



# Eat, Move, Learn: Explorations of Energy Balance

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# Outline



- Introduce Team & roles
- Problem Area Identification
- Project Development
- Team Building
- Stakeholder Input
- Project Goals/Objectives/Actions
- Maintaining the Collaboration
- Project Management
- Project Challenges
- Unexpected Benefits/Barriers
- Expected Project Accomplishments and Impacts





# Project Team Members

- **Purdue University**
  - Carol Boushey
  - Dennis Savaiano
  - George McCabe
  - Linda McCabe
  - Connie Weaver
  - Kate Giberson
  - Jeannie Wetzel
  - Linda Monahan
- **Southern Illinois Univ**
  - Kathleen Welshimer
- **University of Arizona**
  - Scott Going
  - Linda Houtkooper
  - Tim Lohman
  - Jennifer Reeves
  - Daniel McDonald
  - Janis Eklund
- **New Mexico State Univ**
  - Jeanne Gleason
  - Barbara Chamberlin
  - Pamela Martinez
- **Western Human Nutrition Research Center (Davis, CA)**
  - Marta Van Loan





**Project Director**  
**Carol Boushey**

**Intervention  
Development Team**  
Welshimer\*  
Reeves  
McDonald  
VanLoan

**Technology  
Development Team**  
Gleason\*  
Chamberlin\*  
Martinez  
(Staff)

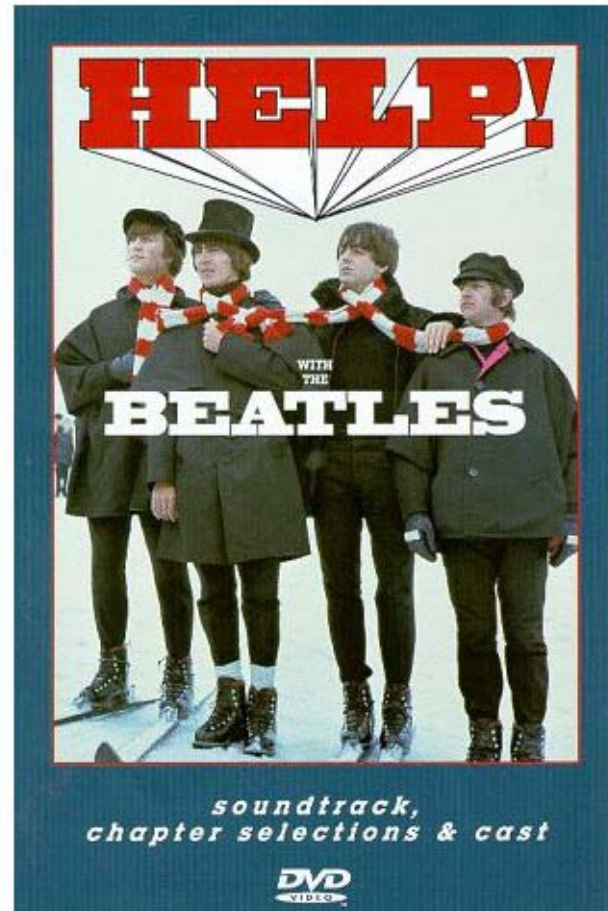
**Implementation and  
Evaluation Team**  
Boushey\*  
McCabe G.  
McCabe L.  
Savaiano  
Weaver  
Going

