Proposal for a Young Youth Curriculum (ages 6-10??)

I am proposing that the collective adopt (or adapt) the following youth curriculum for children below the ages of 10-12 (depending on individual ability). I designed the following curriculum based off my experiences teaching with the current youth class curriculum over the summer of 2009 at Free Ride. I would like the "young youth curriculum" to be used in tandem with, in support of, or in place of the current curriculum. I developed this curriculum on my own, based on my own experiences of what worked in class, plus adapting some insight from the 2009 Bike! Bike! conference classes on youth programming.

I developed the following "young youth curriculum" to be more suitable for the physical, emotional and developmental age of young children (under 10 years old). Here are some attributes of young children that I've noticed while working with children of all ages this past summer.

Young children _____ than the older ones:

- have a shorter attention span
- possess high physical energy
- often possess basic, but not fine, motor skills
- struggle through long, detailed process-oriented tasks
- excel at creative interpretation and expression

Problem: the current curriculum is appropriate for older kids (12-17), but younger kids (ages 7-11) more commonly make up the attendance of our summer classes. I feel the existing curriculum stresses out these kids more than necessary, and that much of what we teach them isn't retained because of their frustration and exhaustion. I am concerned about scaring kids away from bikes and bike mechanics because they end up seeming too complex... I'd rather excite kids about bikes by meeting them on their level of ability, thereby inviting them to continue coming back and learning more as they grow.

With all of this in mind, I propose that the curriculum be modified:

- to reduce the stress of complex tasks by making the activities shorter and simpler, focusing less on hard mechanics and more on the concepts behind bike maintenance and repair (like when/where on the bike should we be using degreaser? when/where to use polylube? why do we use lube?)
- to reduce the stress on the kids of doing fine motor activities with sometimes dangerous tools by excluding some of the present advanced curriculum
- to emphasize Free Ride as being a supportive mutual aid environment, in which all cooperate and assist one another
- to add more bike-related games and arts & crafts to the curriculum
- to enhance the bike-riding element to the program

How this would affect Free Ride

Adopting this new curriculum for younger classes would mean that Free Ride youth class staffers would have to work slightly more hours, meaning Free Ride would have to pay staff more money overall. Staff would be responsible for repairing any major problems with the kids' bikes that they cannot be expected to fix themselves in the given timeframe. This has been true for past classes, but I anticipate an increased amount of hours needed to fix these bikes for the kids given this new curriculum. There would also be an increased cost in the form of creating and printing workbooks for them. (Note: many extra bike safety coloring books were printed last year that can be used this year... they live in the primary-colored short file cabinet beneath the workbench.)

Despite these adjustments, what would NOT change is the style of supportive, DIY teaching... encouraging the kids to do it themselves and solve the puzzles and problems on their own, with hints and assistance from the instructors only when they ask for it. Instructors should still adjust the activities however necessary to accommodate the needs of unique children (refocusing)... and always remembering that their enjoyment and education--not their perfect care and repair of their bikes--is the top priority.

Overview of Changes to the Curriculum

LEARNING HOW TO RIDE A BIKE

Learning how to ride a bike would become a formal part of the curriculum. I've found that many times kids are actually afraid or inexperienced with riding bikes, but they are ashamed to say so in front of their friends. This creates problems on the last day of class, when we plan to go for a ride to the park--some kids are so insecure about this that they cause a problem, which in turn frustrates the kids who *do* know how to ride a bike and want to. Making a day for public and/or private lessons would be helpful. This would challenge us to learn how to be better teachers of riding bikes, instead of just teaching bike mechanics.

ESTABLISHING A FUN DAILY ROUTINE

Have one game per day. Perhaps it can be at the beginning of the day so they get warmed up with one another and about bikes. Then they can go on to their activities and they get to wrap up the day working on their special activity. This kind of daily routine and consistency will improve the experience of younger kids.

BUILDING CONCEPTS FIRST, BIKES SECOND

Youth at this age seem especially receptive to conceptual ideas, and being as they lack certain fine motor skills that their older peers possess, replacing some of the hard mechanical curriculum with conceptual exercises feels appropriate. Emphasize learning vocabulary, shapes, and concepts over long, detailed step-by-step procedures for accomplishing a strict goal on their bike (like fixing a flat

or removing a bottom bracket). In this way we can meet them on their level and reduce frustration. When setting up a goal, emphasize that they don't need to do it perfectly the first time around, they just need to try (instructors can always finish up the loose ends after class). Spend time to establish concepts that they can take with them beyond the week-long class.

