems. Each of these aspects will be described in turn.

Theories of Learning

Theories are just a set of connected ideas about what is leading to what. Theories of learning try to explain how people learn. The theories of learning on which the approach in this monograph draws emphasise four principles. The first is the importance of engaging prior conceptions of practice[2]. Just as students arrive in classrooms with pre-conceptions of how the world works, so do their teachers and leaders. Bypassing these preconceptions runs the risk of practitioners rejecting new information about improving practice because it does not fit with what they currently believe. Alternatively, new information is incorporated into existing conceptual frameworks and understood

applying professional knowledge in light of the challenges and needs presented by the students they teach. Adaptive experts engage in ongoing inquiry and knowledge building to work out when their routines of practice do not work for students and they know from where to seek help[15].

Given the social nature of learning, it is difficult for teachers to develop adaptive expertise unless they work in schools that foster and support their learning. This means school leaders act as adaptive experts in their leadership role so the whole school develops what is usually referred to as adaptive capacity[16].

Adaptive expertise can be best understood by contrasting it with routine expertise. Both kinds assume people learn throughout their lifetimes. Routine experts and schools with routine expertise learn how to apply a core set of skills and routines with greater fluency and efficiency. Notions of routine expertise are based on assumptions that novice teachers and leaders become expert through supported practice[17]. Skill development follows a general pattern of an initial phase of survival and rule-following, one or more intermediate stages showing greater flexibility, experimentation and consolidation, and a final phase of mastery and fluency. The emphasis is on procedural efficiency[18]. The main contrast with adaptive experts is that routine experts do not necessarily develop a routine central to developing adaptive expertise, that is, systematically examining practice for its effectiveness and seeking new knowledge and skills when problems become evident. Thus changing demographics, new technologies and the like are incorporated into existing routines rather than serving to challenge the efficacy of those routines.

The Research Base

The empirical research on which this monograph is based involved a research and development programme in three cohorts of schools with over 100 schools in each cohort where large gains for students' literacy achievement were replicated[19]. While the work in the schools was multi-faceted, as most improvement initiatives are, the teachers involved consistently rated the conversations they had with those facilitating their professional learning around observations of their practice as being the most powerful lever for improvement[20]. The same conversational structures were then extended to the observation of leadership practice with similar reactions.

The research evolved over three phases with a development focus taking place in between. The first phase involved transcription analysis of facilitator feedback to teachers and interviews of participating teachers. The findings were consistent with other research in the area. This research has repeatedly highlighted that conversations involving giving feedback[21], discussing difficult issues[22], and appraising teachers typically do not achieve the intended results. These conversations usually suffer from obscure messages in ways that minimise concerns and difficulties[23]; dominance of one party through stating untested assumptions about what is leading to what as if the assumptions are the truth[24]; or advice giving that is not necessarily understood or valued[25].

Following this first phase of the research, training was provided to the facilitators responsible for promoting professional learning in the participating schools. The training focused on improving the interpersonal processes consistent with the values outlined above between the facilitators and teachers about the observation of practice. These revised conversations resulted in interpersonal processes more consistent with the values outlined above with high ratings of usefulness given by

Integrity	Sticking to your principles, values and beliefs	Advocating your principles, values and beliefs in a way that invites inquiry into them and encourages others to do the same
Maximising valid information	Thinking of evidence as self-evident	Thinking of evidence as something that needs to be interpreted because it is likely each participant will have a different interpretation
Inquiry	Asking a lot of questions	Expressing your views and the reasoning behind them, then checking to see whether they are shared and asking the other person to explain their views

A typical example of a Model One defensive conversation in the situation of an observer giving feedback to a teacher following the observation of a lesson might include opening the conversation with positive comments about the lesson *(giving help and support)* followed by a series of questions asking how the teacher thought the lesson went *(inquiry)*. Often the questions become more specific around an area of concern that the observer wants the teacher to notice as a problem in the hope that the teacher will also recognise it as such *(maximising valid information)*. The reason given for this kind of questioning is that the teacher is more likely to "own" the problem if he /she names it *(respect for others)*. In reality, this opening is often about wanting the teacher to say what the observer is not prepared to say thus averting the possibility of upsetting them *(giving help and support)*. If the teacher acknowledges this is something that he / she could work on, further analysis is avoided, including the reasons why it might be a problem *(respect for others)*. Rather, the observer offers suggestions for change with implementation of any one of them left to the discretion of the teacher *(respect for others)*.