**Project Coordinator**  
**Kate Giberson Byers**

**Site Coordinators**  
Janis Eklund (AZ)  
Jeannie Wetzel (IN)



# Problem Area Identification

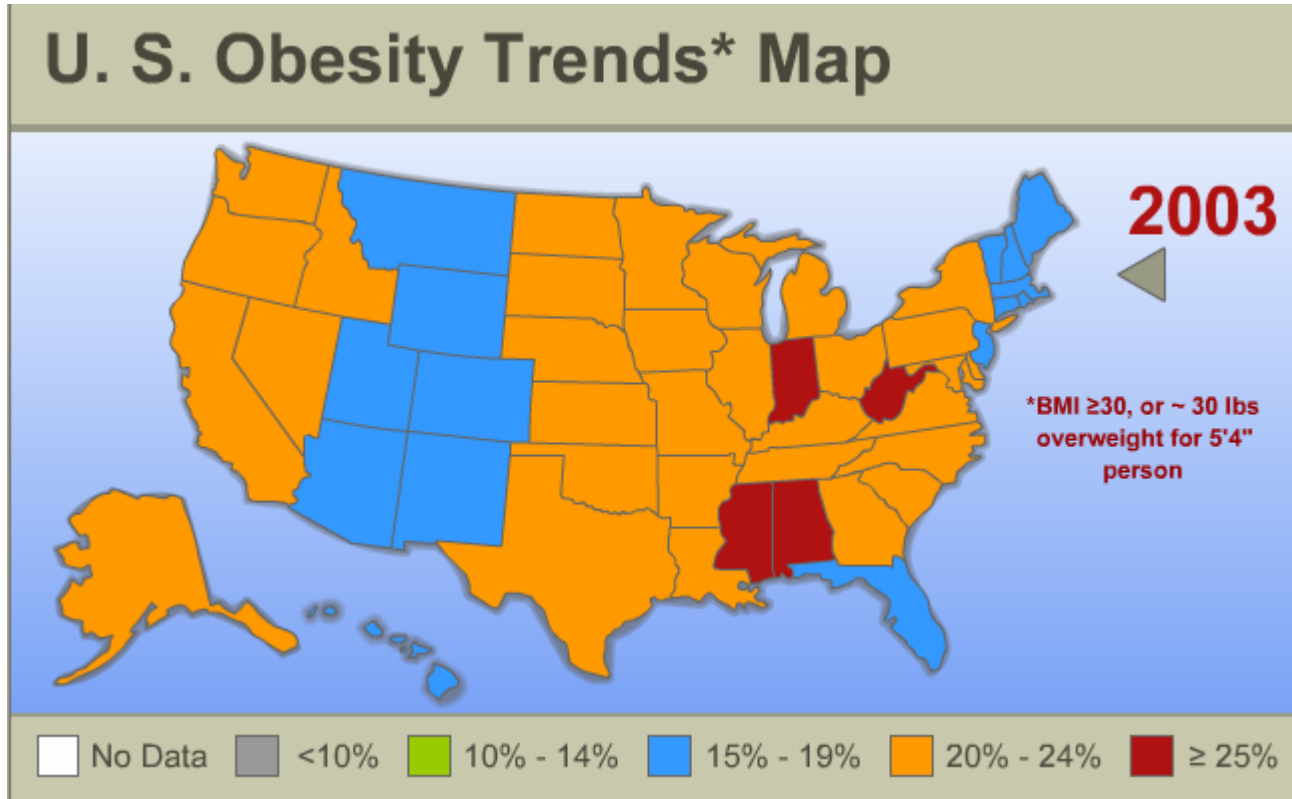




## The Freewheelin'

Bob Dylan

- The answer, my friend, is blowin' in the wind,  
The answer is blowin' in the wind.



The prevention of adolescent  
overweight...



- Project Development

“It's been a hard day's  
night, and I been working  
like a dog  
It's been a hard day's  
night, I should be  
sleeping like a log”





- Make a copy of the announcement and send link to all known collaborators
- Schedule brainstorming sessions to develop the actual approach / strategies
- Evaluate ideas on feasibility
- Assess team's ability to tackle the tasks
- Additional expertise needed?

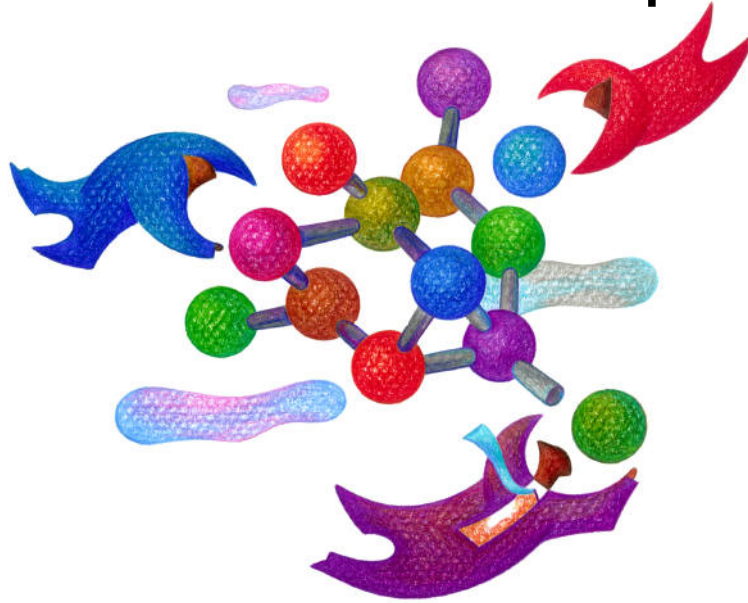
- Meet with business office
  - Outline subcontracts and consultants
  - Start inter-business offices communication
- Designate one person as primary writer and one person as primary collector of items
- Assign tasks with deadlines
- Send out drafts for feedback
- Minimum deadline date – 5 business days before application deadline



