TAG Workshop Organizer Meeting

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Introductions and Logic Game

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Purpose of this Meeting

Introduce you to TAG Workshop
- Assumptions
- Goals
- Methods
- Materials
- Content

Develop a draft agenda for your workshop

Create a timeline for organizing your workshop

Plan for next steps

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What is a TAG Workshop?

Professional development for high school CS teachers
- Focused on promoting diversity

Three day summer workshop
- Thirty participants
- Stipends to support teacher participants
- Provide high-quality materials from NCWIT and CSTA

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Assumptions of TAG Workshops

Teachers are experts on
- Teaching in high school
- Introductory computer science concepts
- Their local conditions

Researchers can offer teachers
- Cutting edge content for examples and assignments
- Evidence-based advice on methods and gender diversity in CS

Teachers can offer teachers
- Field-tested content and methods
- Peer support

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Goals of TAG Workshops

Attract more and diverse students to CS
- NOT a special environment for girls
- Reform the existing special environment for certain boys

Enhance pedagogy

Develop a path to college computing majors

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Methods of TAG Workshops

Interactive

Hands-on

Treat teachers as honored guests

Promote community

- House teachers together and nearby on-campus

Take advantage of the location

- Let it speak for itself; don't hype your institution

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TAG Workshop Content

Each day

- Diversity
- Special CS topic
- Pedagogy
- Share successful practices

For each topic

- Teachers discuss and plan how they will apply it

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Materials for TAG Workshops

national center for women & INFORMATION TECHNOLOGY

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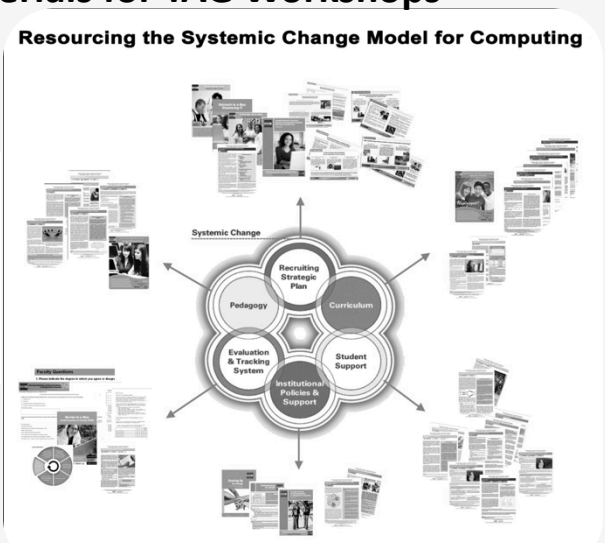
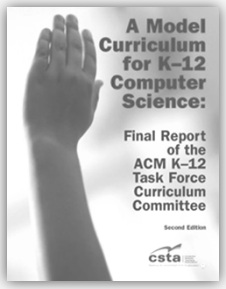


More Materials for TAG Workshops

csta Computer Science Teachers Association



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See CSTA.ACM.org for a complete list of free resources

HOW DOES THIS OVERVIEW FIT WITH YOUR HOPES AND EXPECTATIONS?

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AGENDA TEMPLATE

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Day 1

Welcome

Keynote focusing on the future of computing education

Icebreaking

Talking about diversity and computing

Special topic in CS, generate ideas about examples, assignments

CS Unplugged

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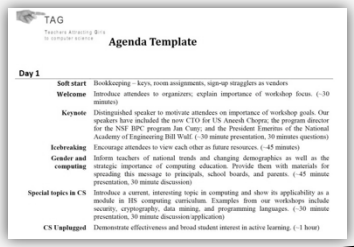

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Agenda Template

Day 1

Soft start	Bookkeeping – keys, room assignments, sign-up stragglers as vendors
Welcome	Introduce attendees to organizers; explain importance of workshop focus. (~30 minutes)
Keynote	Distinguished speaker to motivate attendees on importance of workshop goals. Our speakers have included the now CTO for US Aneesh Chopra; the program director for the NSF BPC program Jan Cuny; and the President Emeritus of the National Academy of Engineering Bill Wulf. (~30 minute presentation, 30 minutes questions)
Icebreaking	Encourage attendees to view each other as future resources. (~45 minutes)
Gender and computing	Inform teachers of national trends and changing demographics as well as the strategic importance of computing education. Provide them with materials for spreading this message to principals, school boards, and parents. (~45 minute presentation, 30 minute discussion)
Special topics in CS	Introduce a current, interesting topic in computing and show its applicability as a module in HS computing curriculum. Examples from our workshops include security, cryptography, data mining, and programming languages. (~30 minute presentation, 30 minute discussion/application)
CS Unplugged	Demonstrate effectiveness and broad student interest in active learning. (~1 hour)

Day 2

Promising practices

Rethinking CS1

Creative lessons with broad appeal

Recruiting for diversity, including student stories

Special topic in CS

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Day 2

Rethinking CS1	Present effective pedagogic practices for organizing and conducting a CS1 course that encourages all types of students towards computing. (~1 hour, 30 minutes for discussion/application)
Creative lessons	Reinforce effectiveness and broad student interest in active learning activities using active learning techniques. (~45 minute presentation, 30 minute discussion/application)
Recruiting for diversity	Inform teachers about the value, methods, and effectiveness of active recruiting. Have diverse current students tell their own stories. (~1 hour presentation, 30 minutes for students, 30 minutes for discussion/application)
Promising practices	Have attendee from prior workshop demonstrate and discuss one of their successful applications of workshop material. (~30 minute presentation, 30 minutes discussion/application)
Special topics in CS	Introduce another current, interesting topic in computing and show its applicability as a module in HS computing curriculum. (~30 minute presentation, 30 minute discussion/application)

Day 3

Promising practice
Special topic in CS
Pair programming
Brainstorming next steps
Assess the workshop

Day 3

Promising practices	Have attendee from prior workshop demonstrate and discuss one of their effective learning practices. (~30 minute presentation, 30 minute discussion/application)
Special topics in CS	Introduce another current, interesting topic in computing and show its applicability as a module in HS computing curriculum. (~30 minute presentation, 30 minute discussion/application)
Pair programming	Introduce pair programming and document the effectiveness of its pedagogic practice towards all students; provide tools for carrying out the practice. . (~1 hour for presentation, 30 minutes for discussion/application)
Brain storming	Encourage participants to present their promising practices and to commit to adopting some of presented practices. . (~30 minutes)
Assessment	Assess workshop efficacy and explain importance of participation in future assessment. . (~15 minutes)

General Advice

- Make everything as interactive as possible. Give teachers time to think, talk with each other, and share with the group how each presentation applies to their situation and what they will do differently.
- Include a dinner together that highlights something special about your location.
- Use high energy speakers or physical movement late in the day to keep everyone engaged.
- Don't hype your institution.
- Promote membership in CSTA chapters for on-going support and engagement

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SAMPLE CONTENT

As we work through the day,
pencil in your agenda worksheet

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