Good concepts:

-Righty tighty, lefty loosy

-The 6 Systems of the Bike (and their colors in the shop)

-Right Tool for the Right Job (tool-to-part shape matching, like puzzle)

-Vocabulary, such as Names of Tools, Parts, etc.

ADDING A "SPECIAL ACTIVITY" TO WRAP UP THE DAY

I've had mixed success with offering snacks... mostly bad ones. I think a better approach than offering snack (which they will come to expect and ask for daily, distracting them from their tasks) is to replace snack with a fun activity. The activity could be a mild form of a "reward" for finishing up or cleaning up their area early, or as a break between hands-on classwork. I think two (or more) variations on the activity would be helpful to allow students with different strengths to do what they enjoy. Here are the two ideas I came up with:

1) **Accessorizing one's bike.** Add bells, streamers, paint, stickers, tape, etc. to your bike.

2) **Design and decorate one's poster.** Task them to make a poster that will hang in the shop (I know there's practically no room for this, but they don't know that.) Encourage them to include a bike in their drawing somehow. Or if they don't want to make their own poster, they can color in the coloring books about bike safety.

<u>TOOLKIT of FUN GAMES</u>

Simon Says (using bike vocabulary) e.g. "touch your bottom bracket"

Treasure Hunts

Provide students with a color-coded list and give them a few minutes to find as many of the parts on the list in the shop as possible. Colors correspond with the systematic color-coding used in the shop.

Reverse Treasure Hunts

Write up a list of a few parts from around the shop. Select a couple familiar parts (seat, pedal), a couple medium ones, and one hard one (crown race). Color-code the written list to correspond with the colors of the systems used throughout the shop. The students will try to match the parts from the list to their proper home in the shop, thereby orienting them with the shop, reinforcing the color-coding and reinforcing vocabulary.

(continued)

Mismatch labeling game

Using all the vocabulary they know up to that point, tape labels to the bike in all the wrong places, and invite them up in pairs for a couple minutes each to try to fix everything.

Roleplaying shop issues games

Have staffers act out scenarios in which one of them either breaks a shop rule. Ask the students if they saw anything wrong with the scene, what they saw wrong, and how they would fix it. Then either have the staffers re-enact the scene using the students' suggestions, or have a student come up and take the place of one of the two staffers to try to resolve the conflict in the make-believe scene. This game is modeled after Theater of the Oppressed techniques. It invites the students to see themselves as a dynamic part of making the shop run smoothly and well for everyone, which is a principle on which Free Ride operates after all.

Tool game - Odd Tools

Take out a variety of weird-looking tools and encourage the kids to guess what they might be used for, and if they can't, to come up with a creative use for it.

Tool game - "Right Part for Right Tool"

Pass around common tools like screwdrivers, wrenches, etc. with their corresponding nut or bolt that they affect, and explain the concept that the tools have to fit perfectly around the parts or else they won't work. Allow the students to explore this topic of shape-fitting.

One word game

A group-building activity. Go around and have each person contribute one word to a story about going for a bike ride.

<u>ACTIVITIES</u>

Hands on activities that illustrate a concept are so important. Good ones include:

Pushing a toolbox with/without bearings underneath. Illustrates the role bearings have in a bicycle (to reduce friction).

DAY 1
[brackets = optional]

5 min. Introduction to Free Ride + overview of the week's curriculum (so the kids will have a vague idea of what to expect each day)

5 min. Name game icebreaker - tell about your experience with bikes (first time you ever saw a bike? ever rode a bike? etc.)

15 min. Tour of the shop.

10 min. List of shared agreements

[15 min. Icebreaker - drawing a bike. Tell us about your bike.]

5 min. Introduce the Systems of the Bike: Wheels (Yellow), Headset (Orange), Drivetrain (Blue), Brakes (Red), Shifting (Green), Seat (Purple). Discuss how these colors are used in the shop.

20 min. Introduce the Tools
-toolboxes
-how to use the tools (righty tighty, lefty loosey; proper fit to avoid stripping)
-special tools that they'll probably encounter
-materials (lube, degreaser, gloves, etc.)
-millimeters and other math measurements

[5 min. Physical activity: Stand up. Sit down if you've ridden a bike more than 1,000 times before. Sit down if 100 times. If 10 times. If once. If never. (Instructors take notes on kids' reactions)
Stand up if you've ever been to a bike shop before. Ever thought of becoming a bike mechanic when you grow up (and so on. Game designed to reveal which kids might have difficulty riding their bikes).]

5 min. Time to pick bikes! Invite the students to pick numbers from a hat for their bikes

45 min. Bike deconstruction activity occurs... maybe assign each pair to a system?
Ask them to take bring one of the parts they took off up to the front at the end.

