

Pilot Program for Road Safety Education

Report to the Legislature



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Pilot Program For Road Safety Education

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Executive Summary

During the 2008 Legislative session, Engrossed Substitute House Bill (ESHB) 2878, Section 201 (Transportation Budget), approved \$76,000 to conduct pilot programs for road safety education and training. The Office of Superintendent of Public Instruction (OSPI) administered the program, and the Bicycle Alliance of Washington (Bicycle Alliance) managed the program. Students were to be taught safe biking, walking, and transit use behavior. The participating school districts were Bainbridge Island, Moses Lake, and Oak Harbor. The majority of the participating students were in elementary school. The programs were conducted during the 2008–2009 school year and modeled after the program in Spokane Public Schools.

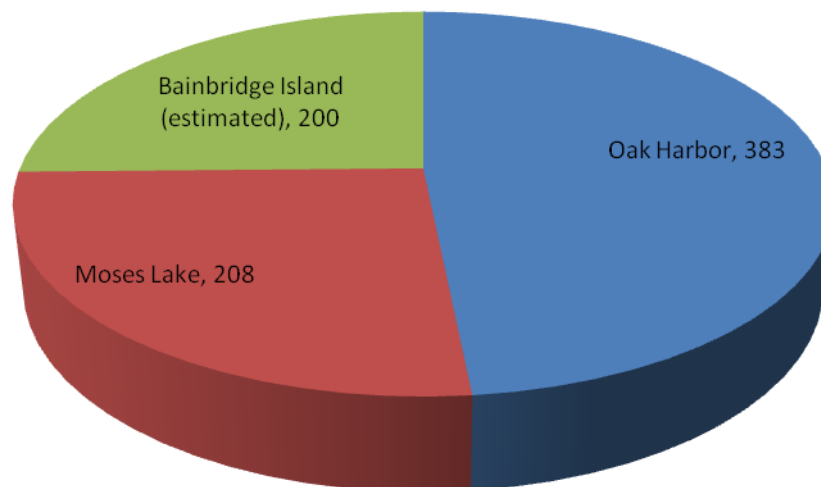
The goal was to demonstrate that by teaching road safety and mobility skills, students would become more aware of the transportation choices open to them and become safer bicyclists, walkers, and transit users.

Funding was provided for curriculum resources, the purchase of bicycles, trailers and related equipment, teacher training, and other essential services. Schools participated in program implementation, reporting, and evaluation efforts.

Survey Participation

Nearly 800 students participated in the pilot from three school districts. Bainbridge Island had approximately 200 students participate, Moses Lake had 208, and Oak Harbor had 383.

Nearly 800 Students in Three Cities Participated in the Road Safety Curriculum Pilot



Based on the comments and evaluation results, it is clear that traveling by bicycle is the favorite mode of transportation. Helmet use is a factor in saving lives. Being predictable (using arm signals) and safety checks are also factors to increasing safety.

Student outcomes include:

- Seventy percent ride more.
- Forty percent ride farther.
- Increased performance of a pre-ride safety check from 53 percent to 80 percent.
- Increased use of a helmet from 87 percent to 97 percent.
- Increased use of arm signals from 66 percent to 79 percent.
- Decreased riding double from 23 percent to 13 percent.
- Decreased the use of headphones while riding from 11 percent to zero.

Favorable outcomes for transit use and/or walking include:

- Forty-one percent know where the bus stops are located.
- Thirty-eight percent know how to plan a route.
- Twenty-nine percent know how to read a bus schedule.
- Twenty-five percent follow the walking rules.

While the safety-related results above are not as high as would be preferred, it is an impressive increase.

The participating school districts indicated that they would continue the classes, as there was favorable student interest. The results of the surveys speak to the popularity of the class.

Recommendations

To sustain a successful program, it is imperative that there is supportive staff willing to implement the program. The three school districts that participated in the pilots would serve as strong models for other schools. As other schools participate, lessons could be learned, shared, and improved. The curriculum could also be provided to other schools in an easily accessible way (e.g., internet).

In order to expand the program to other school districts, funding is necessary. Due to budget issues, many school districts are reducing the number of buses. Since some children will need other modes of transportation, road safety education is critical to strengthen travel to and from school. A possible funding option could be to allow school districts to use transportation monies for teaching students these skills.

I. Introduction

During the 2008 Legislative session, Engrossed Substitute House Bill (ESHB) 2878, Section 201, (Transportation Budget), approved \$76,000 to conduct pilot programs in three school districts for road safety education and training. The Office of Superintendent of Public Instruction (OSPI) was contracted by the Washington Traffic Safety Commission (WTSC) to administer the program, and the Bicycle Alliance of Washington (Bicycle Alliance) managed the program. Students were to be taught safe biking, walking, and transit use behavior.

The pilot program was conducted during the 2008–2009 school year and was modeled after Spokane Public School's program. The goal was to demonstrate that by teaching road safety and mobility skills, students would be cognizant of the transportation choices available and become safe bicyclists, walkers, and transit users. The three school districts that participated in the program were Bainbridge Island, Moses Lake, and Oak Harbor.

The pilot program team consisted of:

- Dave Janis, Acting Executive Director, Bicycle Alliance
- Gordon Black, former Executive Director, Bicycle Alliance
- Lisa Rakoz, Program Supervisor, Health and Fitness Education, OSPI
- Elizabeth Moore, Ph.D., Evaluator, Applied Inference
- Eileen Hyatt, Retired Teacher, League of American Bicyclists Certified Instructor #286

Funds were provided for curriculum resources, the purchase of bicycles, trailers and related equipment, teacher training, and other essential services. Schools were required to participate fully in program implementation including on-bike instruction, reporting, and evaluation efforts conducted and administered by the Bicycle Alliance and OSPI. This included, but was not limited to, site visits, survey completion, quarterly and final reports.

The curriculum, *Bicycle Skills and Transportation Choices*, is a comprehensive series of lessons to teach students in Grades 5–8 the essentials of safe transportation by foot, bicycle, and transit. The program incorporated on-bike instruction on the basic rules of the road for safe operation of a bicycle, best and safest practices as a pedestrian, and the basics of navigating and using public transit.

The goal of the pilot program was to demonstrate that by teaching road safety and mobility skills, students would become safer bicyclists, more aware walkers, and gain the confidence and skills to use transit buses for local trips. The curriculum used in the pilot program was modeled after the one used successfully by Spokane Public Schools. In turn, the pilot program was based largely on the curriculum which was developed by the League of American Bicyclists and is taught extensively by certified instructors throughout the United States. The curriculum has been modified to include curricula developed by the

Federal Highway Administration, and other sources, and is designed to allow teachers flexibility based on the length of physical education classes and weekly frequency of physical education.

The purpose of this report is to demonstrate the effectiveness of the program as shown by the evaluation and the results. The evaluation, a key part of the pilot program, examined the effectiveness of the curriculum in terms of its implementation and its effect. The legislation specified that the evaluation would include the identification of barriers to, interest in, and the likelihood of students traveling by bicycles, walking, or transit, prior to and following completion of the pilot.

II. Process

School districts and health departments were contacted to discuss participation requirements, program objectives, and desired outcomes. Once the school districts committed to the pilot program, each received 30 or 31 bicycles, one trailer to store and move the bicycles between schools, and other bicycle-related equipment (e.g., pumps, tools). The certified instructor, Eileen Hyatt, and a representative from the Bicycle Alliance worked with each school district to arrange professional development and secure proper equipment. Prior to the training, the evaluator prepared the surveys and implementation methods.

The curriculum, a two-day course, consisted of five lessons covering a wide range of topics related to safe bicycling, walking, and busing. The lessons included:

1. Knowing the rules of the road, signaling turns, exiting buses, riding predictably, being visible, and watching for mistakes other road users make. Students also received homework assignments.
2. Learning proper clothing for biking and walking, proper helmet fit, how to do a safety check, and an introduction to hazards. Students also received homework assignments.
3. Focusing on bicycle handling skills, such as stopping, straight-line riding, and scanning.
4. Providing traffic skills practice, including stops, safe walking, turning, and the differences using transit buses and school buses.
5. Learning advanced traffic skills, including yielding, intersection positioning, and cooperative use of the roadway.

