

To: Benjamin Stokes, Connie Yowell, Yasmin Kafai, Nichole Pinkard 🥌 From: The Field Museum May 13, 2009 🧼

## Proposed Focus Group Activities for WhyReef

In addition to exposing millions of young people to the importance of coral reef ecosystems, another primary goal of this project is to further the understanding of how to effectively link digital learning and museum learning experiences. To this end we have established a Kid Advisory Council (KAC) that will be in effect for the rest of 2009. The purpose of the KAC is to pilot additional innovative educational experiences that will link WhyReef and traditional exhibitions and collections. This KAC will be comprised of twenty students aged 10 to 14. Ten students will be Chicago-area residents from The Field Museum partner schools, and ten students will be selected from across the country with your guidance.

As a complement to the KAC, we will be taking a more traditional approach to assess Whyvillians coral reef and conservation learning. This will be accomplished through a series of four to five online questionnaires that will be administered on Whyville. We have already begun this process with a baseline survey administered in February 2009 that was designed to measure content knowledge and attitudes towards coral reefs. 3,420 Whyvillians responded to the baseline survey and we are currently analyzing these results.

The inspiration behind the KAC has come from our initial "Break the Reef" pre-launch focus groups, various informal observations, and reviews of digital learning literature. The most exciting experience was with The Field Museum's Museology program. We had a small group of teens play with the various modules on WhyReef. We then took them down to the Collections and Research Center to see real specimens of the fish in WhyReef. We have never seen teenagers so enthused to see fish in jars of alcohol! They were able to recognize the fish from their time playing in WhyReef, and said that the virtual experience made them more confident to interact with the specimens and the researchers. They also said that seeing the specimens made them more eager to go back on WhyReef to pay closer attention to the information about the fish they had seen.

On the following pages is an outline of the KAC with more specific details pertaining to the programming, activity slate and approach we will be taking to understand the impact of the KAC. We look forward to discussing this with you and other researchers and contacts that you recommend. Your guidance and feedback is an important to the success of our evaluation process.



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There are several goals for the KAC. The first is to gauge how kids learn in digital and real world environments. Second, we want to ascertain the process by which students acquire content knowledge about coral reefs. Third, we want to understand how kids use digital and real world museum collections to learn, and how each of these formats plays a role and supplements the other. This will be accomplished through in-world play in WhyReef, supplemented by engaging kids in handson experiences with coral reef specimens and collections, customized programs at a local Aquarium, and real world interactions with Reef conservationists. Through these after-school experiences, kids will be challenged to take what they have learned in Whyville and apply it to other learning contexts. This will be assessed through movies and mashups produced by the kids that highlight their virtual and real world experiences.

Another goal is to understand how kids learn from each other using digital media and spaces, and to capture unexpected learning outcomes that were not predicted. We will accomplish this by asking the On-Site kids to create learning tools (movies and mashups) that will be available to the Off-Site kids. Using directed virtual chats, comments and blogs, we will use these kid-developed tools to enhance the Off-Site kids' learning experiences. Understanding the impact of these kinds of qualitative experiences can be challenging. Our current approach will be to use a more traditional evaluative rubric to understand and document what the kids have learned and experienced. However, we will also be using an approach more akin to program evaluation, which focuses on documenting learning outcomes as well as unexpected impacts. The outcomes of the KAC will impact future program plans.

The final goal is to discover if these digital and real world experiences and lessons become actionable knowledge for these children. The ultimate outcome of any learning project, real or digital, is for the kids to assimilate the knowledge gained during their experience and apply that knowledge to future problems and situations. We will ascertain if the kids are able to apply knowledge gained from WhyReef by having the kids make and solve problems involved with the Lake Michigan Ecosystem.



The KAC will run during 2<sup>nd</sup> Perturbation, which is tentatively scheduled from August to October 2009.

KAC Session I – Week of August 30<sup>th</sup>

KAC Session 4 – Week of October 4<sup>th</sup>

KAC Session 2 – Week of September 13th

KAC Session 5 – Week of October 18th

KAC Session 3 – Week of September 27<sup>th</sup>



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## **KAC Activity Schedule**

Session	On-Site Kids	Off-Site Kids
Pre-KAC	All logged into Whyville, have Avatar and Chat License	
KAC #1 Play	Play for ~1.5 hours (to become familiar with each other) Last 30min focus on Count & ID activities	Play for ~1.5 hours (to become familiar with each other) Last 30min focus on Count & ID activities
KAC #I	Survey - multiple choice & open answer –	Last John Tocus on Count & D activities
Assessment	assess learning goals associated with Count & ID activities	
KAC #1 Activities	Collections - examine specimens from Field Museum collections and compare to WhyReef	None
KAC #I Assessment	Make a species movie <sup>*</sup> about reef species using WhyReef & Collections –post for Off- Site Kids	Watch species movies made by On-Site Kids - directed comments/blogs on what learned
KAC #2 Assessment	Live directed chat in reef station about species movies & what learned	
	30 minute dive	30 minute dive
KAC #2 Play	Directed play - Mini Food Webs & Reef Videos	Homework – Mini Food Webs & ReefVideos
KAC #2	Survey - multiple choice & open answer –	
Assessment	assess learning goals associated with Mini Food Webs & Reef Videos	
KAC #2 Activities	Aquarium – examine species behavior at Shedd Aquarium and compare to WhyReef	None
KAC #2 Assessment	Make a behavior movie about reef species using WhyReef & Shedd Aquarium – post for Off-Site Kids	Watch species behavior movies made by On- Site Kids - directed comments/blogs on what learned
KAC #3 Assessment	Live directed chat in reef station about behavior movies & what learned	
KAC #3 Play	30 minute dive	30 minute dive
	Directed play – Reef Simulator & Save the Reef Activities	Homework – Reef Simulator & Save the Reef Activities
KAC #3	Survey - multiple choice & open answer –	
Assessment	assess learning goals associated with Reef Simulator & Save the Reef Activities	
KAC #3 Activities	Governmental Group or NGO – talk about reef management	None
KAC #3 Assessment	Make a reef management movie using WhyReef & talk from Govt./NGO – post for Off-Site Kids	Watch reef management movies made by On-Site Kids - directed comments/blogs on what learned
KAC #4	I. Live directed chat in reef station about reef management movies & what learned	
Assessment	2. Ask for <i>advice</i> on WhyReef and future activities	
KAC #4 Play	30 minute dive	30 minute dive
KAC #4 Assessment	Make a problem with the Lake Michigan ecosystem that the Off-Site Kids would have to solve (movie or text)	Solve problem Lake Michigan posted by On- Site Kids.
KAC #5 Assessment	(Both Groups Off-Site) On-line directed chat in reef station about Lake Michigan problem.	

\* Kids will story-board movie plan using screen shots, screen videos, pictures, and videos, and we will help them put the movies together.