Group Interaction on Interactive Multi-touch Tables by Children in India

INTRODUCTION

- 1. Multi-touch tabletops in a local school in Delhi, India
- **2.** Observational study:
 - Collaboration strategies
 - Touch input technique





GROUP ACTIONS



- 1. Simultaneously move an object
- 2. No appearance of conflict
- **3.** Demonstrate understanding to each other



- 1. 'Crowded conditions' several activities happening
- 2. Cohesiveness and engagement
- **3.** Awareness of each others' actions

IMPLICATION: GROUP ACTION

- **1.** Performance attitude is valuable in group tasks
- **2.** Natural group behaviour and shared understanding is seen
- **3.** Allow children to work anywhere on surface without restrictions





TASKS & TECHNIQUES

Collaborative Learning Tasks:

- 1. Spider diagram
- 2. Classification



MULTI-FINGER TOUCH TECHNIQUE



- **1.** Beyond the typical thumb-index finger combination
- 2. Fingers used: thumb, middle and little fingers
- **3.** Expressing themselves & drawing attention

IMPLICATION: MULTI-FINGER

- 1. Children applied touch input that seemed natural to them
- **2.** Important to understand the existing 'natural' techniques of users
- **3.** Design interaction techniques that support the 'organic' flow of digital object interaction

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- 1. Direct touch
- 2. Pantograph



- Actions seen:
- Move digital objects
- Draw lines
- Using both techniques

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