The certified instructor completed a site visit at each school district and became familiar with the school grounds and training areas. The two-day training consisted of ten hours of the League of American Bicyclists Traffic Skills 101 for teachers and five hours of curriculum review.

Professional development was delivered at the following times:

- Bainbridge Island: October 21–22, 2008
(Five teachers completed the full session.)
- Moses Lake: September 16–17, 2008
(Seven teachers completed the full session.)
- Oak Harbor: April 15–16, 2009
(Four teachers completed the full session; one principal and one public health staffer completed a partial session.)

Both qualitative and quantitative data were collected for this evaluation. Qualitative data consisted of interviews with school or district administrators as well as open-ended comments in paper and electronic surveys. Quantitative data consisted of the parent, teacher, and student surveys (see Appendices A–C).

III. Findings

The legislation specified that the evaluation would include the identification of barriers to, interest in, and the likelihood of students traveling by bicycle, walking, or transit prior to and following completion of the pilot program. The following is a discussion of the feedback from parents, administrators, and students regarding these questions.

Parents

The feedback from parents was very positive. Typical comments included, “If it will teach the children to be safe riding, walking, or using transportation for the public, I would say, yes.” Others pointed out that while their children knew how to ride safely, it was important that their friends did also. More than 75 percent indicated that their child learned to ride bikes more safely in the road safety class, and about 50 percent said that their child actually does ride his/her bike more safely now. Nearly 25 percent said they allow their children to ride more now than before, though about as many said that they do not. Very few said they would allow their child to ride in bad weather or at night. Nearly 30 percent agree that their child does ride his or her bike more now, and about 25 percent said that their child learned to ride a bike in this program. Only about 20 percent allow their child to ride a bike to school, but nearly 60 percent said that they are now more comfortable when their child does ride a bike.

Administrators

Administrators reported extraordinary efforts on the part of the physical education instructors to make the class a rich experience for the students, and the student responses indicated that their efforts were successful. Administrators reported that they would like to see the class repeated. Although they expected that

fourth and fifth grade students should know how to ride bikes, some interviewees pointed out that some students learned to ride a bike during this program. When asked if the school is well located for students to bike to and from school, one principal indicated that it was. However, it was noted that there are busy and/or twisting roads in the community with poor shoulders, making a road safety curriculum especially important in that community.

Another administrator remarked that their school district is promoting several initiatives to increase the percentage of students that travel to and from school on foot or bicycle. This respondent remarked that there is a need for road safety education for pedestrians and cyclists, commenting that this curriculum helps move the community in that direction. One administrator remarked that implementing an effective class would help overcome parental concerns regarding bicycle safety. This administrator said that leveraging a Safe Routes to School grant from the Washington State Department of Transportation would benefit about half of the students, so there would be safer pathways to and from school.

Students

Students reported that they enjoyed riding bikes. Nearly all have a bike they can ride, and about 85 percent indicated the bike was in good working condition. Of those 85 percent, the students reported that they have a helmet that fits. Half the students indicated that they ride their bikes whenever they can (although when they have plenty of time or are with friends, walking has an edge). Sixty-two percent said the bicycling skills section of the curriculum was fun, and 46 percent said it was interesting. Half said the bicycle safety rules section was interesting and helpful, and more than 40 percent said it was fun, useful, and they liked it. Bicycling was the most preferred mode of transportation for these students, unless the route included a busy street, then it was the least preferred. Seventy percent of students said they want to ride more than they do.

About 80 percent of the students wore a helmet the last time they rode, two-thirds of them did a pre-ride safety check, and 60 percent reported using arm signals. About half of the students said they were uncomfortable riding in traffic.

Seventy-five percent of the students said the bicycling section of the curriculum was “very useful.” About 30 percent said that they already knew most of the bicycling safety information, and for some, the information was new.

Students indicated an interest in following the safety rules, if it related to bicycling or walking rather than taking the bus. When asked how their bicycling behavior has changed since taking the class, 70 percent said they ride more, 40 percent said they ride farther, 50 percent said they perform a safety check before they

ride. Forty-one percent said they wear a helmet, and 44 percent use arm signals.

The transit and walking sections of the curriculum were less successful. Students were more likely to consider them boring, and rated the information as less useful. Two-thirds of the students said that they already understood transit and walking behaviors. The results indicated that student's attitudes regarding public transportation is an area for improvement. Since taking the class, 18 percent of the students ride the bus more, and twice as many (36%) ride it less. Overall, taking the bus was the least preferred mode of transportation.

To review the evaluation report, contact the Bicycle Alliance of Washington, Road Safety Education Pilot Program Evaluation Report, at www.bicyclealliance.org.

IV. Recommendation

The ultimate goal would be to incorporate the curriculum in schools throughout Washington State. The pilot programs clearly indicated what it takes to make this program work. The initial start-up costs for school districts varied; however, \$17,000 was an average amount. This included purchasing bicycles, a trailer, other bicycle-related equipment (tools, pumps, etc.), curriculum materials, and contractual fees for a trainer. On-going costs were typically bicycle maintenance and equipment replacement.

To sustain a successful program, it is imperative that there is supportive staff willing to implement the program. The three school districts that participated in the pilots would serve as strong models for other schools. As other schools participate, lessons could be learned, shared, and improved. The curriculum could also be provided to other schools in an easily accessible way (e.g., the internet).

While the curriculum included pedestrian and transit skills, this could be strengthened. The teachers had two days to focus on the curriculum. The bicycle skills section monopolized most of the instructional time, which limited the pedestrian and transit education.

In order to expand the program to other school districts, funding is necessary. Due to budget issues, many school districts are reducing the number of buses. Since some children will need other modes of transportation, road safety education is critical to strengthen travel to and from school. A possible funding option could be to allow school districts to use transportation monies for teaching students these skills.

V. Conclusion

Based on the comments and evaluation results, it is clear that traveling by bicycle is the favorite mode of transportation. Helmet use is a factor in saving lives. Being predictable (using arm signals) and safety checks are also factors to increasing safety.

Student outcomes include:

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Favorable outcomes for transit use and/or walking include:

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While the safety-related results above are not as high as would be preferred, it is an impressive increase.

The participating school districts indicated that they would continue the classes for the students, as there was considerable interest. The results of the surveys speak to the popularity of the class.

VI. Appendices

Appendix A: Bicycle, Transit, and Walking Parent Survey

Appendix B: Bicycle, Transit, and Walking Teacher Survey

Appendix C: Bicycle, Transit, and Walking Student Survey

Appendix D: Bicycle Skills and Transportation Choices Curriculum

Appendix E: "Bicycling Program Begins in Moses Lake Schools,"
Newspaper Article

Bicycle, Transit, and Walking Parent Survey

1. Explanation and confidentiality



Thank you for coming to this questionnaire. This is part of an evaluation of the biking, transit, and walking curriculum your child just finished in P.E. at school. We're trying to get feedback from everyone concerned, including the students, the teachers, principals, and of course, parents.

Please answer freely and frankly. Your responses will be combined with those of other parents and presented in the final report without any identifying information. We may quote some of your comments, attributing it to "Parent."

The information you give here will help the Bicycle Alliance of Washington learn how to improve the curriculum.

It should take less than 10 minutes to complete this survey.

If you have any questions about this, please call Liz Moore at 206 533 0231 or you can email me at liz@appliedinference.com

2. Background

1. Please write in today's date

MM DD YYYY
Today's date / /

* 2. Name of your child's school

Bicycle, Transit, and Walking Parent Survey

3. Please write your name. This will be used ONLY so we know not to follow up with you to complete the survey. Your name will NOT be saved with your responses.

4. Name of your child's P.E. teacher

* 5. What grade is your child in?

