

# *Harmony Island: Multimedia enhanced conflict resolution curriculum*

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Supported in part by a grant from the National Institute of Child Health and Human Development, a part of the National Institutes of Health.

# Harmony Island: *A tropical adventure in conflict resolution*

Launch demo from website  
(requires browser and Flash 7)

Question: How can interactive media augment  
conflict resolution educational efforts?

# Introduction

- For some populations, over 30% of students report having been involved in a physical fight sometime during the previous year (Brener, Simon, Krug, & Lowry, 1999).
- Overall rates of violence among youth are unacceptable and incidents of school bullying and violence remain high (CDC, 2004)
- Schools have the added responsibility of helping students master the fourth "R" of Relationships and conflict resolution is increasingly being integrated within school curricula.
- Innovative and effective materials to address social problem solving and emotional awareness are needed.
- This presentation describes an effort to create a research-based, multimedia-enhanced conflict resolution curriculum for middle schools.



# Theory

## Conflict Resolution and Social Problem Solving

Step-based models of problem solving and social problem solving  
Stop, Think, Act, Reflect (Goldsworthy, et al, 2000, 2007; Bransford, et al. 1996)

## Emotional Intelligence

Six Component Emotional Intelligence Framework,  
recognizing to harnessing emotions (Goldsworthy, 2005; Salovey & Meyer, 1999)

## Constructivism and Situated Learning

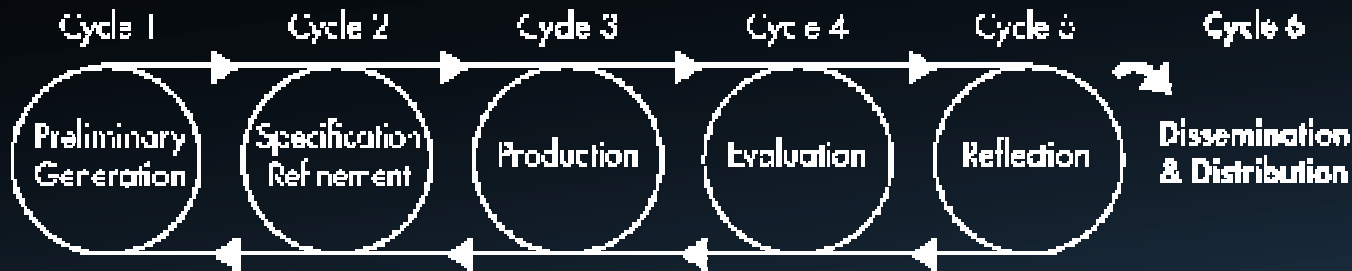
Authentic, engaging activities with real-world applications,  
both in media and in the classroom (Barab & Duffy, 2002)

## “Interactive theatre”

Ways of interacting, in person and in media, with stories,  
particularly conflict stories: branched and unbranched scenarios

# Development

Six stage, iterative development process  
(Goldsworthy & Kaplan, 2006; Goldsworthy, et. al., 2007)



User and expert involvement

A suite of materials produced and evaluated

# Harmony Island



# The Treehouse



- An introduction to the world of Harmony Island
- You meet Rizzo
  - and learn about APE: Active Listening, Problem Solving, and Emotional Awareness
- You meet Francis
  - and learn about STAR: Stop, Think, Act, Reflect.

# Know Conflict Here!



- You are:  
a contestant in a  
multiplayer quiz show
- You:
  - Learn facts and terms,
  - Consider case examples
  - Develop an understanding  
of conflict resolution terms  
and strategies



# The Museum



- You are:  
an assistant to a  
museum curator  
charged with setting up  
exhibits on conflicts.
- You learn about:
  - Types of conflict
  - Historical conflicts
  - Types of resolutions
  - Historical resolutions

# Tribal Council



- You are:  
an advisor to a  
community leader
- You:
  - Watch people explain  
their sides of a conflict
  - Question people for  
further information
  - Maintain calm
  - Help resolve conflicts

# Anthropology Hut



- You are:  
an assistant to an anthropologist
- You (with expert help):
  - Explore video captured in “the real world” and interpret the observed actions.
  - Identify actions that lead to, exacerbate, or mitigate conflicts