- Team Building

“Wouldnt it be nice....”  
Beach Boys

- Colleagues from school, previous positions, and previous collaborators
- Multi-state HATCH funded projects



- Team players needed
  - Quarterback (10, 20, 25% time)
  - Wide receiver or running back (50-100% time)
  - Coach (5%)
  - Team statistician (5% + 50%)
  - Additional players (varies)
- Site PD
  - Site Coordinator



- Stakeholder Input

“I heard it through the grapevine...”





- Information collected through the multi-state projects W-191 and W-1003
- Previous research
  - Multiple collaborators can contribute lots of information
- Purdue University has been doing studies with adolescents for over 10 years.



- Project Goals, Objectives, Actions

But I still haven't found  
what I'm looking for  
But I still haven't found  
what I'm looking for  
U2

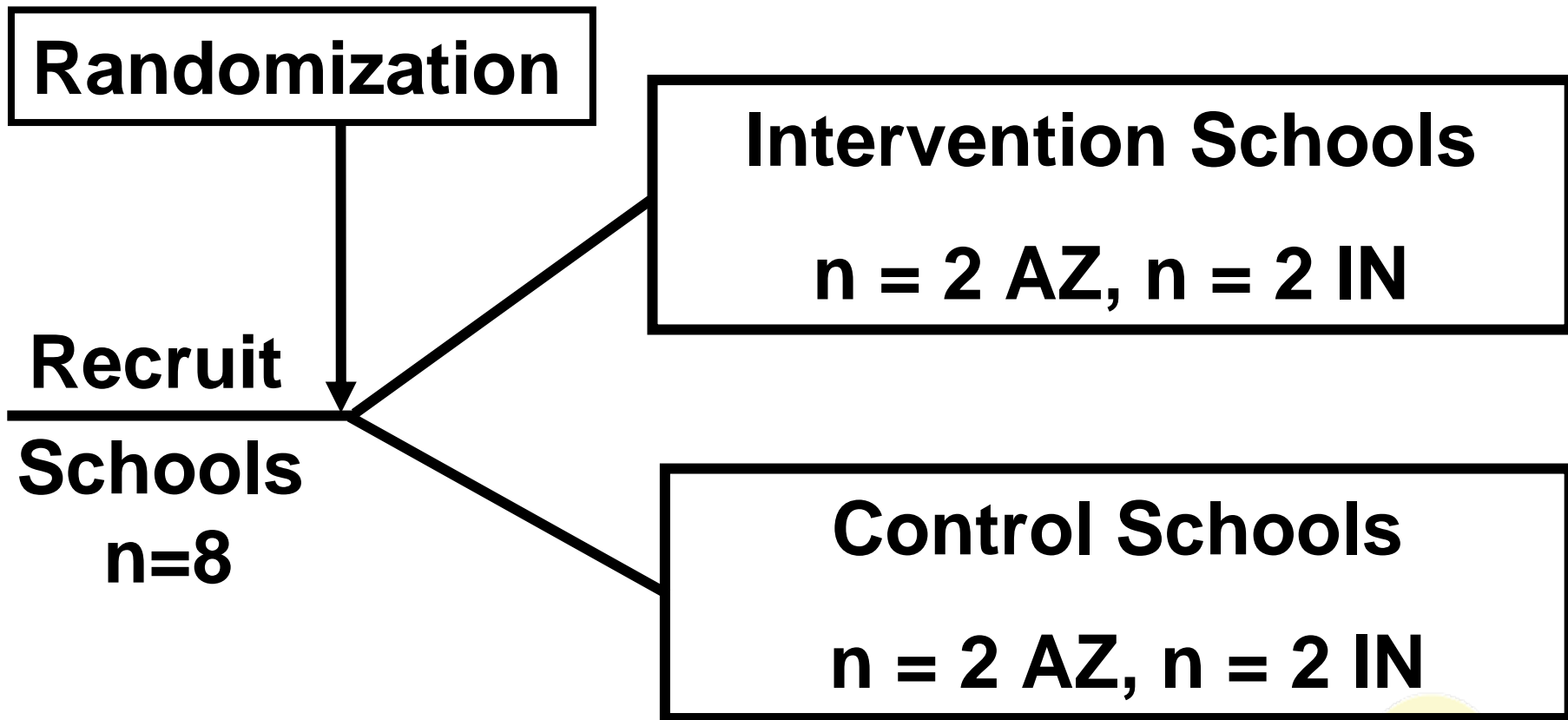


- Long-term goals
  - To develop a cognitive and behavioral approach that will promote healthy weight among adolescents
  - To develop an outreach program that will use this approach to improve the health of US adolescents
- With a web-based approach, outreach beyond this project will be more easily attainable.



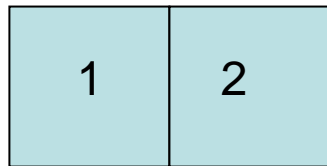
- Objective...
- Central hypothesis