3. The class

1. Please select one answer per question.

	Yes	No	Not sure
Were you aware that your child was learning bicycling skills in P.E.?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did you know that this class also covers walking safety?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
And that it covers using public transportation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did you know that the school has bicycles for the students to practice on?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did your child mention the bicycling class to you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Bicycle, Transit, and Walking Parent Survey

2. Please select the answer that indicates how much you agree or disagree with each statement.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know
My child rides his/her bike more safely now.	jn	jn	jn	jn	jn	jn
I allow my child to ride more now than before she/he took this class.	jn	jn	jn	jn	jn	jn
My child rides his/her bike more now.	jn	jn	jn	jn	jn	jn
My child learned to ride a bike in this program.	jn	jn	jn	jn	jn	jn
I allow my child to ride in bad weather.	jn	jn	jn	jn	jn	jn
My child already knew how to ride a bike.	jn	jn	jn	jn	jn	jn
I allow my child to ride at night.	jn	jn	jn	jn	jn	jn
My child learned how to ride more safely in this program.	jn	jn	jn	jn	jn	jn
I allow my child to ride a bike to school.	jn	jn	jn	jn	jn	jn
I feel more comfortable when my child rides a bike now.	jn	jn	jn	jn	jn	jn

Other comment?

3. Please select the answer that indicates how much you agree or disagree with each statement.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know
My child enjoyed these lessons.	jn	jn	jn	jn	jn	jn
My child learned how to use public transportation.	jn	jn	jn	jn	jn	jn
My child thinks about his/her transportation choices now.	jn	jn	jn	jn	jn	jn
My child is more independent since taking this class.	jn	jn	jn	jn	jn	jn
I feel more comfortable when my child walks around town now.	jn	jn	jn	jn	jn	jn
My child uses public transportation more now.	jn	jn	jn	jn	jn	jn

Other comment?

Bicycle, Transit, and Walking Parent Survey

4. What are your greatest concerns about your child riding a bike, taking the bus or walking around town?

Concern 1

Concern 2

Concern 3

Concern 4

5. Thinking about each of the concerns above, how well did the bicycling program address your concerns?

	Not at all	Somewhat	Fairly well	Very well	Don't know
Concern 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Concern 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Concern 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Concern 4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Other comments?

4. Family transportation choices

1. How much does your child...

	Not at all	Occasionally	About average	More than average	A lot/ all the time
Use a helmet when riding a bike	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Get rides places	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Take public transportation	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Get around by walking	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ride a bike to school	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Use a bike to get around	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Other comment?

Bicycle, Transit, and Walking Parent Survey

2. Does anyone else in the family...

	No one in the family does this	At least one person does this sometimes	At least one person does this a lot
Ride a bike to school or work	jñ	jñ	jñ
Use a helmet when riding a bike	jñ	jñ	jñ
Use a car for transportation	jñ	jñ	jñ
Get around by walking	jñ	jñ	jñ
Ride a bike for fun, weather permitting	jñ	jñ	jñ
Take public transportation	jñ	jñ	jñ
Use a bike to get around, weather permitting	jñ	jñ	jñ

Other comment?

3. Overall, what is your opinion of the bicycle class? Would you like to see them continue to offer the class? Would you suggest any changes?

Bicycle, Transit, and Walking Teacher Survey

1. Explanation and confidentiality

Thank you for coming to this questionnaire. This is part of the evaluation of the demonstration project you were part of to increase your students' skills in riding their bikes, using the bus or walking around town. As one of the teachers, your feedback is especially important.

Please answer freely and frankly. Your responses will be combined with those of other teachers and presented in the final report without any identifying information. We may quote some of your comments, attributing it to "Teacher."

The information you give here will help the Bicycle Alliance of Washington learn how to improve the curriculum.

It should take 10-15 minutes to complete this questionnaire.

If you have any questions about this, please call Liz Moore at 206 533 0231 or you can email me at liz@appliedinference.com

2. Background

1. Please note today's date and the date you finished the bicycle curriculum (an estimate is fine)

	MM	DD	YYYY
Today's date	<input type="text"/>	/ <input type="text"/>	/ <input type="text"/>
Date you finished the bicycle curriculum	<input type="text"/>	/ <input type="text"/>	/ <input type="text"/>

2. Please write your name. This will be used ONLY so we know not to follow up with you to complete the survey. Your name will NOT be saved with your responses.

3. Name of the school where you taught this curriculum

4. Grade of students you taught

5. Approximate number of students per bicycle class

6. How many classes of students did you teach using this curriculum? (Example: A morning class and two afternoon classes would be three classes.)

3. Using the curriculum

Bicycle, Transit, and Walking Teacher Survey

1. From your perspective, what were the most important student learning goals or other goals for this curriculum?

Goal 1

Goal 2

Goal 3

Goal 4

2. Thinking about each of the goals you identified in the question above, how well did the curriculum cover the needed material?

	Not at all	Some needed information was included, many gaps	Most needed information was included, some gaps	All or nearly all needed information was included	Don't know
Goal 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Goal 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Goal 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Goal 4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Other comments?

3. Again, thinking about the same goals, what grade would you give this curriculum in actually achieving the goals? (Example: how effective was the curriculum at teaching the safety rules, judging by what the students actually learned?)

	A (Excellent - Goal achieved!)	B	C	D	F (Failed - Goal missed by a lot!)	Don't know
Goal 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Goal 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Goal 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Goal 4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Other comment or explanation?

Bicycle, Transit, and Walking Teacher Survey

4. How well did this curriculum help students learn...

	Students learned a lot	Students learned some	Students did not learn much	Not applicable
Benefits of bicycling	jn	jn	jn	jn
Bicycle safety	jn	jn	jn	jn
How to ride a bike - the physical skills	jn	jn	jn	jn
How to select a transportation mode	jn	jn	jn	jn
How to use public transportation	jn	jn	jn	jn
Pedestrian safety	jn	jn	jn	jn

Other comment?

5. Please select the option indicating how much you agree or disagree with each statement.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know
I felt well prepared to teach this curriculum.	jn	jn	jn	jn	jn	jn
The students enjoyed this section.	jn	jn	jn	jn	jn	jn
This curriculum was at the right skill level for most of my students.	jn	jn	jn	jn	jn	jn
Most of the students learned something new about bicycling in this curriculum.	jn	jn	jn	jn	jn	jn
Most of my students are already experienced bicyclists.	jn	jn	jn	jn	jn	jn
This curriculum was too advanced for most of my students.	jn	jn	jn	jn	jn	jn
This curriculum was too basic for most of my students.	jn	jn	jn	jn	jn	jn
The students seemed enthusiastic about becoming more competent bicyclists.	jn	jn	jn	jn	jn	jn

Other comments?

Bicycle, Transit, and Walking Teacher Survey

6. Please indicate how strongly you agree or disagree with these statements. As a result of this curriculum...

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know
...I think students will ride their bikes more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...I think students will take the bus more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...I think students will be safer riding their bikes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...I think students will have more confidence riding their bikes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any other changes?

7. What are the strengths and weaknesses of this curriculum for your students, your school, or your community

...for the teacher

...for students

...for school

...for community

...other

8. What did students like most and least about the curriculum?

Like most?

Like least?

4. Bicycling around the school

Bicycle, Transit, and Walking Teacher Survey

1. Please select the option that reflects your opinion about these statements.

	Strongly disagree/ strong negative/ not at all	Disagree	Neither agree nor disagree	Agree	Strongly agree/ strong positive/ always
I enjoy riding a bike.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ride daily or almost daily, weather permitting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely get a chance to ride a bike.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to avoid riding in bad weather.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ride at least once a week, weather permitting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can usually leave the car at home at least once a week.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other comments?	<input type="text"/>				

2. Please indicate how strongly you agree or disagree with each of these statements.

	Strongly agree/ strong positive/ a lot	Agree	Neither agree nor disagree	Disagree	Strongly disagree/ strong negative/ none	Don't know/Not applicable
It's easy to stay safe walking around town.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People ride bicycles around here a lot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This community has a good public transportation system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A group of teachers or staff walk or ride to school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This community makes it easy to bicycle safely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other comments?	<input type="text"/>					

3. What do you like most and least about riding a bike?

Like most?

