Piloting Alice in the Upper School

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Meritas Family of Schools
Coconut Creek, Florida
Alice at North Broward Prep

- Middle School Grades 6-8
  - Eager
  - Innovative

- High School Grades 9-12
  - Serious
  - Competitive
Students

Students are learning:
- Computer programming
- Vocabulary
- Computational Thinking
- Sequential Thinking
- Logical Thinking
- Design

Students are creating:
- Animations
- Interactive Stories
- Interactive Games

Students are feeling:
- Excited about Alice
- Eager to learn more
Previous Experience

- **Instructor’s Background**
  - 15+ years teaching
  - Computer Graphics
  - Microsoft Applications

- **Programming**
  - No prior programming:
    - Education
    - experience
Learning Alice

- **Adventures in Alice**
  - Two-week workshop
  - Sixty hour class
  - 25 teachers
  - Learned Programming
  - Introduced to Animation
  - Created Lesson Plans
  - Feedback from:
    - Instructor
    - Other Teachers

- **Prepared us with:**
  - Knowledge
  - Materials
  - Resources
  - Confidence
Introducing Alice

No formal introduction to students, parents and faculty.

- **Middle School**
  - 6th Grade Class
  - 7th & 8th Grade Class
  - 12 week elective
  - Course title “Alice”
  - “Introduction to Alice Programming”
  - Administrative Support

- **High School**
  - Grades 9-12
  - Fine Arts Elective
  - course title
    1. Alice
    2. Introduction to Computer Programming

- **Independent Study**
  - Same Classroom
  - Tutorials
  - Approved Worlds
  - Academic Projects
Girls Enrolled in Alice

- Our numbers are consistent with major studies
- Girls were not as interested as boys

Goals
- Introduce Alice early in year
- Show Alice as story telling tool
- Offer Saturday workshops for 4th and 5th grade girls.

**NBPS Alice 2012-2013**

- MS Boys
- MS Girls
- HS Boys
- HS Girls

- 48% MS Boys
- 13% MS Girls
- 37% HS Boys
- 2% HS Girls
Teaching Alice

- 12 week class
- 4 Classes a trimester
- Teacher excitement
- Teacher gratification
- Same curriculum for middle school and high school
  - Plan to:
    - Teach same skills to middle school and high school
    - Change content for middle school and high school.

We found that:
- Middle school needs more practice exercises to master skills
- Students enjoyed learning Alice
- Students thought it was cool and fun
- Final projects exceeded our expectations
Course Offerings

High School
- Students can take twelve courses (only five count towards graduation requirement)
- Fulfill 1/5 Fine Arts graduation obligation
- Looking into:
  - Alice as Math or Science Credit
- Nine states currently allow CS classes as core academic
- We are private school
- Do not need to follow state guidelines

Future Plans for Computer Science
- Java
- Python
- AP Computer Science
- IB Computer Science
Alice in Academic Classes

- **English**
  - Book Review
  - Give a book a different ending
  - Capture the main events of a novel

- **Science**
  - Layers of the earth
  - Social Science
  - Time Lines
  - World Languages
  - Vocabulary

Alice is an exciting alternative to PowerPoint's and poster boards…
Enrollment in Upper School

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<tr>
<th>2012-2013 School Year</th>
<th>MS Boys</th>
<th>MS Girls</th>
<th>HS Boys</th>
<th>HS Girls</th>
<th>Total Students</th>
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<td>Trimester 1</td>
<td>26</td>
<td>7</td>
<td>20</td>
<td>1</td>
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<td>Trimester 2</td>
<td>24</td>
<td>7</td>
<td>19</td>
<td>3</td>
<td>54</td>
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<td>25</td>
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<td>9</td>
<td>159</td>
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</table>

Middle School
- Classes filled up quickly
- Students were excited
- Wanted to learn advanced material
- Projects very innovative
  - IPad World
  - Music Videos
  - Interactive Worlds

High School
- Students very serious
- Students ask very few questions
- Projects not as creative as Middle School
  - Science Time Lines
  - Alice can figure out the number between 1 and 100 you guessed in fewer than seven tries.
Exemplar

Link to Ipad Video on YouTube
SHARING ALICE

Meritas Teachers College

- Florida
- Mexico
- Texas
- Arizona
- Nevada
- Manhattan
- Switzerland
- China

Best Practices

- Innovation Day
- Tech Thursday

Upcoming Conferences

- FCIS – Florida Council of Independent Schools
- NAIS - National Association of Independent Schools
  - 5,100 Attendees
- FETC – Florida Educational Technology Conference
Alice with Ms. Distler Webpage

- Lessons
- Files
- Scenarios
- Assignments
- Rubrics
- Examples
- Student Work
PERSONAL FINDINGS

Accomplishments

- Learning Alice
- Teaching Slice
- Alice Paper
- Installing Alice on Personal Computers
- Support from Administration and Colleagues

Challenges

- Learning Alice
- My Classroom
Goals

- Saturday classes for 4th and 5th grade girls
- Introduce Alice to every middle school student
- Share with other schools
- Learn more...
Acknowledgements

- Adventures in Alice
- Professor Rodger
- National Science Foundation
- IBM
- My Students
End and Send

Link To: Alice NBPS Style
Thank You...