

References

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APPENDIX # 1: STUDENT CONSENT LETTER

September 2009

Dear Student,

In addition to being a teacher at Lakeside Middle School, I am also a student in High Tech High's Teacher Leadership Master's Program. As part of this program, I will be conducting a research study to learn more about how my students experience project based learning. I'll be working with my LMS period 3 English students in this study and would like to invite you to be a part of it. Below is some information to help you make an informed decision:

Why I'm doing this study: I am really interested in how I can improve my students' experience with projects. I would like to learn what you enjoy about projects, and what makes projects exciting and fun for you. I will be sharing my findings with other teachers so that we can improve project based learning in our school and school district.

What will happen to you if you are in the study? If you participate in this study, I may interview you about how you experience projects. The interviews may be at lunch or after school.

Will any part of the study hurt you or help you? This study won't hurt you in any way, and it may not help you either. However, this study will provide a chance for you to think and talk about your experiences with projects in our English class. Your opinions will be useful to me as I plan other projects for our class. By sharing your experiences, you could help me better understand how to make the English program serve the needs of students.

Who will know that you are in the study? I'm going to keep whatever I hear from you separate from what I hear from other people -- other students or other teachers. I won't tell them what you tell me, and I won't tell you what they tell me. However, I will write an article or report based on the interesting things I will learn in this study. I will also present what I've learned at conferences so that it can be useful to other teachers. In either case, I will conceal your name so that no one will know who you are, or that you did or said a particular thing.

Do you have to be in the study? No, you don't. No one will get angry or upset with you if you don't want to do this. Just tell me if you don't want to be in the study. And remember, you can change your mind later if you decide you don't want to be in the study anymore.

Questions? You can ask questions at any time. You can ask now. You can ask later. You can talk to me or you can talk to your parents about this study at any time. My email is:

weward@sdcoc.net

If you have concerns about this research, you can also contact my advisor, Professor Stacey Caillier, (scaillier@hightechhigh.org) who will be supervising this research:

To go ahead with this study, I need to know that you are willing to participate and that your choice to do so is entirely voluntary. Please review your rights at the bottom of this page and sign below if you agree to participate.

Sincerely,

Mrs. Wendie Ward

IF YOU AGREE TO BE IN THE STUDY, PLEASE SIGN YOUR NAME BELOW.

Signature of the Participant _____ Date _____

Signature of the Teacher Researcher _____ Date _____

The rights below are the rights of every person who is asked to be in a research study. As a research subject, you have the following rights:

- 1) To be told what area, subject, or issue is being studied.
- 2) To be told what will happen to you and what the procedures are.
- 3) To be told about the potential risks or discomforts, if any, of the research.
- 4) To be told if you can expect any benefit from participating and, if so, what the benefit might be.
- 5) To be allowed to ask any questions concerning the study, both before agreeing to be involved and during the course of the study.
- 6) To refuse to participate in the study or to stop participating after the study starts.
- 7) To be free of pressure when considering whether you wish to be in the study.

APPENDIX 2: PARENT CONSENT LETTER

Parent's Consent For Minor to Participate in an Action Research Study High Tech High Graduate School of Education

Title of Study: "What Happens When I Design a Project with Differentiation in Mind?"

Researcher: Wendie Ward, Graduate Student, High Tech High Graduate School of Education

Email: weward@sdcoe.net

Purpose: Your child is being invited to participate in the above research study. The purpose of this study is to develop a better understanding of students' experiences with project based learning (PBL), and how I can make each student successful. This research will involve my English class and will not be used in any way to evaluate them, nor will it interfere with your family life or your child's schooling.

Procedures: If you are agreeable to having your child participate in this study, I will interview small focus groups of students about project based learning. I will also observe students during project work days and take field notes on how students work on projects.

Risks: There are no known risks to your child for participating in this study.

Benefits: It is possible that your child will not benefit directly by participating in this study. However, this study should provide your child with a valuable opportunity to think and talk about their experiences with project based learning. In addition, the information gathered from this study will be helpful for informing future lessons and project design.

Confidentiality: Absolute confidentiality cannot be guaranteed, since research documents are not protected from subpoena. However, the confidentiality of project records will be maintained to the fullest extent possible. Responses by your child to interview questions will be coded in such a way that her or his identity will be concealed. Your child will never be identified with any particular response, comment or materials that he or she might share with me.