  - Exposure among 11-12 year old children to a cognitive/behavioral intervention program delivered on the web will result in a reduced gain in body mass index (BMI) compared to a control group who do not receive the intervention.
- Secondary hypotheses
- Specific Aims

# Practical Controlled Trial (PCT)

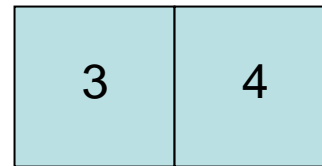


# School Selection

- School recruitment criterion
  - Within an hour of the DXA measurement site
- First come, first serve



School Pair



School Pair



# In-School Measures

- Goal: 70% of consents returned
  - Measure 95%
- Start of school and end of school
  - Height
  - Weight
  - Food and Activities Questionnaire (FAQ)
  - Bioelectric impedance analysis

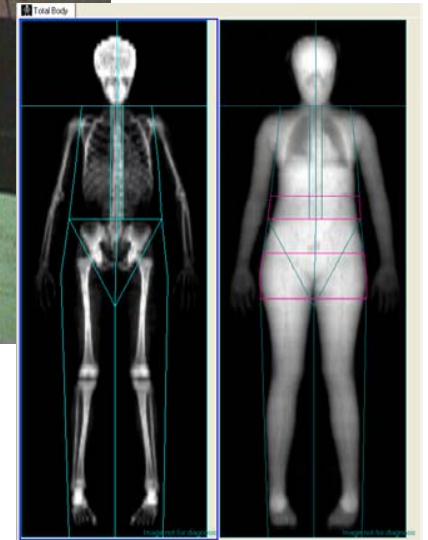
# University lab measures

- 200 students recruited for equipment-dependent measures
  - 100 intervention school students
    - 50% female
    - 50% male
    - Split between AZ & IN
  - 100 control school students
    - Same as above

# Dual energy X-ray absorptiometry (DXA)



Total Body



# Anthropometric Measurements

Weight

Height

Waist circumference



- Pen and paper questionnaire
  - Self-selected Tanner reference stages
  - Age of menarche
- Physical activity
  - Pedometer 4 days