Like least?

5. Transit and walking

Bicycle, Transit, and Walking Teacher Survey

1. Thinking about the walking and transit portions of the curriculum...

	No	Somewhat/slightly	Mostly	Yes	Don't know	Not applicable
... was the pedestrian section relevant to your students?	jn	jn	jn	jn	jn	jn
... was the information in the pedestrian section new to your students?	jn	jn	jn	jn	jn	jn
... did the students like the pedestrian part?	jn	jn	jn	jn	jn	jn
... is the transit portion a good fit for your school, students, and community?	jn	jn	jn	jn	jn	jn
... was the transit information new to your students?	jn	jn	jn	jn	jn	jn
... can teens get around reasonably in your community using public transportation?	jn	jn	jn	jn	jn	jn
... did students like the transit part of the curriculum?	jn	jn	jn	jn	jn	jn

Other issues or comments?

6. Overall

1. How would you suggest improving this program or this curriculum?

Bicycle, Transit, and Walking Student Survey - Post only V2

1. Explanation

Welcome to this questionnaire. Your answers here will help us find ways to improve the classes you had on bicycling, using the bus, and walking.

Don't worry about giving right or wrong answers - we just want to know what you think and what you do.

We'll ask your name so we can match your answers with grades you got on these classes, but only the researchers will know how you answered any question. When we write the report, we'll combine your answers with everyone else's and we won't use your name.

You can help make the program better by telling us what you think! Thank you.

If you have any questions about this, please call Liz Moore at 206 533 0231 or you can email me at liz@appliedinference.com

2. Your school

Remember, your answers remain private. We won't even say whether you answered any question or not.

* What is the name of your school?

* What is the name of the teacher for the bicycle class?

When did you take the class and what is today's date?

Today's date MM DD YYYY
 / /

Last day of the MM DD YYYY
 bicycling class / /

3. A little about you

* What is your first name and last initial?

* What grade are you in? (just put a number)

* How old are you?

Are you a...

Girl

Boy

4. Experience with transportation

Bicycle, Transit, and Walking Student Survey - Post only V2

Over the past week - or during a recent week when the weather was nice enough that you had a choice of how to get around, how often did you...

	Most or all of the time	Sometimes	Not very often	Never or almost never
Ride a bike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Take the bus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Walk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Anything you'd like to add?

How much do you like...

	Like it a lot!	It's OK	Don't really like it
Riding a bike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking the bus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Walking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Anything to add?

5. Transportation choices

How do you *prefer* to get around? For each way of getting around (bike, bus, walking), check the boxes that tell when you *prefer* to get around that way.

	Ride a bike	Walk	Take the bus	Some other way
Whenever I can	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On a nice day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When it's less than a mile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When it's more than a mile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When the weather is cold or wet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I'm in a hurry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I have plenty of time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I'm bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When the route includes a busy street	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When it's dark	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I'm with friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I never prefer to travel this way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Anything to add here?

Bicycle, Transit, and Walking Student Survey - Post only V2

6. Bicycle Safety

This is to find out what you know, and what you do - even if you don't always do what you think you should.

Thinking about the last time you rode a bike, did you...

	Yes	No	Not sure
Wear a helmet	jn	jn	jn
Do a pre-ride safety check	jn	jn	jn
Ride on the road	jn	jn	jn
Ride with traffic	jn	jn	jn
Use arm signals	jn	jn	jn
Ride in the dark	jn	jn	jn
Ride double	jn	jn	jn
Use headphones while riding	jn	jn	jn

Anything you want to add or explain?

Thinking about the last time you rode a bike, did you...

	Yes	No	Not sure
Feel uncomfortable in traffic	jn	jn	jn
Ride in wet weather	jn	jn	jn
Have bicycle problems	jn	jn	jn
Ignore stop signs or lights	jn	jn	jn
Encounter hazards on the road	jn	jn	jn
Fall, crash, or otherwise get hurt	jn	jn	jn
Encounter drivers that didn't share the road with you	jn	jn	jn
Ride more than 10 blocks from home	jn	jn	jn

Anything you want to add or explain?

Bicycle, Transit, and Walking Student Survey - Post only V2

Thinking about the last time you rode a bike, did you...

	Yes	No	Not sure
Ride on streets with traffic lights	jn	jn	jn
Ride on four-lane roads	jn	jn	jn
Ride on paths or trails	jn	jn	jn
Ride with a lot of traffic	jn	jn	jn
Ride where cars were driving fast	jn	jn	jn
Go through busy intersections	jn	jn	jn
Enjoy the trip	jn	jn	jn
Can't remember a bicycling trip	jn	jn	jn

Anything you want to add or explain?

When was the trip you were thinking about for the previous question?

- This week
- Last week
- This month but before last week
- Since the bicycling class but maybe more than a month ago
- Before the bicycling class

What do you think are the most important rules to stay safe when riding a bicycle?

Rule 1

Rule 2

Rule 3

What are the rules you usually follow when you ride a bike?

Rule 1

Rule 2

Rule 3

What are the rules you usually do NOT follow when you ride a bike

Rule 1

Rule 2

Rule 3

Bicycle, Transit, and Walking Student Survey - Post only V2

When you or someone else doesn't wear a bicycle helmet, what do you think are the main reasons why not?

Do you have...

	Yes	No	No bike
A bicycle that you can ride	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A helmet that fits you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A bicycle that fits you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A bicycle in good conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working lights for the bicycle that you ride	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other comment?

7. How you feel about riding a bike

What are the things you like about riding a bike?

What are the things you don't like about riding a bike?

Would you like to ride more than you do?

Yes

No

Not sure

Comment?

What, if anything, keeps you from riding or walking more?

How, if at all, have you changed how you ride a bike, take the bus or walk since the class you had on bicycling?

Bicycle, Transit, and Walking Student Survey - Post only V2

8. Your opinions about the classes

Overall, how useful were the classes on each mode of transportation?

	Not at all useful	Less than half useful	More than half useful	Very useful
Riding a bike	jñ	jñ	jñ	jñ
Taking the bus	jñ	jñ	jñ	jñ
Walking	jñ	jñ	jñ	jñ

Anything you want to add?

What parts of the lessons were too easy or too hard?

Too easy?

Too hard?

How much of the safety information was new to you, and how likely are you to follow the safety rules?

	New safety information	How likely to follow safety rules
Riding a bike	<input type="text"/>	<input type="text"/>
Taking the bus	<input type="text"/>	<input type="text"/>
Walking	<input type="text"/>	<input type="text"/>

Any rules you are more or less likely to follow?

Did you learn new bike riding skills or did you learn how to use the bus system?

	Learned how to do many things I didn't know before	Learned how to do a few things I didn't know before	Pretty much review of what I already knew
Riding a bike	jñ	jñ	jñ
Taking the bus	jñ	jñ	jñ

Bicycle, Transit, and Walking Student Survey - Post only V2

Put a check in the boxes that describe how you feel about the bicycling, transit, walking classes.

	Bicycling safety rules	Bicycling skills	Riding the bus safety rules	How to ride the bus	Walking safety rules
Fun	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too slow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too fast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liked it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Didn't like it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For younger kids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For older kids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Any other ways you'd describe these classes?

How, if at all, has your bicycling changed since taking the class?

- Ride more
- Ride less
- Use arm signals
- Wear a helmet
- Afraid to ride
- Ride at night
- Don't ride at night
- Ride on the sidewalk
- Ride in the street with traffic
- Perform a safety check each time I ride
- Ride farther
- Plan trips

Any other changes?