Costs: There is no cost to your child beyond the time and effort required to participate in the activities described above. I will schedule interviews at times that are agreeable to you, your child and her/his teachers.

Right to refuse or withdraw: Your child may refuse to participate in this study. If you allow your child to participate, your child has the right to not answer any questions I might ask. Even if you agree, you and your child may change your mind and quit at any point.

Questions: If you have any questions, please contact me at the e-mail address above.

Your child's rights: The rights below are the rights of every person who is asked to be in a research study. As a research subject, your child has the following rights:

- 8) To be told what area, subject, or issue is being studied.
- 9) To be told what will happen to them and what the procedures are.
- 10) To be told about the potential risks or discomforts, if any, of the research.
- 11) To be told if they can expect any benefit from participating and, if so, what the benefit might be.
- 12) To be allowed to ask any questions concerning the study, both before agreeing to be involved and during the course of the study.
- 13) To refuse to participate in the study or to stop participating after the study starts.
- 14) To be free of pressure when considering whether they wish to be in the study.

Consent: Your signature below will indicate that you have agreed to allow your child to volunteer as a research participant and that you have read and understand the information provided above:

Signature of Legal Guardian _____ Date _____

Signature of Investigator _____ Date _____

Wendie Ward, Graduate Student, High Tech High Graduate School of Education

APPENDIX 3: SAMPLE INTERVIEW QUESTIONS

Sample Interview Questions

(Pre-project)

- 1) Think back on all of your years of school. What is the most memorable learning experience that you've had at school?
- 2) How do you feel about working in groups? What helps you to be successful in a group?
- 3) What types of activities do you enjoy at school? (Give a few examples if students can't think of any activities- pencil/paper activities, class discussions, writing assignments, art, projects, etc.)

(Post-Project)

- 1) What part of the project was easiest for you? What was challenging for you?
- 2) What did you enjoy about working in your group? What could have been better?
- 3) How can I make this project better for next year's students?

APPENDIX 4: RESEARCH SURVEY # 1

Learning Styles and Group Work SURVEY

Using a scale of 1-4 where 1= *Not like me* and 4=*That's me!*, rate the following statements.

1) When I am thinking I:

- | | Not like me | A bit like me | Sometimes like me | That's me! |
|---------------------------|-------------|---------------|-------------------|------------|
| • Talk to myself | 1..... | 2..... | 3..... | 4 |
| • Move around a lot | 1..... | 2..... | 3..... | 4 |
| • See pictures in my head | 1..... | 2..... | 3..... | 4 |

2) When I am learning something new, I need:

- | | | | | |
|-----------------------------------|--------|--------|--------|---|
| • To be shown how to do it | 1..... | 2..... | 3..... | 4 |
| • To be given verbal instructions | 1..... | 2..... | 3..... | 4 |
| • To try it myself | 1..... | 2..... | 3..... | 4 |

3) I like it when teachers:

- | | | | | |
|-----------------------------|--------|--------|--------|---|
| • Put diagrams on the board | 1..... | 2..... | 3..... | 4 |
|-----------------------------|--------|--------|--------|---|

c) Language Arts is alright... I am improving at it.

d) I don't think that I am very good at Language Arts.

e) Other _____

APPENDIX 5: STERNBERG'S TRIARCHIC INTELLIGENCE SURVEY

Sternberg's Three Intelligences

Creative Analytical

Practical

Mark each sentence T if you like to do the activity or F if you do not like to do the activity.

1. Think about the characters when I'm reading or listening to a story. ___
2. Design new things. ___
3. Taking things apart and fixing them. ___
4. Comparing and contrasting points of view. ___
5. Coming up with ideas. ___
6. Learning through hands - on activities. ___
7. Evaluating my own and other kids' work. ___
8. Using my imagination. ___
9. Putting into practice things I learned. ___
10. Thinking clearly, in a step by step order, and figuring things out. ___
11. Thinking of alternative solutions. ___
12. Working with people in teams or groups. ___
13. Solving logical problems. ___

- 14. Noticing things others often ignore. _____
- 15. Resolving conflicts. _____
- 16. Thinking about my own and other's points of view. _____
- 17. Thinking in pictures and images. _____
- 18. Advising friends on their problems. _____
- 19. Explaining difficult ideas or problems to others. _____
- 20. Supposing things were different. _____
- 21. Convincing someone to do something. _____
- 22. Making inferences and drawing conclusions. _____
- 23. I like drawing. _____
- 24. Learning by interacting with others. _____
- 25. Sorting and classifying. _____
- 26. Inventing new words, games or approaches. _____
- 27. Applying my knowledge. _____
- 28. Using graphic organizers or images to organize my thoughts. _____
- 29. Composing. _____
- 30. Adapting to new situations. _____

What is your dominant intelligence?