# Web-based food frequency questionnaire (FFQ)

- Block kids FFQ
- Estimates intake from the previous month

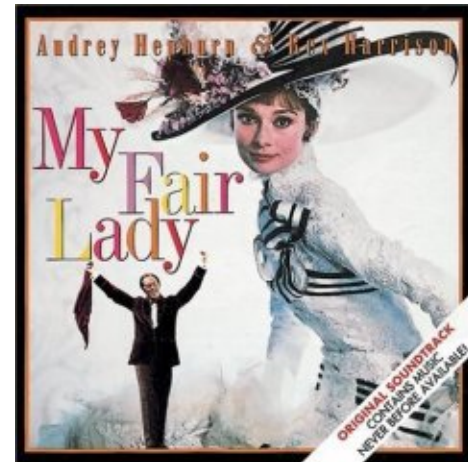




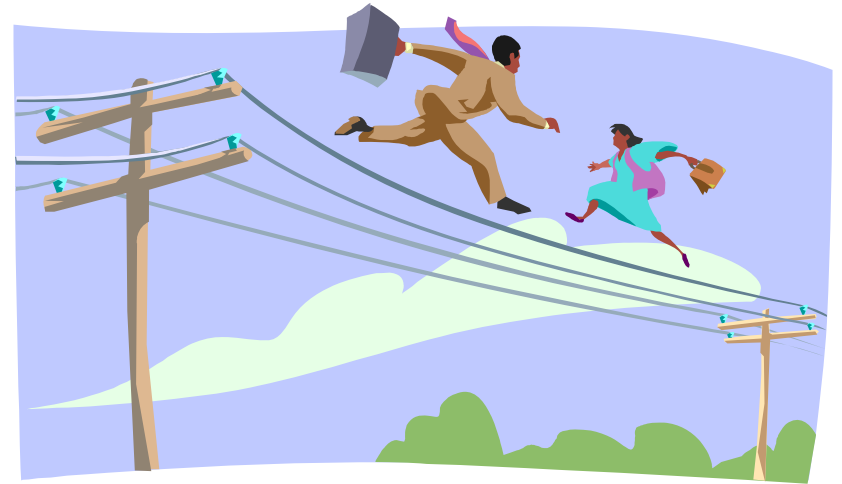
- Maintaining the Collaboration

“1, 2, 3 o’clock, 4 o’clock rock...” Rock Around the Clock – Bill Haley & the Comets

“I could have danced all night...” My Fair Lady



- First order of business
  - Face to face meeting right away and annually
  - Website (password)
  - ListServ
- Conference calls
- Web communication
- Video communication





- Project Management

“Under my thumb...” Rolling Stones

- Develop an organization structure
  - Executive committee
  - Topics teams w/ lead
- Develop concrete timelines (send on listserv and post on website)
- Project Director and Project Coordinator meet regularly (at least 3 times/week)
- PC arranges communication via telephone, list serv, e-mail, snail mail

- Create policies and procedures
  - For all activities – post on website
  - Subject recruitment
  - Applications to Institutional Review Boards
  - Measurement techniques
  - Intervention protocols
  - Data collection forms
- Publication Guidelines

# Project Challenges

“You can't always get  
what you want

And if you try  
sometime you find  
You get what you  
need”

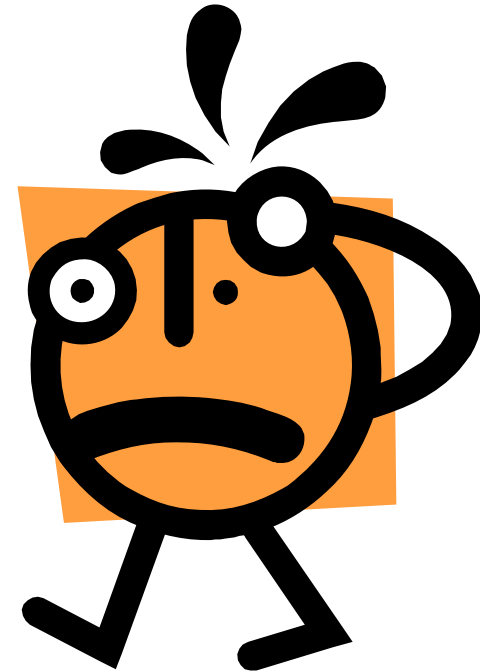
*Rolling Stones*

And I said, money  
honey, money honey,  
money honey  
If you wanna get  
along with me”

*Ry Cooder*

“Think of all that  
we've been through  
Breaking up is hard to  
do”

*Neil Sedaka*



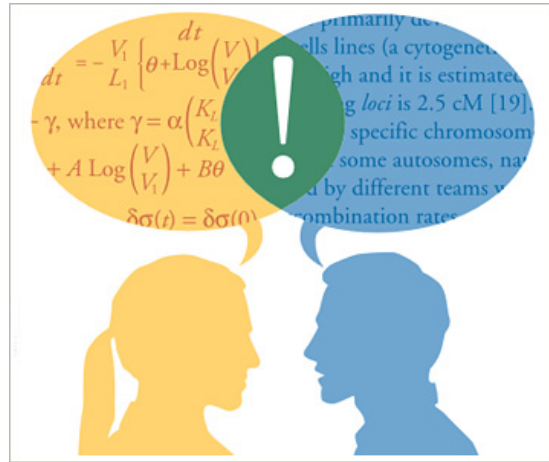
# Unexpected Benefits/Barriers



- ☹️ Abstracts submitted without following publication guidelines
- ☹️ Tracking down missing data and erroneous data



# Unexpected Benefits / Barriers



You say yes, I say no.

