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Welcome!

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## JOINING EFFORTS

From Communication to Collaboration over the Internet

# The ThinkQuest Program

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A Tutorial

by

Vikas A. Sonak

# Program for Morning Session

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1. Presentation
2. Question time
3. Discussion

# Program for Afternoon Session

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1. Web sites as resources
2. Exploring the TQ Library
3. Comparing web sites
4. Identifying key features of sites
5. You be the judge!
6. Question time
7. Discussion

# Presentation Outline

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- IT in Education
- About ThinkQuest
- How a ThinkQuest Contest Works

# IT in Education

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- IT: indispensable part of life
  - Information management
  - Communication
  - Publishing

# IT in Education

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- Role of IT in schools today
  - Skills for the modern world
  - Learning resources
  - Teaching resources
  - Distance learning
  - (International) collaboration



# IT in Education

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- IT in schools
  - Differences in IT resources
    - Financial & organizational constraints
  - Students and IT
    - Haves and have nots
  - Teachers and IT
    - Knowledge gap / lack of motivation
  - Integrating IT in education
    - Bridging gaps

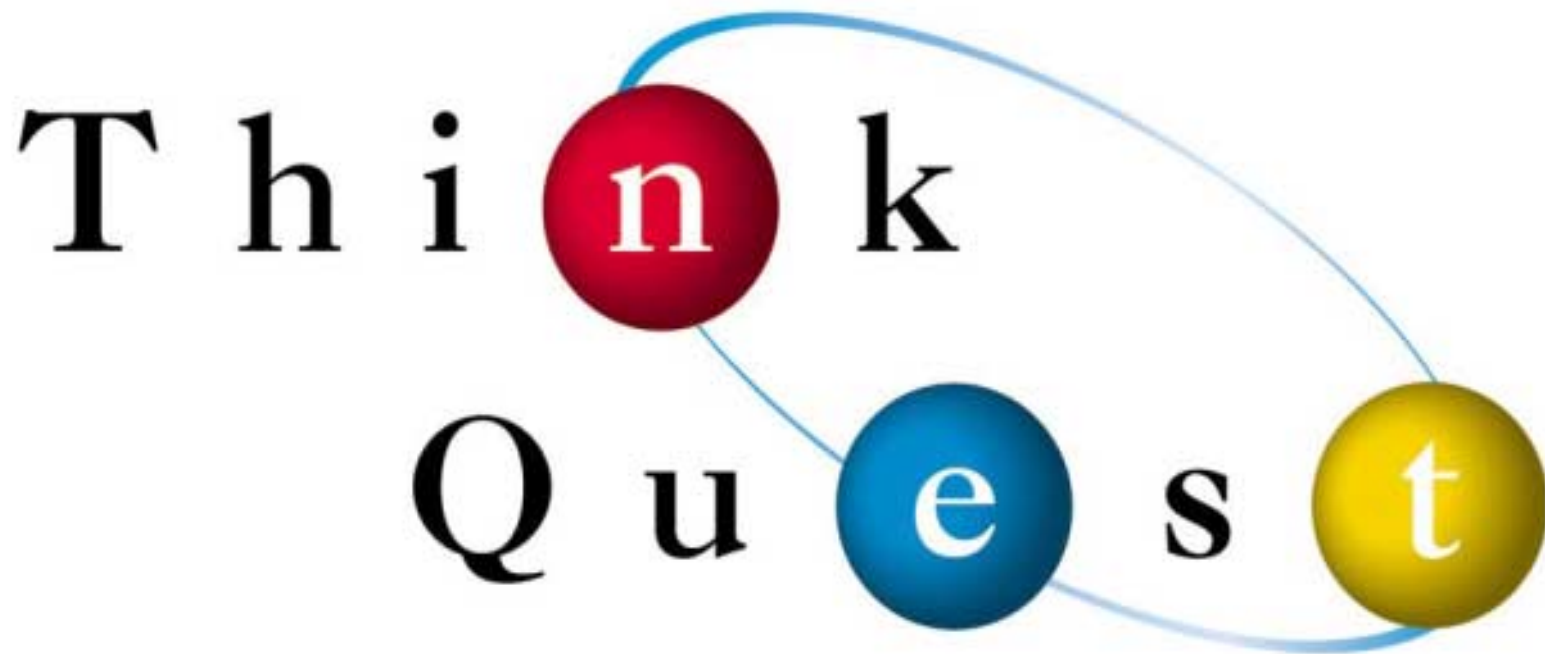
# IT in Education

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- The Internet: a boon or a curse?
  - For and against
  - Responsible use
  - Scope in education
  - Internet-based programs and activities
  - ThinkQuest