The other version of Model One is guided by the values of retaining control in a way that maximises winning and minimises losing[30]. These values often come to the fore when the teacher does not identify the observer's concern so the observer gives suggestions to the teacher about how to improve without establishing if there is agreement about the concern or whether the teacher believes improvement is needed. When potential disagreements look like they might arise, they are skipped over quickly to maintain a more positive emphasis on what should be done from the perspective of the observer. Both these approaches to feedback conversations were evident in the phase one transcripts of the research into classroom observations and feedback.

In contrast, an important strategy in the "learning conversations[31]" (Model 2) is to co-construct understandings to develop shared meaning throughout the conversation, or in more colloquial terms, make sure all participants in the conversation are on the same page. The co-construction applies to all aspects of the conversation, whether it is setting an agenda about the purpose and process of the conversation, undertaking an analysis of the evidence relating to the observed

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Building Knowledge and Promoting Self-Regulated Learning

The challenge to build knowledge within conceptual frameworks through conversations required much deeper engagement with the reasons underpinning teachers' and leaders' practice and for the practical knowledge to be linked specifically to the theoretical frameworks. One way to do this is for the observer to co-construct criteria for effective practice with the teachers in the area of focus and then analyse the observed practice using these criteria. To be robust, the criteria need to be linked to wider theories and research of effectiveness, not just to those believed to be important by the participants or it is inconsistent with one of the important features of adaptive expertise. Understanding these kinds of theory-practice links are central to developing teachers' deep pedagogical content and assessment knowledge.

Practice cannot be considered effective, however, no matter how closely it adheres to a set of theoretically-informed "ideal" criteria unless it is responsive to the participating students and promotes their learning. The worth of the co-constructed criteria in practice, therefore, need to be judged in terms of how students are responding and learning – again a central tenet of adaptive expertise.

The challenge of structuring conversations to promote self-regulated learning requires the effectiveness of practice to be monitored in terms of learning goals[33]. The importance of learning goals for students is well established. The purpose of these conversations, however, is to promote teacher learning so they can be more effective in promoting student learning. The teachers themselves, therefore, need professional learning goals, linked to student learning goals, against which to monitor the effectiveness of practice. Goals on their own, however, are insufficient to ensure the learning of adaptive experts. The conversations, therefore, need also to promote monitoring of the goals and to help the teacher judge whether any changes in practice are more effective than what they were doing before[34].

Practice Analysis Conversations

This section sets out the protocols for the conversation with examples. These protocols were developed and extensively trialled with an additional 60 facilitator- teacher transcripts collected to check the efficacy of the protocols to ensure it was consistent with the development of adaptive expertise. The conversations are structured into three parts although in natural settings Parts Two and Three frequently do not occur in a lockstep manner. What is more important is that the values of the interpersonal processes and key features of the learning theories are evident.

In brief, the first part involves a pre-observation conversation to set the scene and develop criteria for effectiveness. The importance of this part became increasingly evident through the development phase of the research when those involved found it essential to providing the foundation for the observation and the following conversation. The second part involves a co-constructed analysis of practice using the pre-observation conversation as the basis. The third involves the identification of possible new practices and how the teacher would monitor them in terms of their effectiveness for students.

howit is to be achieved	underpinning practice.	*have structured your lesson to achieve them.*
Identify which students will be the focus during the observation	Ensures both observer and teacher are on the same page and the observation is linked to specific student learning goals.	*Is there a group of students you are finding particularly challenging because if I focus on them I may be more helpful in moving things along for both you and them?*
Identify the impact of teaching so far with evidence – students' strengths and needs	Further deepens understanding of reasons underpinning student learning goals and teaching practices intended to address them; possible basis of further evaluation and critique with the focus on students.	*So you want me to focus on this group because ....* *Can you tell me about what these students already know in relation to ... [this goal], and how you know, so I can understand the specifics of what you are trying to achieve and how ....*
Identify ways to establish if students are learning what they are supposed to be learning	Ensures that the effectiveness of practice is assessed in terms of student learning and that evidence is collected on this.	*How will I know if these students are learning what you are intending for them to learn? One way is for me to interview them about their understanding of the learning aims.*
Co-construct teacher's goal for own learning (linked to promoting student learning)	Identifies professional learning goal to monitor progress in the analysis of practice and promote self-regulated learning. Based on the value of mutual respect that attributes a high capacity to learn.	*So you are not sure how to help the students use ... in their writing. You've assessed them and structure is strong but ... is not so strong. You think if you improve your modelling of this aspect it will help. I agree modelling can be a very powerful way of teaching this aspect of writing. So let's make this your goal. How about "Improve my modelling so the students can tell me what I am showing them and are able to use it in their writing." ....*
Co-construct the criteria for effective practice in relation to teachers' learning goal (linked to the students' learning goal)	Establishes theory-practice links by situating the specifics of practice in a conceptual framework of effectiveness; provides the basis for analysis following the observation. Based on the interpersonal	*Let's work out what counts as effective modelling. I'm sure you've got some ideas and I have some too. (May need to refer to research or other authoritative work to ensure criteria are justified in terms of a wider knowledge base than that of teacher and observer).*

