Panel: The Importance and Role of Teaching Track Faculty (TTF) in Ph.D. Granting Institutions

**Tracy Camp** (Head, Colorado School of Mines)
**Gopal Gupta** (Head, UT Dallas)
**Mats Heimdahl** (Head, U of Minnesota)
Tracy Camp

- Professor and Head, Department of Computer Science
- Colorado School of Mines
- Term as Head started July 1st, 2016
- Launched CS@Mines (and Department of EECS)
- T/TT faculty position since 1993
- Academic Leadership Examples:
  - C-MAPP (industrial partnership program)
  - DECtech (girls outreach program)
  - CS+X and X+CS programs
  - PATHS (scholarship program for low-income students)
Gopal Gupta

- Professor and Head, CS Dept @ The Univ. of Texas at Dallas
  - Term as Head started August 15, 2009
  - T/TT faculty position since Jan, 1992
- Academic Leadership Examples:
  - Computer Science Mentor Center
  - Executive MS in Software Engg (since 2012)
  - Hired 16 T/TT and 38 TTF (currently 53 T/TT and 41 TTF)
  - K-12 Outreach/afterschool coding clubs (reaches ~3,000)
  - BS & MS in Data Science (jointly with Math Dept)
Mats Heimdahl

- Professor and Head, Department of Computer Science & Engineering
  - University of Minnesota
  - Term started July 1st, 2015
  - T/TT faculty position since 1994
- Academic Leadership Examples:
  - Founding DGS for MS in Software Engineering Program
  - Director, University of Minnesota Software Engineering Center
A. Responsibilities (Mats)

- What is the typical course load? Teaching what type of courses?
- What are committee responsibilities of a Teaching Track Faculty? Any supervisory responsibilities?
- What are some examples of tasks that teaching track faculty do that a tenured/tenure track faculty does not do?
A. Responsibilities

• What is the typical course load? Teaching what type of courses?
• What are committee responsibilities of a Teaching Track Faculty? Any supervisory responsibilities?
• What are some examples of tasks that teaching track faculty do that a tenured/tenure track faculty does not do?
**Mines:**
- Teaching load: 6 courses per year; significant input on teaching assignment (what do you want to teach?); class sizes “small”: ~60 (or less)
- 4.5 TTF (all have PhD) & 11 T/TT faculty for 540 UGs, 80 MS+PhD; Extra compensation for summer courses and activities (if interested)

**UT Dallas:**
- Teaching load: 7 courses/yr; teach both BS and MS; class size small: ~50
- Scale is big: 41 TTF (35 have PhD) & 50+ T/TT faculty for 2,800 UGs, 1,050 MS, 170 PhDs; Extra compensation for additional courses/activities

**University of Minnesota:**
- Teaching load: 5 courses per year; primarily required courses; class size large: ~150+
- 13 TTF (10 have PhD) & 46 T/TT faculty for 1,700 majors (+pre), 400 MS+PhD; Extra compensation for additional courses and activities
A. Responsibilities

- What is the typical course load? Teaching what type of courses?
- What are committee responsibilities of a Teaching Track Faculty? Any supervisory responsibilities?
- What are some examples of tasks that teaching track faculty do that a tenured/tenure track faculty does not do?
• **Mines:**
  - Service is expected; significant input on service assignment (what do you want to do?); TTF provide significant amount of mentoring/advising; can supervise/participate in research (BS/MS/PhD) if desired (most don’t)

• **UT Dallas:**
  - Serve in UG curriculum committee; *may* supervise UG research; provide significant amount of mentoring; organize activities outside classroom (mentor center, K-12 outreach, student org advisors, organize events, industry outreach, capstone projects); given extra pay for extra work.

• **University of Minnesota:**
  - Generally no expectation of service. Currently all on “lecturer” or “teaching specialist” tracks; not on the “faculty” track. Some serve in service roles, TA assignments, teaching assignments, student group advising, etc. and get teaching release. Moving to “Teaching Faculty” will change this picture.
A. Responsibilities

• What is the typical course load? Teaching what type of courses?
• What are committee responsibilities of a Teaching Track Faculty? Any supervisory responsibilities?
• What are some examples of tasks that teaching track faculty do that a tenured/tenure track faculty does not do?
• **Mines:**
  - T/TT faculty do everything that TTF do. We are all in this together.
  - In reality, TTF do more advising/mentoring/outreach and T/TT faculty do more research/service to research community.

