Supervision tips and techniques for very busy people

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Outline

- The problem…

- My supervision philosophy

- Research Group & joint supervision

- Work plans

- Writing (and reading!) training

- Meetings – group and individual

- Email

- Career development

The Problem

- My example:
    - ☐ Head of school & Director of research centre
    - ☐ Associate editor, Trans on SE, IEEE Software
    - ☐ On several steering committees, many conf committees
    - ☐ Write 10-15 papers per year
    - ☐ Teach
    - ☐ And…

- Supervise ~10 PhDs; 2-3 hons projects; 3-4 small team project groups
    - ☐ How does one manage to do a good job of this???

My (PhD) Supervision Philosophy

- ~~Student~~

- Junior colleague

- Mentor/mentoree

- Student makes the decisions; I advise

- Want to develop next generation of academics; next generation of industry R&D researchers

- PhD = research apprenticeship

Tip 1 - Research Group/Joint supervision

- **Get yourself a research group**
  - ☐ Several students
  - ☐ 1-2 post-docs
  - ☐ 1-2 research assistants
  - ☐ 1-2 colleagues

- **Get yourself a "joint supervisor"**
  - ☐ Joint vs co-supervisor…
  - ☐ Joint supervision = joint planning; joint writing; joint meetings; joint problem-solving; joint everything
  - ☐ Hey – who was doing the paper work again…?

Tip 2 - Work Plans

- Organized people = (generally more) successful people

- Disorganized students = hard work

- I like to have for every student:

  ☐ Work plan (from proposal stage onwards)

  ☐ Weekly report on progress/current/planned work

  ☐ Discuss plan with student, joint supervisor, other students (in group)

  ☐ Revise thesis work plan regularly (every 1-2 months)

Tip 3 - Writing (and reading!) training

- I like students to have thesis outline early (from start?!) in project

- Iterate on reports, papers, chapters:
    - ☐ Purpose/outline (10-15 bullet points)
    - ☐ Flesh out with illustrations, paragraph points
    - ☐ Share writing (papers)
    - ☐ Review chapter draft ONCE (unless very poor…)

- Reports VERY brief/to the point – I prefer PPT, "poster", 1 pager, bullet points vs paragraphs

- Literature review report one exception – in 1st 3-4 months; basis of lit review chapter; read lots!

Tip 4 - Meetings

- Group meetings throughout project

  □ Lunch ☺, short reports, demos, workshop papers etc

- Weekly then as-needed

- Agenda up front (else no meeting)

- Action items

- Keep record of (prefer wiki)

  □ Keep documents organized with

Tip 5 – Managing Email

- I am a 150-200 a day (after spam deleted)!! :-o

- To the point; short; as needed

- Prefer meeting with PhD students ☺

- Delete them all if they get overwhelming – if its really important then they'll come back…

How Students Can Help You…

- Supervision… (!!)

- Helping new students to acclimatize: library, lab, PC support, accommodation, networks…

- Teaching

- Admin

- Industry projects

- Visitors e.g. Chinese delegation example

- Career

- And of course – choose the right students!!!

Summary

- Prioritize – what is most important? Enjoyable? Long-term impact??

- Supervise & work with students as a team

- Be organized – you & student (plans!)

- Manage reading/writing carefully

- Manage email carefully

- Its not your PhD…