While this is going on, bring kids back to select their bikes

15 min. Clean up their areas, put their toolkits back in order.

5 min. Check out - talk about the parts they took off. Ask the kids to remember the names of these for tomorrow. If anyone can remember the names of all of them, they get extra free time!

[5 min. Drawing time.]

DAY 2

10 min Check-in. Role-playing game with staffers demonstrating bad/good behavior per the Shared Agreements.
People can earn their free time now if they remember the names of things from yesterday.

[30 min. - runs concurrently with the class going on inside]
One instructor takes the kids outside that have a lot of trouble with riding bikes. Talks about safety and riding technique. If any kid gets bored or frustrated, they can go back in and work with their peers.

30 min. Introduce the Wheels System.
- Discuss vocabulary of the wheel.
- Discuss how to read information on the rim, tube and tire.
- Discuss concept of inflation
- Discuss concept of tread

40 min. Activity: Patching a Tube
- Give overview of how to take the wheel off the bike
- Give overview of how you'd take the tire off to patch a tube
- Explain types of flats and how to avoid each one
- How to find a flat (cheek, water)
- Begin activity - 1) Sandpaper, 2) Vulcanizing Fluid, 3) Patch
- Check if the patch worked

10 min. The kids from outside come back, and learn from their peers about what they did while in class. Have a hand-out that clearly explains the steps to patching. Ask the students who were in class to step-by-step explain the process of patching to their peers (with assistance from the teachers).

10 min. Clean up.

5 min. Check out.

15 min. Drawing or accessorizing time.

DAY 3

15 min. Check-in: Game. (Suggestion: Treasure Hunt or Simon Says). During game kids have chance to earn extra free time.

[30 min. One instructor takes the next batch of kids outside to practice riding bikes. Talks about safety and riding technique.]

5 min. Introduce the Drivetrain System.
Discuss how the drivetrain system powers your bike.
Discuss the components + vocabulary of the drivetrain system.

20 min. Activity: Tensioning the Chain

20 min. Activity: Cleaning the Chain

30 min. Introduce concept of cup-and-cone bearing systems
Introduce vocabulary and concept
Discuss how bottom bracket uses the c-&-c system

10 min. Kids come back; peers explain what happened that day.

5 min Check out

15 min Drawing or accessorizing

DAY 4

10 min. Check-in: Game. (Suggestion: Vocabulary Mis-matching Game). During game kids have chance to earn extra drawing time or free time.

[If kids from the first group (group with little experience riding bikes) still need help, one instructor may take them out and continue practicing with them.]

25 min. Revisit concept of cup-and-cone bearing systems
Review vocabulary
Review concepts... why is lube needed? What is the function of this kind of system?
Evaluate headset systems for their c-&-c system
Evaluate hub for their c-&-c system
[How to check your parts for wear / Identifying when to replace parts in a c-&-c system]

60 min. Introduce the Brakes System
Creatively explain the relationship between the brake levers

and the rim, the spring, and the housing/cable
Test housing and cables and replace if necessary
Have them adjust their springs (if cantilever brakes, which most all should be on kids bikes)
Have them adjust their pad alignment

10 min. Clean up

5 min. Check out

10 min. Drawing or accessorizing

DAY 5

5 min. Check in... is everyone ready for the ride?

40 min. Conduct a Group Safety Check
Walk them through a safety check from the front of their bikes to the back. Let staff & students deal with any problems that arise.
Hand out locks. Fit helmets.
Students without work to do are encouraged to first check to see if others need help (no one rides unless everyone rides!)
and then, to clean up/lube up their bikes.
If everyone's ready early, they can decide if they want to go on an extra-long ride, or to finish up their drawings/accessorizing first.

60 min. Group ride
First quiz the kids on the safety lessons they learned while practicing their riding.
Explain how the ride is going to go. How it's very important to follow the leader and stay in a straight line or you could lose your bike riding privileges and wouldn't be able to have any fun for the rest of the day! Again pairing up one instructor with the kids who want to go slow, and one with the kids who feel confident on their bikes

10 min. Head back to shop

5 min. Check out.

10 min. Load up bikes.

Throughout:
If anyone finishes up an activity early, invite them to clean their bikes, or work on

their drawings.

If anyone is getting frustrated, redirect them by asking them to clean, help someone else, or to work on their drawing for a little while (out of sight of the others).

Throughout the week, constantly reinforce the co-operative ethic: "We are in this together, let's help each other out." If anyone is struggling with riding their bike, or understanding something, invite the kids to offer support to that child in place of teasing them.