• **UT Dallas:**
  - T/TT faculty do everything that TTF do, in reality much of lower division teaching done by TTF (though T/TT faculty req. to teach a UG course every 3-4 semesters or so); Most mentoring done by TTF
  - Good division of labor (teaching vs research) but got to be careful

• **University of Minnesota:**
  - T/TT faculty do everything that TTF do. We are all in this together.
B. Professional Development

(Gopal)

• What mentoring is available to TTF? What should be available?
• What professional development is available/encouraged? (Departmental or Institutional level)
• What is the format and criteria of annual performance evaluation? How is teaching assessed?
B. Professional Development

- What mentoring is available to TTF? What should be available?
- What professional development is available/encouraged? (Departmental or Institutional level)
- What is the format and criteria of annual performance evaluation? How is teaching assessed?
• **Mines:**
  - All faculty (TTF and T/TT) participate in mentoring program. 2 mentors for Assistant level; 1 mentor for Associate level; reports to Head each Spring. University has a center for teaching and learning that organizes seminars that many faculty attend. Some TTF mentor T/TT faculty in teaching.

• **UT Dallas:**
  - No formal structure, though senior TTF mentor junior ones (dept head mentors/advise, so does “SL coordinator”, a T/TT fac); University has a center for teaching and learning that organizes seminars that many faculty attend; SLs hold their own “lunch and learn” once or twice a semester

• **University of Minnesota:**
  - No formal mentoring structure. Center for Educational Innovation offers continuing education for faculty. Occasional “brown bag” lunches to share best practices.
B. Professional Development

• What mentoring is available to TTF? What should be available?

• What professional development is available/encouraged? (Departmental or Institutional level)

• What is the format and criteria of annual performance evaluation? How is teaching assessed?
• Mines:
  • Prof development encouraged: attend conferences, conduct research, take a short course, attend research talks, etc. Funds available for 1 trip/year from upper admin; more funds available in dept (if needed). Large pot of tech fee funds exist to purchase technology for courses (write proposal)

• UT Dallas:
  • Prof dev required: 1 course release given in lieu; prof dev report required to be submitted with annual report: attend conference, conduct research, take a short course, attend research talks, etc. Funds of $1,500 made available.

• University of Minnesota:
  • No professional development required, but encouraged. $1,000 made available yearly for travel, equipment, whatnot.
B. Professional Development

- What mentoring is available to TTF? What should be available?
- What professional development is available/encouraged? (Departmental or Institutional level)
- What is the format and criteria of annual performance evaluation? How is teaching assessed?
• Mines:
  • Each TTF submits annual report for past year and goals for upcoming year.
  • Student course feedback is part of the evaluation; formula for success: hire good people, treat them well, and magic will happen
  • Promotion process similar to T/TT faculty: Assistant, Associate, Full

• UT Dallas:
  • Each TTF submits CV, annual report, prof dev plan each year.
  • Student course feedback is part of the evaluation; formula for success: hire good people, treat them well, and magic will happen
  • “TTF coordinator” attends lectures occasionally to provide feedback

• University of Minnesota:
  • Each TTF submits annual report, prof dev plan each year.
  • TTF Eval Committee provides teaching evaluation.
  • Criteria the same as for T/TT --”teaching excellence”
C. Department Expectations (Tracy)

- What scholarship is expected from teaching track faculty?
- What is the department looking for in a successful teaching track faculty member?
- Regarding promotion: What is expected from assistant to associate? From associate to full?
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- What scholarship is expected from teaching track faculty?
- What is the department looking for in a successful teaching track faculty member?
- Regarding promotion: What is expected from assistant to associate? From associate to full?
• Mines:
  • Do not expect TTF to publish or do research (unless interested); prof dev is a must to stay abreast of the field. Set of courses a TTF teaches is generally fixed (which is based on interest), so TTF can excel in teaching those subjects

• UT Dallas:
  • Do not expect TTF to publish; prof dev is a must to stay abreast of the field; encouraged to be part of a T/TT fac’s lab. Set of courses a TTF teaches is generally fixed, so TTF can excel in teaching those subjects

