At the end of November 2001, the School of Graduate Studies invited four members of staff—Prof K S Chiang, Prof Douglas Vogel, Prof G G Wang and Prof William Wang—to share their experience and discuss issues on the supervision of research students.

Be sensitive and responsive

The participants stressed that there is no blueprint that must be strictly followed to guarantee quality supervision. "I think with something so subtle and elusive as this relationship, it’s impossible to come up with a list of do this, don’t do that," said Prof William Wang. But an overriding aim for supervisors is to be sensitive and responsive to students’ needs. Students come with different approaches, motivations and abilities that ultimately shape their success. But, said Prof Chiang, "If supervisors are sensitive enough to students they will tailor their supervision style to suit each particular student. I think it’s important to recognise the differences of students and how to deal with them."

All four colleagues queried whether ‘supervision’ best describes this complex relationship. This may seem a small point, but, as Prof William Wang explained, "words shape images, and images shape relations; it’s very important." Supervisor may represent the image of an overseer, such as in banks or factories. Alternative words suggested by participants included mentor, fellow explorer, team leader, and coach.

Share experience and open doors

Although participants agreed that a prescriptive list of do’s and don'ts was not realistic, they did raise a range of key issues and illustrative examples. Supervisors have many roles and are involved in a range of processes. In all of these, the supervisor can contribute two important elements. First, they have a wealth of experience in research and the field of study. "It’s essential for supervisors to be experienced in research," Prof Chiang explained, "so they can have many successful or even failed experiences to share with their students." Second, supervisors are aware of other resources and opportunities that can support their students. "Through their interaction the supervisor knows what the student’s needs are, and the supervisor or the coach has a much better view of what is out there beyond the university," said Prof William Wang.

Motivate

Research study requires students to be highly motivated, enthusiastic and passionate about their work, and supervisors can help stimulate this motivation. "You’re trying to create the environment in which the intrinsic motivation is nurtured and encouraged," said Prof Vogel. "Ultimately these are students who need to be very self-motivated, and anything we can do to enhance or encourage that attribute—to me it’s what supervision is about." Participants agreed that motivating students is a more effective approach than trying to force students to produce work.

Focus

Giving students focus is important, particularly at crucial times such as project formulation, write up, and publication writing. Suggesting students expand their focus is rare said Prof Vogel, whereas encouraging students to narrow it is very common. "A major element in research is to identify a worthwhile problem," explained Prof Chiang, "and some students can take many years to get to that point." "A lot of what we do in the first few years is to whittle it down," said Prof William Wang. He said students should be encouraged to have depth in their specialisation along with a certain level of breadth in the subject.

Facilitate development

Supervisors can help students develop intellectual, research and generic skills. An important aspect of research study is independent thinking, which includes active learning and analytical and critical thinking. Explaining to students how to be analytical can be difficult. Prof G G Wang said he once used a student’s cold to help explain analytical thinking in law, by likening diagnosing and treating a cold to identifying legal problems, finding underlying sources and providing solutions. Prof Vogel said it can help to draw on other material and ask students “How does that reflect back into your own work?”

The short time span and the demands of research and writing up mean that supervisors should also help “ensure the students are able to manage their time,” said Prof G G Wang.

Generic research training courses can help students by introducing them to methods and approaches. For more detailed training, support needs to come from supervisors. "I think it is the supervisor who can provide more useful information about this aspect," said Prof Chiang. "They have a lot of good experience to share in their field." Or if supervisors are not experienced in particular methods, they are in a good position to direct students to people and facilities that can offer the right support.

Supervisors give varying types of support when their students are writing their theses, ranging from guidance to full editorial support. Whatever the approach, giving feedback that is constructive and helps students improve their work is essential. Prof G G Wang said it is important to encourage improvement rather than just highlight problems. Prof Vogel said that showing students “they are making progress” is a key part of motivation during writing.

Foster collaborative learning

Students can learn much from their peers through day-to-day interaction and collaborative learning situations, including a broader understanding of their research area. Supervisors can actively encourage this teamwork. For example, Prof William Wang suggested setting up small lab groups of students. Prof Vogel recounted the positive experience of taking a research methods course with his students: “On that course we’re working on a project. We’ve gone out and gathered data and we’re really working as a team. So that’s been the most team building effect we could have had, where all of us are working together and producing something.” Prof G G Wang explained another way of building groups is to “formulate a project, and that will really let the students participate as they really need to work together.”

Enjoy

Supervising research students is demanding in both time and effort. But Prof William Wang emphasised this relationship can be extremely rewarding. “When it works it’s beautiful. It is one of the most satisfying aspects I find in my professional life.”

— Vicki Geall