Put a check next to any answer you marked as T (true) on the survey.

<u>Analytical</u>	<u>Creative</u>	<u>Practical</u>
1. ___	2. ___	3. ___
4. ___	5. ___	6. ___
7. ___	8. ___	9. ___
10. ___	11. ___	12. ___
13. ___	14. ___	15. ___
16. ___	17. ___	18. ___
19. ___	20. ___	21. ___
22. ___	23. ___	24. ___
25. ___	26. ___	27. ___
28. ___	29. ___	30. ___

TOTALS

APPENDIX 6: END OF PROJECT SURVEY

END OF PROJECT NARRATIVE SURVEY JUNGLE GRAVEYARD PROJECT

1) What part of the project was easiest for you? What was challenging for you?

2) What did you enjoy about working in your group? What could have been better?

3) How can I make this project better for next year's students?

4) What grade do you deserve for the group project? Why? Use details to explain what you contributed to your group!

APPENDIX 7: ANTICIPATION GUIDE SAMPLES

Anticipation Guide for
the Jungle Graveyard Project

Per. 3

The Jungle Book, by Rudyard Kipling

I already know... I want to discover...

I already know that in the Jungle Book, Mowgli's parents disappeared long ago, so wolves raised him.

I want to discover where Mowgli and his parents were headed before his parents disappeared, leaving Mowgli.

I also already know that Mowgli is captured by King Louie and his group of monkeyies. They use Mowgli, how to make fire in exchange to have Mowgli in the exchange to have Mowgli in the exchange.


I also want to discover how Mowgli is raised by wolves.

Lastly, I already know that Mowgli defeat Shere Khan in the end by fighting his last enemy.


Lastly, I want to discover how Baloo the bear and Bagheera the leopard find Mowgli.

Rev. 3


Anticipation Guide for the Jungle Graveyard Project



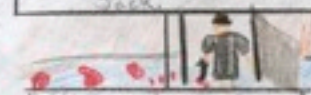
The Graveyard Books by Neil Gaiman




I already know...



I already know that the protagonist is Nobody Owens, and the antagonist is Jack.




I also already know that Jack murdered Nobody's family, but didn't get Nobody. He searched but couldn't find him.

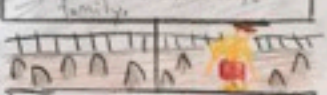


Lastly, I already know that Mrs. and Mrs. Owens "adopted" Nobody, and he was given the freedom of the graveyard.


I want to discover...




I want to discover why Jack wanted to murder people, and especially why he chose Nobody's family.



I also want to discover how Nobody grows up and how he's raised by ghosts.



Lastly, I want to discover if Jack finally finds Nobody and kills him.