• University of Minnesota:
  • Do not expect TTF to publish; Note again that we have “lecturers” or “teaching specialists”, expectations will change when converting to Teaching Faculty track.
C. Department Expectations

- What scholarship is expected from teaching track faculty?
- What is the department looking for in a successful teaching track faculty member?
- Regarding promotion: What is expected from assistant to associate? From associate to full?
• **Mines:**
  • Looking for a superb teacher who (1) connects with the students, (2) cares about the students, and (3) engages the students both inside and outside the classroom. Impact beyond the classroom.
  • Looking for someone who’ll join our wonderful department culture (good citizen / collegial)

• **UT Dallas:**
  • Looking for a superb teacher who connects with his/her students; cares about them; engages them both inside and outside classroom; establishes a good communication channel, and delivers high quality content through it.

• **University of Minnesota:**
  • Teaching excellence and collegiality.
C. Department Expectations

• What scholarship is expected from teaching track faculty?
• What is the department looking for in a successful teaching track faculty member?
• Regarding promotion: What is expected from assistant to associate? From associate to full?
• **Mines:**
  - Promotion criteria defined (though some TTF find it confusing, like T/TT do)
  - Ranks for TTF and T/TT are the same: Assistant, Associate, and Full
  - Assistant $\Rightarrow$ Associate: documented success in teaching/service
  - Associate $\Rightarrow$ Full: excellence in teaching/pedagogy/service and leadership

• **UT Dallas:**
  - If the TTF teaches well, is a good colleague and is a good citizen of the department, then promotions are automatic;
  - University has policies/guidelines for promotion of TTF

• **University of Minnesota:**
  - Limited promotion path for “lecturers” and “teaching specialists”; “senior” only promotion. No documented standard or procedure.
  - After change to Teaching Faculty, detailed procedures and eval criteria-- modified tenure code
D. Perspectives and Advice

• How does the department ensure that teaching track faculty are effectively integrated in the department?
• What is the biggest challenge facing teaching track faculty?
• How do teaching track faculty fit into expected future needs and strategic plan of the department?
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• **Mines:**
  • Both TTF and T/TT faculty are FACULTY (campus culture at Mines)
  • TTF have a say on everything at Mines (except tenure decisions)
  • We could not survive without them.

• **UT Dallas:**
  • Treat them with respect and fairness (1st class citizens), pay them well, help them achieve their aspirations; don’t take advantage of them; Give them opportunities to earn extra money: 41 SLs at UT Dallas CS: zero turnover.

• **University of Minnesota:**
  • Make them first class citizens. Bit of a challenge with our space constraints.
  • Treat with respect. Make the Teaching Faculty conversion.
  • We could not survive without them.
D. Perspectives and Advice

- How does the department ensure that teaching track faculty are effectively integrated in the department?
- What is the biggest challenge facing teaching track faculty?
- How do teaching track faculty fit into expected future needs and strategic plan of the department?
• **Mines:**
  - Growing enrollments
  - Enrollment challenges exist for T/TT faculty too, but more severe for TTFs

• **UT Dallas:**
  - Many T/TT faculty tend to have less respect for TTFs
  - Growing enrollment (but we are hiring more)

• **University of Minnesota:**
  - Space crunch hits them hard (first to be moved). Burnout from large and challenging classes. Pay. Lack of career path.
  - Departement working hard to address it all.
D. Perspectives and Advice

• How does the department ensure that teaching track faculty are effectively integrated in the department?
• What is the biggest challenge facing teaching track faculty?
• How do teaching track faculty fit into expected future needs and strategic plan of the department?
• **Mines:**
  - We could not survive without our teaching faculty. TTF are involved in everything.
  - Department goal: ~⅓ TTF and ~⅔ T/TT faculty
  - Looking to hire!

• **UT Dallas:**
  - TTF are very important component of our success (UTD has 41 of them, will hire more); UTD has a long history of relying on TTF over 30 years.
  - Growth in CS enrollment continues; if we want to keep class size reasonable, we need to rely on TTF; Small class size is important for us.

• **University of Minnesota:**
  - We cannot survive without our teaching faculty. They will be integral to our growth and service to the U.
  - Must be fully integrated in the department and its mission.
Q&A