

AAPT SUMMER MEETING – MINNEAPOLIS – JULY 26-30

STEMteachersNYC - Starting an Effective Physics Teacher Support Group

Fernand Brunschwig

Teachers College, Columbia University

- 1) Show video: <tinyurl.com/stemnycvideo>.
- 2) Show graph of membership growth
- 3) Show live Google Map of members' locations
- 4) Show list of past workshops
- 5) Show list of upcoming workshops
- 6) Overall principles: Sharp focus on excellence, on teachers working together (teachers teaching teachers), and on combination of deep content, strong (active engagement) pedagogy, and effective classroom management (minimum time for complaints, war-stories, and long-winded theory unconnected with classroom practice).
- 7) How to get off the launching pad (getting started at the very beginning).
 - a) Small group of strong teachers located near each other
 - b) Get or create an email list of physics teachers (We used AMTA & NYAS, plus TC, plus my personal contacts)
 - c) Do a survey (we used a Google form)
 - d) Issue open call for teachers who want to be part of a support group – to come to a meeting
 - e) Orient the meeting toward excellence in teaching physics. Invoke the tradition of great teaching (PSSC, Karplus, Modeling, Arons, McDermott,)
 - f) After introductions, ask for topics that people want to discuss or on which they want help.
 - g) Ask for volunteers to lead a workshop on one of the topics

- h) Get names & email addresses of everyone at meeting.
- i) Setup Google Group, Invite everyone who completed survey to join (for free!)
- j) Set survey to notify you every time someone completes it. Survey now becomes application form for Google Group.
- k) Get rooms
- l) Choose strongest leader for 1st workshop.
- m) Create description of 1st workshop with leader – make sure it appeals to as broad an audience as possible
- n) CHARGE A FEE FOR ATTENDANCE!! (But no membership fee.)
- o) NO FOOD!
- p) SHARP FOCUS ON CONTENT & PEDAGOGY!
- q) On Sat. or Sun. morning: 3 hours, 10 am to 1 pm)
- r) Create registration site (Google form/Eventbrite, . . .)
- s) Prepare materials (NAME TAGS & LIST OF PARTICIPANTS!) and equipment for workshop. SET TONE: SHARP FOCUS ON CONTENT & PEDAGOGY!

8) How to keep going and grow.

- a) Choose workshop leaders carefully – master teachers if possible, and someone who knows how to work collaboratively.
- b) Be careful and selective about university and college faculty members as workshop leaders.
- c) Incorporate new and young teachers as leaders
- d) Be inclusive:
 - i) Public/district teachers, private school teachers, charter school teachers, religious school teachers
 - ii) Middle and elementary teachers
 - iii) Chemistry, physical science, engineering, technology, math, biology, . . . teachers
 - iv) Teachers in under-resourced schools
- e) Work closely with workshop leaders to make workshops accessible to broad group, and to create descriptions that are inviting.
- f) Don't be dogmatic about teaching approach (modeling, ISLE, ...)
- g) Connect with a larger organization (We connected with AMTA.) –tax exempt fiscal agent, credibility, access to list of members, methodology, no requirement for membership in larger organization.
- h) Seed the mailing list with “good” posts (personal, short, well-written, useful, interesting, . . .).
- i) Build community

- j) **Learn names and personal details, including special skills and strong interests.**
 - k) **involve others in doing things, latch onto whatever they want to do or have skills in doing: printing name tags and list of participants, setting up/watching over registration, keeping track of the money, checking people in, deciding workshop topics,**
 - l) **nurture collaborations**
 - m) **Encourage posting of teaching job openings on mailing list.**
 - n) **AVOID POLITICS!!**
- 9) Long-term sustainability– still heavily dependent on volunteer effort – will need to have enough income to hire at least a part-time executive director, accountant & equipment manager. (\$50K/year in addition to income from fees.)**
- 10) Scalability, Size & Limits on growth**
- a) **How many members required to reach sustainability? (adequate supply of workshop leaders and participants, and of volunteers to run organization)?**
 - b) **How large before leadership loses touch with members and members lose touch with each other?**
 - c) **How large can a genuine “learning community” be?**
 - d) **How spread out geographically to maintain some “face-to-face” contact?**
 - i) **My guess: 500 members in NYC/Tri-State region**
- 11) This is highly replicable – local grassroots teacher-to-teacher support is critical, effective, and cheap!! It supplements and complements work of the national organizations.**