You say stop and I say go go go, oh no.

You say goodbye and I say hello

Hello hello

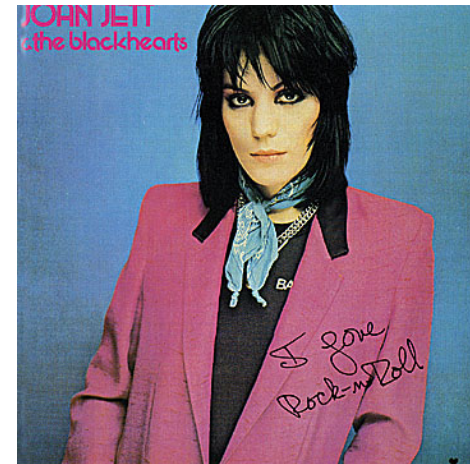
*Beatles, Hello Goodbye lyrics*

# Unexpected Benefits / Barriers



Schedule creative time with collaborators

# Unexpected Benefits / Barriers



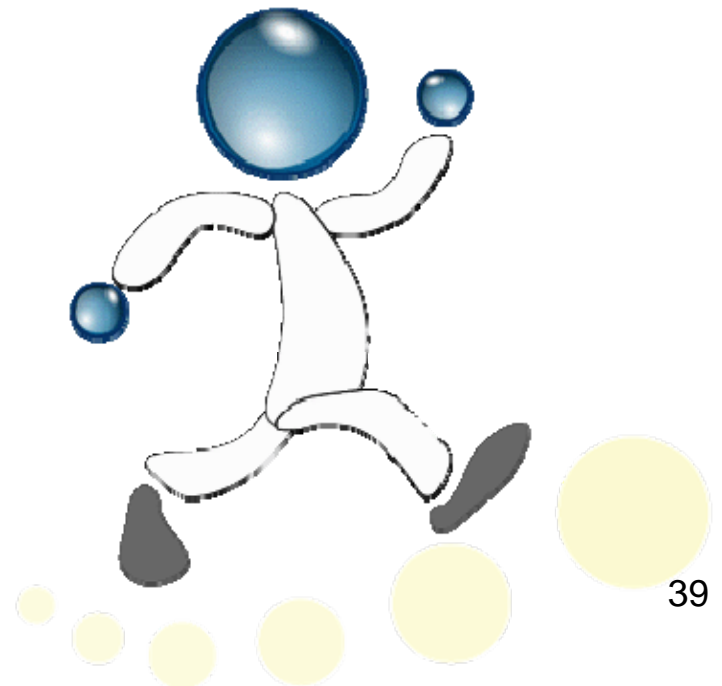
- ☺ Entering the world of developing active video games
- ☺ Formation of new collaborations

# Accomplishments and Impacts

# Accomplishments and Impacts

- **“I've been amazed how astute the children have been regarding all the information they've learned and are able to discuss intelligently.”**
- **“Eat, move, and learn is incredibly dynamic, kid friendly, colorful, and so much fun to just sit and watch...”**
- 6th grade teacher Oxford Elementary School, Oxford, IN

Skippy



**“The video themselves were good and kept the children engaged. I think that they were very informative, yet had a funny side to them that kept the kids engaged. “**

6th grade science teacher,  
Frankfort Middle School,  
Frankfort, IN

**“The students understood most of the concepts, and they understood the correlation between measuring pedometer steps and keeping track of food intake.”**

**“The groups enjoyed writing the “Letter to the Principal.” Having the students report their findings to the Principal was extremely rewarding to them and to me.”**

6th grade teacher Mansfield Middle  
School, Tucson, AZ

**Woot! Any questions?**