Bicycle, Transit, and Walking Student Survey - Post only V2

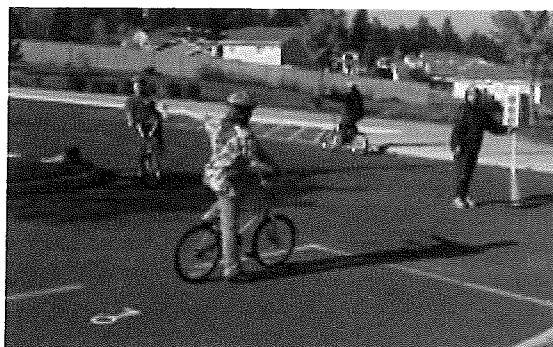
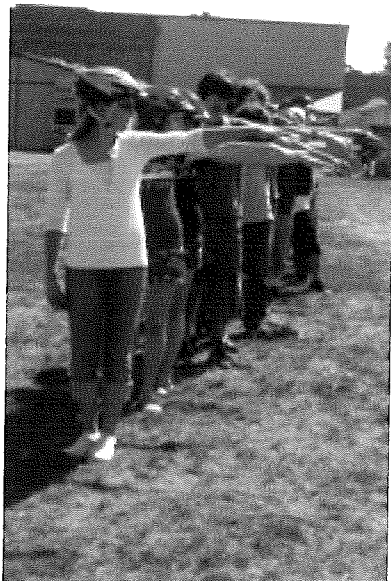
Check all the ways your use of the city bus system or your walking practices have changed since the class.

- Take the bus more
- Take the bus less
- Know how to plan my route
- Know where the stops are
- Know how to read a bus schedule
- Walk with traffic
- Walk against traffic

Other changes?

What ideas do you have for improving the class? Do you want more or less of any parts of it? What would you add or subtract or change?

Bicycle Skills and Transportation Choices Middle School Curriculum



**Bicycle Alliance of Washington
2008**

Eileen Hyatt
League of American Bicyclists Certified Instructor #286
SpokaneBikeBuddy@aol.com

Principles of Traffic Law

What Principles of Traffic Law do all drivers* follow?

* In all 50 states, bicycles are by law considered vehicles.

1. First Come, First Served

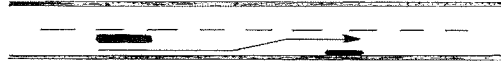
- ❖ Each driver is entitled to the space they are using, with reasonable clearance around them, between intersections and at intersections.
- ❖ At uncontrolled intersections if drivers arrive at the same time, yield to the person on your right.

2. Drive on the Right-hand Side of the Roadway

- ❖ All drivers follow the same set of rules so they know what to expect from one another.
- ❖ Across the U.S., drivers of all vehicles operate in the right-hand side.

3. Yielding to crossing traffic:

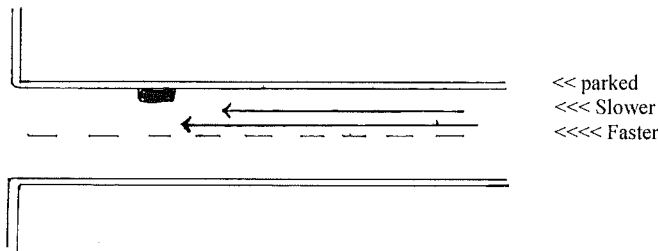
- ❖ Drivers on less important roads, and that includes driveways and alleys, yield to traffic on more important roads. Yielding means looking and waiting until you see that no traffic coming so close as to be a danger.
- ❖ Yield when changing lanes:
 - Drivers who want to move laterally on the roadway must yield to traffic in their new line of travel. Yielding means looking behind until you see that no traffic is coming and looking in front until you see that there is nobody to run into.



- ❖ Yield when turning across the path of another vehicle.

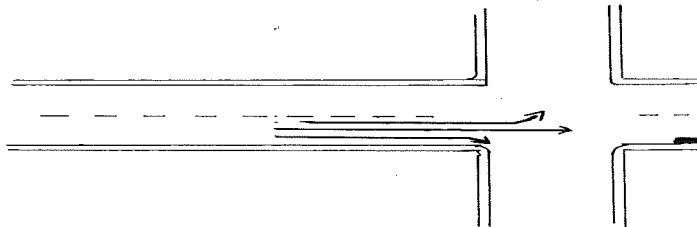
4. Speed Positioning

- ❖ Parked drivers are at the curb, slow drivers are next to them, and fast drivers are near the center line. Generally overtake on the left. Passing on the right leads to conflicts with turning traffic. Bicycling in the gutter causes you to disappear from the traffic scene.



5. Intersection Positioning : Traffic divides by direction of travel.

- ❖ Approach intersections in the proper position. Right turners are next to the curb, left turners are near the center line, straight through drivers are between these positions.
- ❖ The rule of thirds ~ a bicyclist has 3 choices in a lane: right, center, left. Autos have only one.



"BICYCLISTS FAIR BEST WHEN THEY ACT AND ARE TREATED AS DRIVERS OF VEHICLES" (J.

FORESTER) There is one set of rules on the road. All drivers of vehicles are to follow the same set of rules so as to know what to expect from each other.

Bicycle Skills & Transportation Choices

Contents

Teacher Training

Lesson 1	Introduction
Lesson 2	Clothing and Equipment
Lesson 3	Bicycle Handling Skills
Lesson 4	Basic Traffic Skills
Lesson 5	Advanced Traffic Skills
Appendix A	Pretest
Appendix B	12 hazards Homework
Appendix C	A-B-C-Quick-Check
Appendix D	Bike Parts
Appendix E	Pedestrian Hazards (FHWA)
Appendix F	Bike Handling Skills
Appendix G	Basic Traffic Skills Course
Appendix H	Advanced Traffic Skills Course
Appendix I	Rule of Thirds Diagram

Teacher Training

Health and fitness teachers are finely suited to teach children the skills needed to be safe and confident transportation bicyclists and pedestrians. But as with so many Americans that have grown up in the car culture, most of these instructors have received no training in how to be competent bicyclists themselves.

It is highly recommended that each instructor take part in the League of American Bicyclists BikeEd Road I course that is available through League Certified Instructors. Without such a course, teachers will be likely to repeat many of the mistakes that other well-meaning people transfer to children. BikeEd Road I is a 10 hour class aimed at helping adults be safe, legal, and confident riders so that they can move about their communities by bike to work, to the store, or for recreation. As they experience their own successful bicycle riding, teachers will be more able to transfer their knowledge to students.

Schools need to have safe and reliable bicycles and helmets available for teachers so that they can concentrate on teaching the lessons. Poor equipment will take away from the energy required to organize and teach children. Lightweight road signs can be made from school materials and transported with the bikes and helmets. Parent volunteers help make the lessons more effective by monitoring students and giving instant feedback.

Resources:

Bicycle Alliance of Washington (bicyclealliance.org)

League of American Bicyclists (www.bikeleague.org)

Effective Cycling, John Forrester, ISBN 0-262-06159-7 1994 MIT Press

Safe Routes for Kids –Bicycle Safety Program Curriculum, Bicycle Transportation Alliance, Portland, OR (<http://www.bta4bikes.org>)

Spokane Public Schools, Bicycle Safety Middle School

Federal Highway Administration Safer Journey Pub no. FHWA-SA-03-014

Lesson I- Bicycle Skills & Transportation Choices

Introduction

Objective: Students will be introduced to the purpose of the bike unit and the connection to lifetime fitness activities.
Students will be exposed to safe riding (visibility and predictability)

Equipment: Video or DVD of “First Gear” plus A-V equipment, Washington State Bicycle Traffic Laws brochure, Pre-assessment, classroom, plus bike and helmet for demonstration.

Instructions:

- Show students bike and helmet.
- Talk about the connection to lifetime activity opportunity through biking or walking.
- Discuss impact on the environment of different travel modes.
- Tell that this course is drivers’ education for a bicyclist. Instruct students that they must discuss with their parents the routes they are allowed to use from home.
- Show video. Ask students to look for riding safety behaviors. After video ask students for the tips they picked up and write on overhead or whiteboard.