# About ThinkQuest

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# About ThinkQuest

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- What is ThinkQuest?
- Why is it such a good program?
- ThinkQuest contests

# About ThinkQuest

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- What is ThinkQuest?
  - A global Internet-based platform for educational collaboration
  - An online global community
  - A program of Internet-based contests

# About ThinkQuest

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- ThinkQuest contests/activities - 1
  - Primary school children: 6 – 12 years
    - Junior TQ
  - High school students: 12 – 19 years
    - TQ Internet Challenge

# About ThinkQuest

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- ThinkQuest contests/activities – 2
  - Students in Higher Education
    - ThinkQuest for Art Students
  - Teachers
    - ThinkQuest for Teachers
  - Other Interest Groups
    - ScienceQuest

# About ThinkQuest

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- Why is ThinkQuest such a good program for students?
  - *Because it enables and encourages them to:*
    - Work together and have fun together
    - Use Internet-based resources and technologies wisely and creatively
    - Learn to do research, organize, plan and think critically
    - Communicate with and understand peers with a different background
    - Create something special and win an award!



# About ThinkQuest

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- Why is ThinkQuest such a good program for teachers?
  - *Because it enables and encourages them to:*
    - Explore new ways of working together with students
    - Guide and stimulate students' research and critical thinking
    - Expand students' awareness of the world they live in
    - Learn new technologies from students
    - Share new technologies with other teachers

# About ThinkQuest

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- Challenges for the future:
  - Reaching out to a broader range of students and schools
  - Increasing involvement of school management
  - Extending reach to libraries, museums
  - Industry-sponsored web sites on specific topics
  - Involving other age-groups
  - Better maintenance of sites
  - Greater acceptance and active use of sites by publishers as supplementary course material

# About ThinkQuest

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- The ThinkQuest Internet Challenge

## *The Rules*

- Contest open to international participants
- Team composition
  - 2 or 3 students, boys and girls mixed
  - 1 to 3 coaches (teachers or parents)
- Student age: 12 – 19 years
- Students can be from the same school, from different schools in the same city or country, or from different countries

# About ThinkQuest

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- The ThinkQuest Internet Challenge

## *The Rules*

- Students cannot participate in more than one team
- A student who has been a finalist in a previous contest year cannot form a team with other finalists
- A coach can coach one or more teams

# About ThinkQuest

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- The ThinkQuest Internet Challenge

*The Time Path*

- January through May: signing on
- June through August: building web site

# About ThinkQuest

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- The ThinkQuest Internet Challenge

*Some judging criteria*

1. Diversity of Computer and Network Resources among Student Team Members
2. Team Collaboration
3. Educational Value
4. Entry Quality
5. Internet Style of Learning
6. Entry Usage

# About ThinkQuest

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- The ThinkQuest Internet Challenge

## *Awards*

- In the beginning very large sums of money, for about 40 teams, according to ranking
- Now much smaller amounts for the 10 best entries and no ranking + a very small compensation (\$100) for each student team member of the 90 top scoring entries

# Participating in a Contest

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- How to form a team
- How to choose a topic
- The student's role
- The coach's role



# Participation

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- How to form a team
  - Major considerations:
    - Team members with diverse skills and talents
    - International team
    - Multilingual site
  - Finding teammates:
    - By asking around in class/school
    - By publishing interests, skills and preferences in “MyThinkQuest”
  - Finding coaches:
    - By asking teachers or parents

# Participation

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- How to choose a topic - 1

*Topic ideas*

- Personal interest or preference
- Via team brainstorming session
- Suggestions from teachers or parents
- Based on a school project