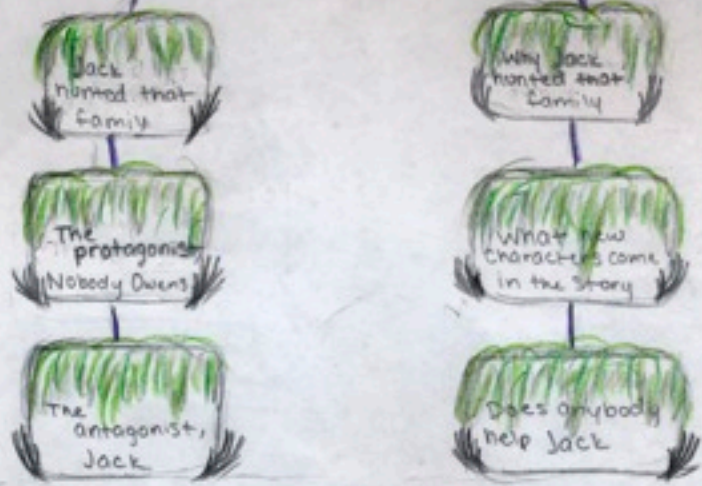


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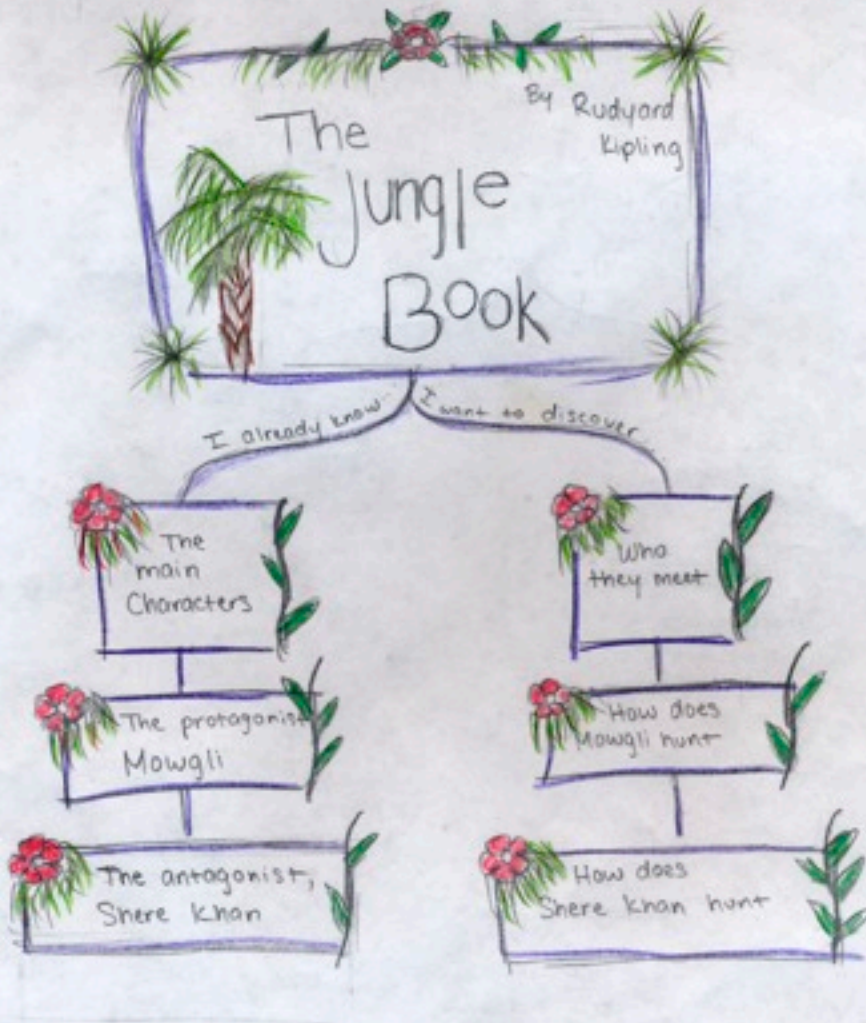
Anticipation Guide for The Jungle Graveyard Project



I already know: I want to discover:



Anticipation Guide for The Jungle Graveyard Project



APPENDIX 8: SAMPLE LEARNING CONTRACTS

10/9/09

Per. 3

Dear Mrs. Ward,

We're the analytical group, [redacted], [redacted], [redacted] and [redacted]. We plan on doing a picture book for the Jungle Graveyard Project. For around ten pages, we will all work on a picture and a tiny summary of what is happening in one scene of the Graveyard Book. This project will (hopefully) be done also outside of class and with no specific art skill.

There will be no specific job for anyone in our group, as we will all do a few pages ourselves and then just staple them all together and into a booklet. The supplies will be nothing more than pens, pencils, colored pencils and paper that's either a huge piece of just separate printer paper. The printer paper may be easier because all of us can take it home and work on it.