# Cave Art



- You are:  
an artist drawing and  
annotating pictures on a  
cave wall.
- You:
  - Identify salient aspects of  
conflicts you witness
  - Suggest resolutions to  
conflicts you witness
  - Report your own conflicts and  
reflect on how they could  
have gone differently



# Supporting Materials

- Website
- 40+ page Teachers Guide



# Evaluation

- **Formative evaluation throughout**
- **SME Review**
- **Review by teachers (n=15)**
- **Pre-post field trial among adolescents (n=38)**

# Evaluation (Teachers)

- **Teachers (n=15) found the interactive program and classroom guide to be**
  - useful,
  - appropriate for their students,
  - worthy of inclusion in their classes, and
  - worthy of recommendation to peers.

**Table 1: SUMMARY OF TEACHER EVALUATION DATA**

Question	Mean	Stand Dev.	p-value	Sig?
The overall content in the CD is appropriate for my students.	4.3	1.04	0.0317	*
The types of activities in the CD are appropriate for my students.	4.5	1.13	0.0064	*
The teachers guide helped me understand how...	4.0	0.94	0.0425	*
The teachers guide is well-organized.	4.2	0.71	0.0358	*
The types of activities in the guide are appropriate for my students.	4.4	1.11	0.0101	*
The WSTDtv materials would be useful in my classes.	4.5	0.70	0.0021	*
I would recommend these materials to a fellow teacher	4.6	0.95	0.0298	*
What is your overall impression of the CD-ROM?	4.4	1.05	0.0017	*
What is your overall impression of the teachers guide?	4.2	0.93	0.0090	*

\* Indicates the mean was significantly greater than the experimental value of 3.5,  $p < .05$

# Evaluation (Students)

- Increase in knowledge of social problem solving
- Increase in ability to apply social problem solving
- Increase in conflict resolution self-efficacy
- Rated the program highly on measures of Consumer satisfaction, Usability, and Engagement (CUE, >4 on all 10 5-point items of the scale)

Table 2: STATISTICS FOR SOCIAL PROBLEM SOLVING MEASURE

	PreMean	Stand Dev.	PstMean	Stand Dev.	†
OVERALL	1.45	.35	1.92	.41	6.116**
Problem Description	1.50	.60	2.05	.46	3.457*
Empathy	1.61	.66	2.14	.59	3.002*
Strategies Mentioned	1.12	.54	1.79	.66	5.576**
Quality of Solution	1.35	.46	1.86	.56	3.887*
Number of Solutions Proposed	1.75	.44	1.89	.57	1.140

\* p<.01, \*\* p<.001



# Evaluation (continued)

*“Look at that, that’s cool! “I really liked the characters, especially the way they looked and that we could send them messages.” “The kids picked up STAR pretty quickly...it gave them a way to think about trouble.”*

- **Open-ended debriefing yielded positive comments & useful formative data in three areas:**
  - Content: More examples, more cases, linking STAR and APE
  - “Look & Feel”: Really liked it. “Lip sync” issues.
  - Functionality: Installation. Richer branched and unbranched scenarios.

# Conclusion

Overall positive SME and user outcomes & evaluations

Industry awards: **BESSIE** (Best Educational Software Awards, ComputerED Gazette)

Multimedia can be effectively used to augment school-based conflict resolution efforts and is acceptable to teachers and students. Branched and unbranched scenarios are particularly engaging.

Future work:

- Using newer technologies. Serialization? Discussions?
- Increasing transfer. Performance support? Tools and sims?
- Games that can be educational, or educational games?
- Controlled, longitudinal studies/behavioral indices

*“If you are learning from your teacher, it is really lame because your teacher is old.”*  
-- suggests that having an intermediary, such as a multimedia program, deliver information and activities may be helpful and worthwhile.

# Acknowledgement

Supported in part by grant R44HD39032 from the National Institute for Child Health and Human Development, a part of the National Institutes of Health.

Sasha Barab, Indiana University, School of Education

Nancy C. Schwartz, Academic Edge, Inc.

Anita Landa, Due Diligence Corporation

Tom Duffy, Indiana University, School of Education

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“The students were very much caught up in the island conflicts, often arguing about how they should be resolved.... Later (I) noticed them referring to events in the game when talking about their own conflicts.... Great work!” --teacher