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	learn.	
When analysing the lesson, probe and examine what led teachers to do what they did during the illustrative parts of the lesson	Further exploring teachers' reasons for underpinning their practice so that any new suggestions (next part) can be linked to current understandings.	*"I noticed you did ..., I was wondering what led you to do that?"* *"Can we clarify what each of us means by ..., because I'm not sure we are on the same page?"* *"Can you talk me through ... and how you felt about it because I need to understand that if I'm going to help sort this one through."*
Effectiveness related to impact on students	Reminder that practice is only effective in terms of the extent to which it has a positive outcome for students.	*The way you modelled ... did fit the criteria we worked out but the group didn't seem to get it, so there must be something else going on that we need to figure out.*

Co-constructing New Practice

The third part of the conversation relates to the co-construction of new practice. It is co-constructed in the sense that both contributes possibilities consistent with the criteria for effectiveness, with the teacher in particular evaluating the ideas for their feasibility or needed adaptations in their context.

Figure 4

The Dimensions of a Practice Analysis Conversation Co-constructing New Practice

Dimension	Reasons for the Dimension	Example
Co-construct new practice based on previous analysis and criteria for effectiveness (revise criteria if appropriate)	Reference to criteria develops deep knowledge within conceptual frameworks. Co-construction gives help and support while maximising valid information.	*So let's look at what this all means for you next time you model a writing strategy. We've revised the criteria we worked out initially because they didn't quite capture what was needed for these students. You found you needed to also ....*
Reasons for new practice referenced to underpinning theoretical ideas / theories	Develops theory-practice links within conceptual frameworks.	*We've worked out some strategies, but I just want to go back and check the bigger picture to make sure we are on-track in terms of why those strategies and not others.... Let's start with ....*

base the analysis and the co-construction of more effective practice. The same kind of inter-play between theory and practice operates in which one is used to understand the other more deeply and to develop knowledge within conceptual frameworks. Promoting self-regulated learning, whether for leaders, teachers or students requires learning goals and ways to monitor progress in relation to those goals[36].

Conclusions

The old adage that 'practice makes perfect' omits the crucial role of conversations in promoting improvement. Schools are places of high activity and the oil of conversations that create and carrying meaning across these activities largely determines whether they become opportunities for learning and developing adaptive expertise, or not. Among other things, they provide the vision for new possibilities through goal setting[37], and feedback on effectiveness[38]. They can motivate or de-motivate. This power of conversations underpins the importance of their careful construction because this power may be negative, neutral or positive. Observing and analysing professional practice has the potential to be all these things.

Increasingly, we expect teachers to move from purely craft based practice to more research-informed professional practice[39]. It is no longer enough to do one's best as a teacher or leader. There is a growing expectation that teachers will interrupt their standard routines of practice and use research-informed theory and practice to create experiences that promote the learning and well-being of all their students. Similarly, research into effective leadership practice that has an impact on outcomes for students has broadened and deepened. Acting in accordance with this research is becoming a professional obligation and a demanding expectation.

In parallel with this professional obligation to meet these demanding expectations of practice, are the obligations of those responsible for supporting their learning. They, too, need to help teachers and leaders in ways that are consistent with what is known about learning. This means interrupting their standard routines of practice and examining that practice for its effectiveness in promoting professional learning using research-informed theory and knowledge of practice.

This monograph has focused on interrupting conversations surrounding the analysis of teaching and leadership practice and constructing such conversations in ways that are consistent with how people learn and the development of adaptive expertise. The underpinning theory, however, applies to a wide range of conversations. Learning theories are increasingly converging on the importance of four principles that include engaging prior conceptions, developing a deep foundation of knowledge, constructing learning through social interactions, and developing meta-cognitive and self-regulated learning orientations[40]. Conversations, however, are essentially about interpersonal effectiveness, so attention needs to be paid to the kinds of interpersonal processes that are consistent with promoting adaptive expertise in environments with adaptive capacity. The research project that has surrounded the construction of conversations consistent with these principles has demonstrated repeatedly that they are effective in promoting professional learning in ways that accelerate student learning and achievement.

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