See, it will be around ten pages and hopefully all of us in the group will try sketching out our few pages assigned to do. After drawing the picture, it will be penned over. Coloring may be done in class. To record our work, one of us will update a timeline in our notebooks to show what we've (or we haven't) done. You seemed to like the idea from the beginning, so we'll try to make you happy. ☺

Sincerely,

[redacted]
[redacted] [redacted] [redacted] [redacted]
[redacted] [redacted] [redacted]

Dear Mrs. Ward,

In our group there is ~~Alyssa Bradley~~, ~~Kaydee Buchanan~~, ~~Kenadee Buchanan~~, ~~Kenadee Buchanan~~ and ~~Amelia Scarsella~~. Our project idea is a raft letter.

The role is Scarlet and the audience is Nobody Owens. The format is a letter and the topic is how much Scarlet misses Nobody Owens.

Here is our time line:

Day 1: Brain storm

Day 2: Type proposal letter

Day 3: Write the raft letter

Day 4: Raft letter

Day 5: Finish raft letter

Day 6: Work on poster

Day 7: Design poster

Day 8: Finish poster

Day 9: Catch up

Day 10: Run through/correct

Alyssa will be responsible for- Writing on the poster/proposal letter.

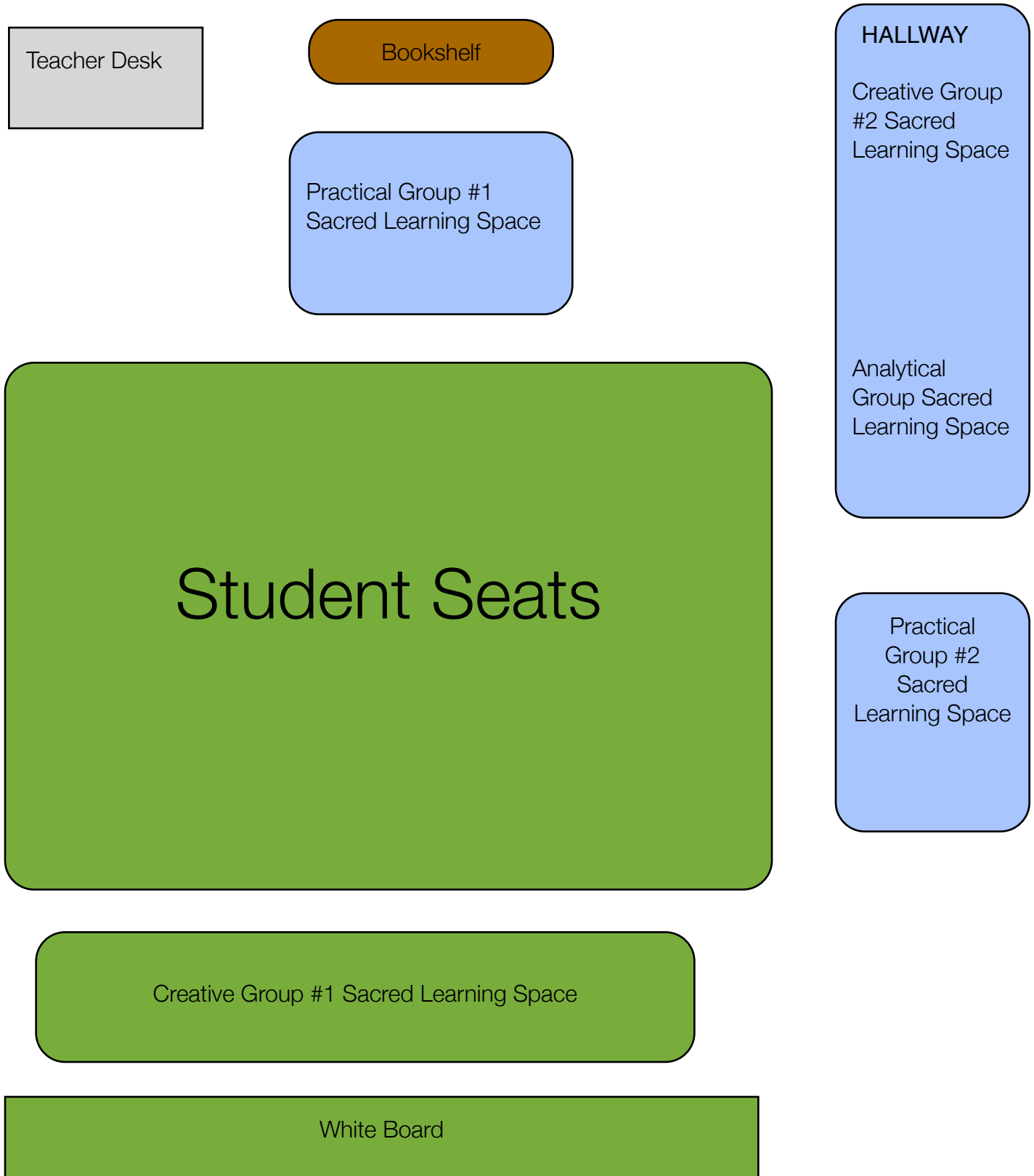
Kaydee will be responsible for- Typing the proposal letter.