# Participation

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- How to choose a topic - 2

*Criteria for final choice of topic*

- Not offensive to anyone
- Suitable for an *educational* web site
- All team members should agree/identify
- At least one coach or teacher who can guide research in the chosen topic
- Not an over-used TQ topic or a unique approach to a topic used before
- Good match between topic and student skills
- Not too ambitious

# Participation

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- What role does a student play?
  - Contributes his/her specific skills to the site
  - Works with full commitment on allocated task in terms of time and effort
  - Encourages and helps other team members
  - Takes an active interest in the work of the other members
  - Makes good use of the support coaches can provide

# Participation

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- What role does a coach play?
  - Takes an active interest in the work of the team and acts as a sounding board
  - Guides research activities by suggesting sources
  - Advises the team on matters such as copyright and plagiarism
  - Helps resolve conflicts among team members
  - Boosts morale and provides constant encouragement

# Teamwork

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- Students and coaches
- Appointing a team leader
- Appointing a head coach
- Deciding the strategy
- Allocating tasks
- Planning the work
- Choosing a communication protocol

# Teamwork

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- Students and coaches
  - The student team members carry out the actual work of researching, designing, programming and building the site
  - The coaches may not work directly on the entry; they fulfill only a supportive role

# Teamwork

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- Appointing a team leader

*Each team has a team leader who*

- Organizes team meetings and leads team discussions
- Submits the entry proposal and finalizes the entry at the deadline
- Coordinates the project and monitors team work



# Teamwork

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- Appointing a head coach

*A team may have a head coach who*

- Acts as the team spokesman towards TQ officials in case of problems
- Takes decisions in case of disagreement

# Strategy

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- Setting a clear goal
  - What do you want to achieve with the site?
- Knowing exactly what your topic is
  - Do you have a clear idea how narrow or broad you want your topic to be?
- Agreeing on a general approach
  - What design, programming and interactivity features do you have in mind?

# Teamwork

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- Allocating tasks
  - Research and content writing
    - In case of a multilingual site, more than one writer needed, or translation work required
  - Design
    - Good cooperation needed with both content writer and programmer
  - Programming
    - Choices need to be made regarding the structure of the site and the technology to be used
  - Site promotion
    - An essential part of participating in the TQ contest

# Teamwork

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- Planning the work
  - Always take into account / allow for:
    - Students' school commitments (e.g. exams) or family plans (e.g. holidays)
    - Coaches' other commitments (e.g. school trips, exam marking, holidays)
    - Sequence of activities: design may depend on content, and programming on content and design
    - Unexpected setbacks: e.g. computer crashes, server problems, parental restrictions, falling in love
    - Sufficient time for testing the site before final submission

# Teamwork

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- Choosing a communication protocol
  - Mode of communication
    - Email, chat, phone, fax, in person (at school)
  - Language
    - Often underestimated communication problem
  - Frequency
    - Every day, every week, etc.
    - Regular team meetings
  - Time
    - Allow for time zone differences
    - Allow for long sessions at the beginning and towards the end of the project

# Highs and Lows

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- What problems can you encounter?
- What fun can you have?

# Highs and Lows

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- What problems can you encounter?
  - Lack of motivation
  - Team member dropping out
  - Conflict regarding content, design, etc.
  - Clash of personalities
  - Bad planning
  - Project too ambitious
  - Time-zone drawbacks
  - Language problems

# Highs and Lows

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- What fun can you have?
  - Getting to know new people worldwide
  - Interacting with people of different backgrounds and cultures
  - Trying to cope with linguistic misunderstandings
  - Exploring new ideas and new fields of interest
  - Learning new skills
  - Learning to communicate creatively online
  - Winning awards
  - Meeting teammates in person at events



# Web site features 1

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- Topic
- Language versions
- Content
- Design
- Programming

# Web site features 1

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- Topic
  - Five TQ categories:
    - Arts & Literature
    - Science & Mathematics
    - Social Sciences
    - Sports & Health
    - Interdisciplinary

# Web site features 1

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- Language versions
  - English
    - Obligatory for international TQ contest
  - Additional languages
    - Promotes wider use of site

# Web site features 1

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- Content
  - General:
    - A web site is not a book on the Internet
    - Acknowledge sources !
  - Text
    - Pages should not be too long (scrolling)
    - Include hyperlinks to other sources on the Internet (make the most of the medium)
  - Illustrations
    - Photos, graphs, etc. make pages attractive

# Web site features 1

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- Design
  - Compatible with topic
  - User-friendly
  - Simple, intuitive navigation
  - Not too many gimmicks
  - No offensive design elements
  - Remember goal: *educational* web site
  - Don't overdo it!