Discussion Threads:

- Know and follow the rules of road to get where you want to travel on your bike.
- Communicate with other road users
 - Demonstrate right and left hand signals in class
- Make eye contact with other drivers
 - Be sure they see you
 - Exit city bus and cross after the bus leaves, not in front of the bus as with school busses.
- Be predictable:
 - Ride on the right where others look for traffic.
 - Obey traffic signs
 - Ride in a straight line
 - Scan behind, wait until clear, signal to move over in lane
- Be visible:
 - Wear bright, light, retro-reflective clothing
 - Bikes use lights at night (it's the law)
 - Ride where people look for traffic (on the right, in the street)
 - Walks facing traffic if there is no sidewalk
- Learn to watch for the mistakes that drivers make which will endanger pedestrians and bicyclists, especially at intersections.
 - Turning right or left in front of bicyclists and pedestrians
 - Not allowing bicyclists to take their turn at 4 way STOP
 - Not signaling intentions
 - Car drivers don't always look for bicyclists; ride where they can see you, make eye contact with motorists when walking or bicycling.

Homework Assignment:

- Hand out homework assignment (Appendix A pre-test and Washington State Bicycle Laws brochure).
- Students are to do the pre-test at home with parental involvement and correct it using the information presented in the brochure (brochure stays with the student, pre-test is to be returned the next day).
- The returned pretest may be a requirement for riding the on-bike lessons (student accountability).

Variations: Recommended Middle School videos: “Bike Safe Bike Smart” (9 minutes), AAA-Biking, “Get the Big Picture” (9 minutes).

Recommended high school videos “Pedal Smarts” (18 minutes)

Assessment ideas:

Pre- test may be used as an accountability piece to enable students to actually ride the bikes. It is also a way to involve families with the information to be covered. If the paper is not returned, the student will still go through helmet and bicycle fitting, daily bicycle check, but will forgo actual riding.

Informal discussion/feedback/assessment may be used to debrief at the end of classroom sessions.

Lesson 2 – Bicycle Skills & Transportation Choices

Clothing and Equipment The Rider and the Bike Hazards

Objectives:

- Students will show clothing for bicycling and walking
- Students will be able to properly fit a helmet and bike
- Students will be able to demonstrate a bicycle safety check
- Introduction to Hazards

Equipment: Helmets, bicycles, and helmet tissue or surgical caps

Instructions: Students sit in a group.

- Bright clothing is part of being VISIBLE in the traffic scene. The bicyclist or walker should wear light, bright clothing in the daytime, and reflective clothing at night. Have 5-6 students with differing colors of shirts run to the far end of the gym. Ask students to rate which color is the most visible. Ask if anyone has ever caught their shoestring or pant leg in the chain of their bike. Have students demonstrating tying and tucking shoelaces and rolling up right pant leg.
- Helmets and bikes are organized by number (1-40), relating to seat post height and helmet size
 - A helmet is an essential piece of safety equipment, just as a seat belt in a car. Demonstrate helmet fitting and positioning over forehead. Show using tissue to shield from head lice.
- A safe bike is part of traffic safety. Demonstrate the A-B-C-Quick Check as taught in adult BikeED Road I
 - ✓ A = air pressure
 - ✓ B = brake pads and levers
 - ✓ C = chain lubes and crank tight
 - ✓ Quick = proper closing of quick release lever
 - ✓ Check = Pick up bike 4" and drop, listening for loose parts and rattles. Check items such as reflector, rack, lights.
- After demonstration, hand out a tissue to students for inside of helmet. Students work in pairs to check helmet fit. A teacher helmet check should be made to ensure all students have helmets on properly. Students must remember their helmet number for future lessons.
- Line students up by height, as bikes are arranged #1-40 by seat post height. Teacher shows stand-over frame sizing. Ask students not to change the seat height on their own, as seat post safety line needs to be adhered to.
- Students are assigned bikes and must remember the number for future lessons. Demonstrate bike safety check to a partner. Students place helmets back in order by number.

Homework:

- Circle 12 Hazards, Appendix B. Make a copy for each student.

Materials: (overhead transparencies):

- Appendix B, 12 Hazards
- Appendix C, A-B-C-Quick-Check
- Appendix D, Bike Parts

Assessment ideas:

Informal assessment can be used to see if students remember points of proper fit of helmet and bike before concluding the class period. Monitor student pairs as they show each other the A-B-C-Quick-Check.

Lesson 3 – Bicycle Skills & Transportation Choices

Bicycle Handling Practice

Objectives:

Students will demonstrate predictable straight line riding, whistle stop with control, scanning for traffic behind, and right and left hand signals. Bikes will be kept under control, and bunny hopping, skidding are not allowed. Using your bicycle for transportation will be practiced. Tricks and jumps should be done out of the way of traffic.

Equipment:

Bikes, helmets, cones, and marked area for skill practice. An adult volunteer to monitor scanning exercise.

- **Instructions:** Gather students in a group. Show a drawing of outside skill courses (Appendix F) and tell expected behaviors.
- Students get their helmet and bike. Students tie and tuck, check helmet fit and demonstrate A-B-C-Quick-Check as teacher monitors
- Walk outside. Park bikes and step away from them to watch demonstration. With 2-4 students, teach control and handling skills:
 - **WHISTLE STOP:** Put foot brakes in parallel to ground position. Shift weight back to prevent skidding, apply brake. If skidding, let up on brakes lightly and reapply. (Whistle Stop is for class control, and is an important safety maneuver.) Use front brake lever cautiously, as pitch over can occur if applied too forcefully.
 - **STRAIGHT LINE RIDING:** Ride in a straight line 1-2 bike lengths apart. Riding in a straight line is essential when riding on the street so others can predict your movements. Whistle Stop practice several times. Reinforce no-skid rule for control.
 - **SCANNING:** Demonstrate (by teacher or skilled student) scanning over left shoulder as when looking for traffic behind. Call out “Look” and student passes, hold up varying number of fingers, students count and yell back number they see with scan. Do not swerve out of course lines. Use two cones where students scan at each.
 - **RIDING OVER BUMPS:** Practice crossing railroad tracks and speed bumps at a 90° angle. Unweight saddle and let bent knees act as springs to absorb shock.
- As time allows practice additional skills as demonstrated in teacher training course:

- * Hand signals, one hand riding
- * Rock Dodge
- * Quick Stop
- * Instant Turn
- * Snail Race
- * "You Go First"
- * Squeeze box
- * Small circle riding
- * Figure 8 riding
- * Slalom
- Walk bikes back and place bike and helmet in numbered order.

Resources: Diagram of Skill course (Appendix F)

Assessment ideas: Visual assessment and verbal feedback to students.

Lesson 4 – Bicycle Skills & Transportation Choices

Beginning Traffic Skills Practice

Objectives:

Students will show their ability to ride predictably by straight line riding, scanning for traffic, turning right and left using proper signals, exiting a driveway or alley, and crossing safely as a pedestrian on a street at school. Instruct students that riding lawfully on the street allows them to get where they want to go in the safest way. Remind students that they should only ride their bikes where their parents allow them to.

Equipment:

- Transparency of Appendix G
- Bikes, helmets
- Outside marked area for skill practice (Appendix G),
- 2 STOP signs and 6 or more cones
- 3 “Students on Bikes” signs and sawhorse or hurdle to hold signs.
- Two to four adult volunteers are needed to monitor STOP signs and driveway.

Instructions:

- Inform students regarding objectives for the day and show course diagram. Follow the same format from day 3 for tie and tuck, helmets, bikes, A-B-C-Quick-Check and getting to practice area. Park bikes and step away from them to watch demonstration.
- On “L” course as in Appendix G, demonstrate STOP, right and left turns, passing parked cars, and crossing as a pedestrian:
- Show scanning before passing parked car with 3’ clearance for opening doors. Right hand turn using straight line riding, scanning all ways, and right hand turn signal.
- Show complete STOP using one foot on the ground. Turn head right, left, right, behind on the right, and look forward for left turning traffic. Explain that looking all ways is also important for pedestrians.
- Complete STOP is need at stop signs, red signals, driveways, and alleys. If a parked car is blocking the view, stop, then creep out to look again.
- Demonstrate left hand turn using the skills of scanning, arm signal, lane position change, stop with one foot down, yielding to oncoming traffic, and movement through intersection to complete the turn.
- Students practice right and left hand turns as demonstrated
- Show pedestrian style left turn for very busy intersection areas.
- Explain that looking all ways is also important for pedestrians as well as bicyclists. Turn head right, left, right, behind on the right, and look forward for left turning traffic. Discuss exiting a city bus: wait until the bus leaves the curb, walk to the corner and cross after the bus leaves. City buses do not have stop

signs and guards for crossing in front of the bus as school busses do.