Amelia will be responsible for- Writing the raft letter.

Kenadee will be responsible for- Drawing pictures.

~~Alyssa Bradley~~
~~Kaydee Buchanan~~
~~Kenadee Buchanan~~
~~Kenadee Buchanan~~
~~Amelia Scarsella~~

APPENDIX 9: SACRED LEARNING SPACES MAP



APPENDIX 10: SAMPLE CHART FOR RAFT PROJECT (PRACTICAL GROUP #2)

RAFT Ideas for *The Graveyard Book*

Role	Audience	Format	Topic
Bod	Scarlett	Letter	I Miss You...
The Man Jack	Bod	Posters	Wanted!
Scarlett	Bod	Letter	Pen Pals?
Miss Lepescu	Bod	Speech	Learning is Important

APPENDIX 11: PROJECT CALENDAR

(50 minute periods)

Day 1	Day 2	Day 3	Day 4	Day 5
<ul style="list-style-type: none"> Take Sternberg's Intelligences survey Discuss triarchic intelligences Read GB, chap 1 Literary Vocab: Foreshadowing 	<ul style="list-style-type: none"> Anticipation Guide for GB and JB Complete read aloud of chap 1 Literary Vocab: Protagonist and Antagonist 	<ul style="list-style-type: none"> Read <i>Mowgli's Brothers</i> in JB Groups to compare/contrast chap 1 of GB and <i>Mowgli's Brothers</i> from JB 	<ul style="list-style-type: none"> Read aloud GB chap 2 Give pre-project survey Group students by triarchic intelligences: "What do I need to be successful?" 	<ul style="list-style-type: none"> Work on Triarchic Intelligence posters "What do we need to be successful?"
Day 6	Day 7	Day 8	Day 9	Day 10
<ul style="list-style-type: none"> Project Work Groups come up with project ideas Project Proposal Letters (contracts) 	<ul style="list-style-type: none"> Project Work Complete Project Proposal Letters for teacher approval 	<ul style="list-style-type: none"> Begin group projects Teacher observations- audio record group meetings 	<ul style="list-style-type: none"> PROJECT WORK DAY 	<ul style="list-style-type: none"> PROJECT WORK DAY Read aloud GB, chap. 3
Day 11	Day 12	Day 13	Day 14	Day 15
<ul style="list-style-type: none"> PROJECT WORK DAY 	<ul style="list-style-type: none"> PROJECT WORK DAY 	<ul style="list-style-type: none"> PROJECT WORK DAY Read aloud GB, chap. 4 	<ul style="list-style-type: none"> PROJECT WORK DAY 	<ul style="list-style-type: none"> PROJECT WORK DAY Read aloud GB, chap. 5
Day 16	Day 17	Day 18	Day 19	Day 20
<ul style="list-style-type: none"> PROJECT WORK DAY Plot chart with Literary Vocab: conflict, rising action, turning point, denouement 	<ul style="list-style-type: none"> PROJECT WORK DAY Read aloud GB, chap. 6 	<ul style="list-style-type: none"> District Benchmark Assessments (Day off from project) 	<ul style="list-style-type: none"> District Benchmark Assessments (Day off from project) 	<ul style="list-style-type: none"> District Benchmark Assessments (Day off from project)
Day 21	Day 22	Day 23	Day 24	Day 25
<ul style="list-style-type: none"> PROJECT WORK DAY 	<ul style="list-style-type: none"> PROJECT WORK DAY 	<ul style="list-style-type: none"> PROJECT WORK DAY 	<ul style="list-style-type: none"> Exhibition Day! 	<ul style="list-style-type: none"> End of Project Narrative Survey