# Web site features 1

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- Programming
  - First aim: the site should function smoothly
  - Server type, server usage rules
  - Databases
  - Scripts
  - Clear, intuitive navigation
  - Remember: different audiences, different technological resources
  - Text-only version
  - Different browsers
  - Meta tags

# Web site features 2

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- Multimedia
- Interactivity
- Classroom usage
- Site growth
- Site maintenance
- Site promotion

# Web site features 2

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- Multimedia

- Advantages

- Makes site attractive
    - Vital role in elucidating some topics
    - Maximizes fun
    - Balanced mix of content elements

- Multimedia

- Disadvantages

- May slow down the site
    - PC crashes in less developed infrastructures
    - May overshadow main content features
    - Often copyright problems



# Web site features 2

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- Interactivity

- *Fun features*

- Guestbook
    - Feedback form
    - Greeting cards
    - Quizzes
    - Downloads
    - Counter

- Interactivity

- *Practical features*

- Content contribution
    - Discussion forum
    - Classroom simulation
    - Opinion polls
    - Tests
    - Search engine

# Web site features 2

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- Classroom usage
  - Features
    - Student / teacher account
    - Projects
    - Focused assignments
    - Tests and marking
  - Advantages
    - Integration of web sites into schoolwork
    - From extracurricular activity to classroom activity
    - Teacher guidance / supervision
    - Integration of school subjects

# Web site features 2

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- Site growth
  - Encouraging growth
    - Include well designed contribution features
    - Invite all visitors to add experiences
    - Invite specialists to add specific content
  - Controlling growth
    - Monitor user contributions
    - Organize / categorize contributions
    - Remove offensive / irrelevant contributions

# Web site features 2

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- Site maintenance
  - Handling errors / problems
    - Broken links / script errors
    - Effect of user contributions
    - Problems due to server change
    - Access slowdown
  - Handling user response
    - Queries
    - Complaints

# Web site features 2

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- Site promotion
  - On the Internet
    - Meta tags
    - Internet awards
    - Search engines
    - Targeted mailing (no spamming!)
  - Local
    - Friends
    - School
    - Newspapers

# Points to remember

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- Coaching
  - ***Any teacher can be a coach***
  - Technical skills: useful but not essential
  - Important: enthusiasm, interest in how young people think, work and interact
  - Opportunity to reverse learning process
  - Remember: you can influence the way students use the Internet

# Points to remember

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- Students
  - Can lose interest in a project
  - Can *seem* uninterested
  - May hesitate to bother you
  - Look at things differently
  - Can be very creative
  - Can be fun to work with
  - Can teach you new skills
  - May forget they also have school work

# Points to remember

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- Teams

- International teams are fun, but demand good communication
- Keep an eye on team spirit
- A very dominant team member can undermine others' fun and motivation
- ***Encourage girls to join teams***



# Points to remember

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- Other teachers
  - Can discourage you
  - May ridicule your IT involvement
  - Can help in your project
  - May get inspired by you

# Points to remember

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- Schools
  - May ignore what you are doing
  - May not have the adequate IT resources
  - May consider TQ participation to interfere with school performance
  - Will praise you when you bring in awards
  - May get inspired by your efforts and provide extra IT facilities
  - May even integrate TQ-like activities into the school curriculum!

# Points to remember

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- Parents

- May worry about the effect of TQ participation on performance at school
- May complain about huge phone bills
- May complain their son/daughter is becoming anti-social
- May not like TQ work interfering with the family's holiday plans
- May discover new qualities in their child
- Will be grateful you guided their child

# Points to remember

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- Technology
  - Can do wonderful things
  - May fail you at crucial moments (PC crashes, overcrowding on Internet, server downtime)
  - Should be used to serve a purpose
  - Is only part of the story

# The End

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# Thank you!