- Demonstrate the course loop. Send 6 students out to ride the course. When they are performing correctly, send the remainder of the class out to cooperate using the traffic scene.
- As time allows, practice additional handling skills as listed in Lesson 3
- Students walk bikes into the gym to put bikes and helmets away as in Lesson 3.

Assessment ideas: Visual assessment and verbal feedback to and from students.

Resources: Appendix G, Pedestrian hazards FHWA

Lesson 5 – Bicycle Skills & Transportation Choices

Advanced Traffic Skills

Objectives: Students will demonstrate intersection skills, and practice ‘First Come, first served’ rule with 3 or 4 way STOP signs. Students will practice yielding at traffic lights and show understanding of Rule of Thirds for intersection positioning. They will demonstrate cooperative use of the roadway and safe bike handling skills.

Equipment:

- Transparency of Appendix H and Appendix I showing intersection with Rule of Thirds
- Bikes, helmets 3-4 STOP signs
- Traffic light box
- “T” or “+” outside marked riding course (Appendix H)
- 4 adult volunteers stationed at STOP signs, driveway

Instructions:

- Inform students regarding objectives for the day.
 - Show course diagrams.
 - First come, first served rule is used for 3 or 4 way STOP.
 - Rule of thirds is used for intersection positioning to show destination.
 - With traffic light, left turning traffic must yield even when light is green.
 - Review stopping at driveway, and scanning all ways.
- Follow the same format from day 3 for tie and tuck, helmets, bikes, and A-B-C-Quick-Check and walking outside. Park bikes and step away from them.
- Teacher or skilled student leads and 5 students follow the leader on a prescribed course similar to Appendix H to demonstrate traffic skills. Other students join in. Students will chose their own path today to interact on advanced traffic course.
- Culminate with groups skills & activities as listed in Lesson 3.
- Students walk bikes into gym to put bikes and helmets away in number order.
- Debrief class with short discussion on the advanced traffic experience. Have students assess the success of riding cooperatively.

Assessment ideas:

- Final written test may be administered at the beginning of the next class day. Pretest may be used also as a posttest.
- Show review film and discuss new skills.
- Challenge students to work in groups to create a safe bicycling, walking, or transit poster based on concepts learned. Post results.

Bicycle Skills & Transportation Choices

~ notes ~

Bicycle Skills and Transportation Choices Pre-Test

1. Yes / No Traffic laws are made for bicyclists as well as for cars.
2. Yes / No Bicyclists should ride on the right side of the street as cars do.
3. Yes / No Riding at night without a white headlight and red rear reflector is unsafe.
4. Yes / No It is safe for 2 people to ride on a bike if one is on the handlebars or pegs.
5. Yes / No A bike in poor condition is safe if the driver is skilled.
6. Yes / No Listening to music on headphones is a good way to relax while riding a bike.
7. Yes / No Coming out from a driveway into a street without stopping for traffic is a leading cause of bicycling deaths among children.
8. Yes / No Bike riders should obey all traffic signs and signals.
9. Yes / No Turning traffic is a danger to bicyclists, but not to pedestrians because walkers have the right of way.
10. Yes / No Blue is a good color to wear when bicycling after dark.
11. Yes / No Scanning for traffic means looking around for cars, bikes, and people crossing the street.
12. Yes / No Bike riders use hand signals to tell others when they are turning.
13. Yes / No It's okay to ride a bike that's too big for me now so I can grow into it later.
14. Yes / No When getting off a city bus, you walk in front of it to cross the street just like a school bus.



Be Visible - Wear light, bright colors - Ride where others expect to see traffic.

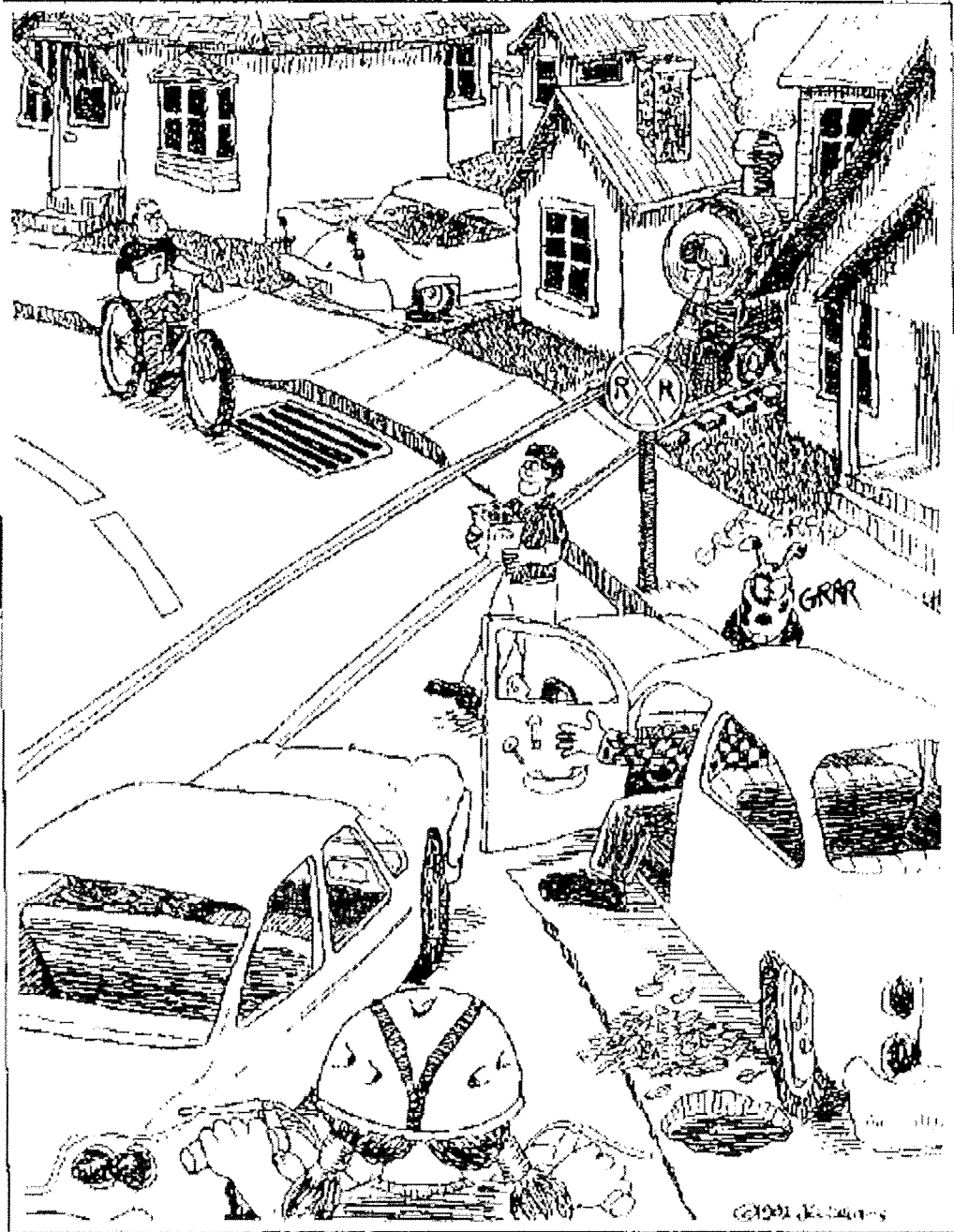
Be Predictable - Obey the same traffic rules as cars use.



Appendix B – Bicycle Skills and Transportation Choices
Lesson 2 Homework – Bicycling Hazards

Name _____ Class _____

Find the Twelve Hazards



Pretend you're the cyclist at the bottom of this picture.
Can you see the 12 hazards that could cause an accident?

Appendix B – Bicycle and Transportation Choices
Lesson 2 Homework – Bicycling Hazards

Answers to Find the 12 Hazards Activity Sheet

1. Leaves in street – don't know what's under them.
2. Pothole and cracks in street
3. Open car door
4. Pedestrian crossing street
5. Railroad tracks (angle of tracks)
6. Train approaching
7. Drain grate - in line with bicycle tires
8. Cyclist approaching on wrong side of the street
9. Car backing out of drive way
10. Wrong way riding bicyclist is carrying books - presents danger others because of potential loss of control.
11. Car passing bicyclist is encroaching bicyclist's space
12. Growling dog on the loose – if you can't outrun him, jmp off your bike and place the bike between you and the dog, and keep walking away.

A-B-C-Quick-Check ~ Bike Safety Check

A = air To check if your tires need air, use a gauge, or push down on your handlebars to see if the tires are soft. Low tire pressure leads to flats and poor performance.

B = brakes To check brakes, look for the foot brake bracket. It should not move. If you have hand brakes, squeeze levers - they should not bottom out. Look to see if pads are hitting the rims.

C = chain, crank Chain should be lubed, then wiped clean with a rag. Look for rust, and stiff spots. Crank should not rattle back and forth.

Quick = Know how a quick release lever works. Be sure it is closed..

Check = Check for loose parts, pick up your bikes 4" and drop it. Listen for rattles. Do this every time you ride, and you can tell if there is something coming loose.

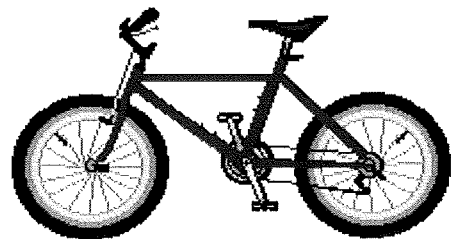
Check that reflectors, seat, handlebars are tight.

Check shoelaces, pant legs and straps. Tuck them away from the moving parts of your bike.

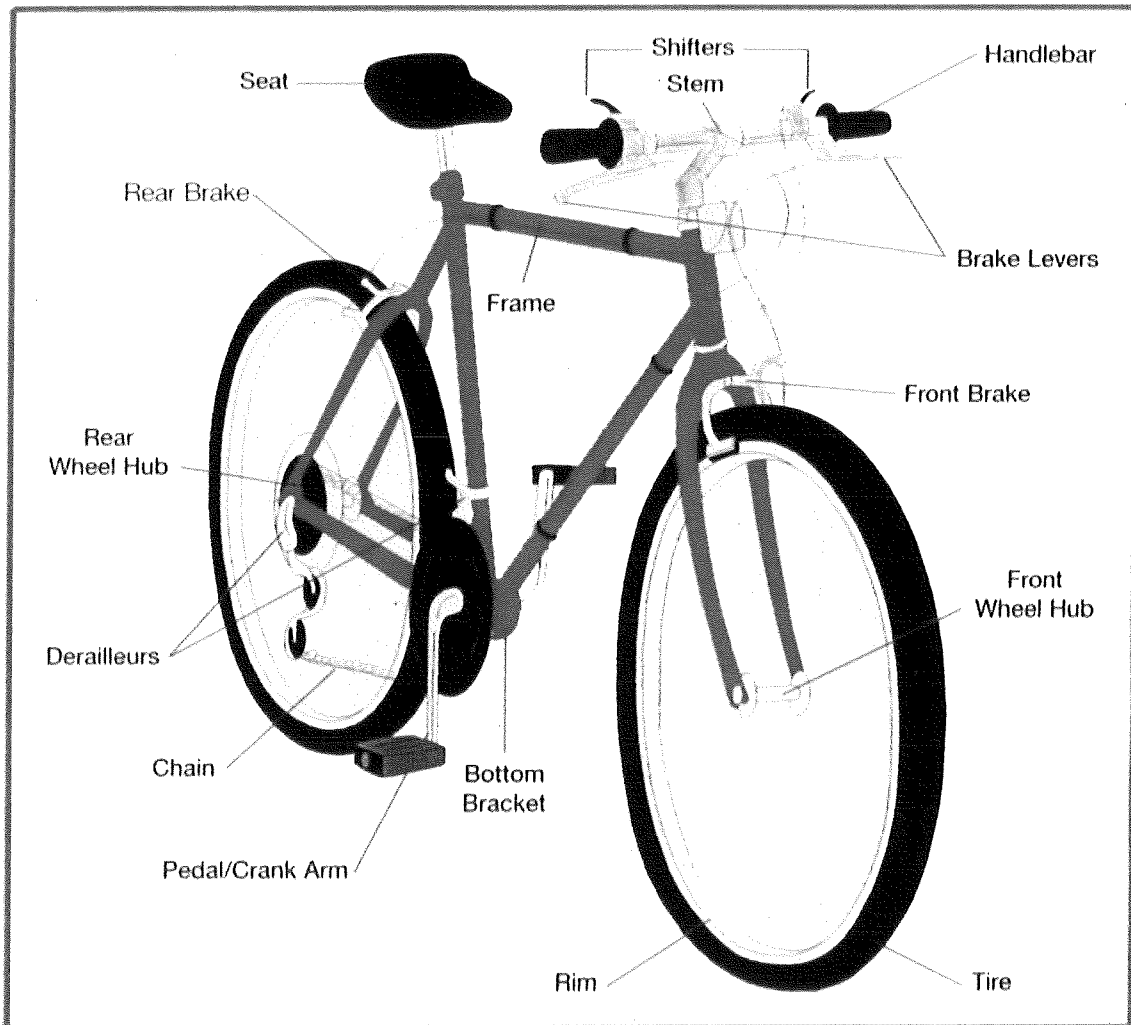
Have your bike tuned up each year.

Check to see if your bike is the right size for you. Can you stand over the frame with 1-4" of clearance?

Check your helmet for size and comfort - and that it covers your forehead.



Appendix D
Bicycle Parts Diagram
Bicycle Skills and Transportation Choices



Appendix E

Pedestrian Hazards - Walkers and Transit Users

1. Obstructions on sidewalks such as shrubs, trash cans, poles, mailboxes, etc can make visibility poor for pedestrians and motorists and bicyclists to see each other.
2. Obstacles limit the ability of pedestrians and drivers to see each other.
3. To improve the driver's ability to see you after dark, wear retro reflective materials on your clothing, wrists, or ankles. Limited visibility after dark makes it harder for drivers to see pedestrians.
4. The flashing Don't Walk signal means that you should not START to cross the roadway. If you are already partway across the street finish crossing quickly.
5. When crossing two lanes, don't assume the car in the second lane will see you and stop for you. ALWAYS wait for traffic to stop before you begin to cross the street, and ALWAYS keep an eye out for moving traffic.
6. Shared used paths should be treated as two lane roads. Walk to the extreme right. Bicyclists should pass you on your left.
7. When there is no sidewalk, always walk on the roadway facing traffic. That way you can see vehicles coming toward you.
8. It is unsafe and illegal to walk along or to cross a freeway, expressway, or interstate highway. High traffic speed leads to more fatalities than crashes on lower speed roads.
9. Crossing in front of a city bus is not allowed. When departing a city bus, walk to a crosswalk or wait at the curb until the bus pulls away. Look all ways, and if all traffic is stopped, proceed cautiously. Always watch for turning vehicles. (Crossing the street from a school bus is different. School buses have flashing lights and a STOP sign to warn other drivers to wait so children can cross in front of a school bus.)
10. Pedestrian push button signals don't change immediately when the button is pressed. Pedestrians should only start crossing when the WALK signal is showing.

Source: Federal Highway Administration, Safer Journey Publication No. FHWA SA-03-014

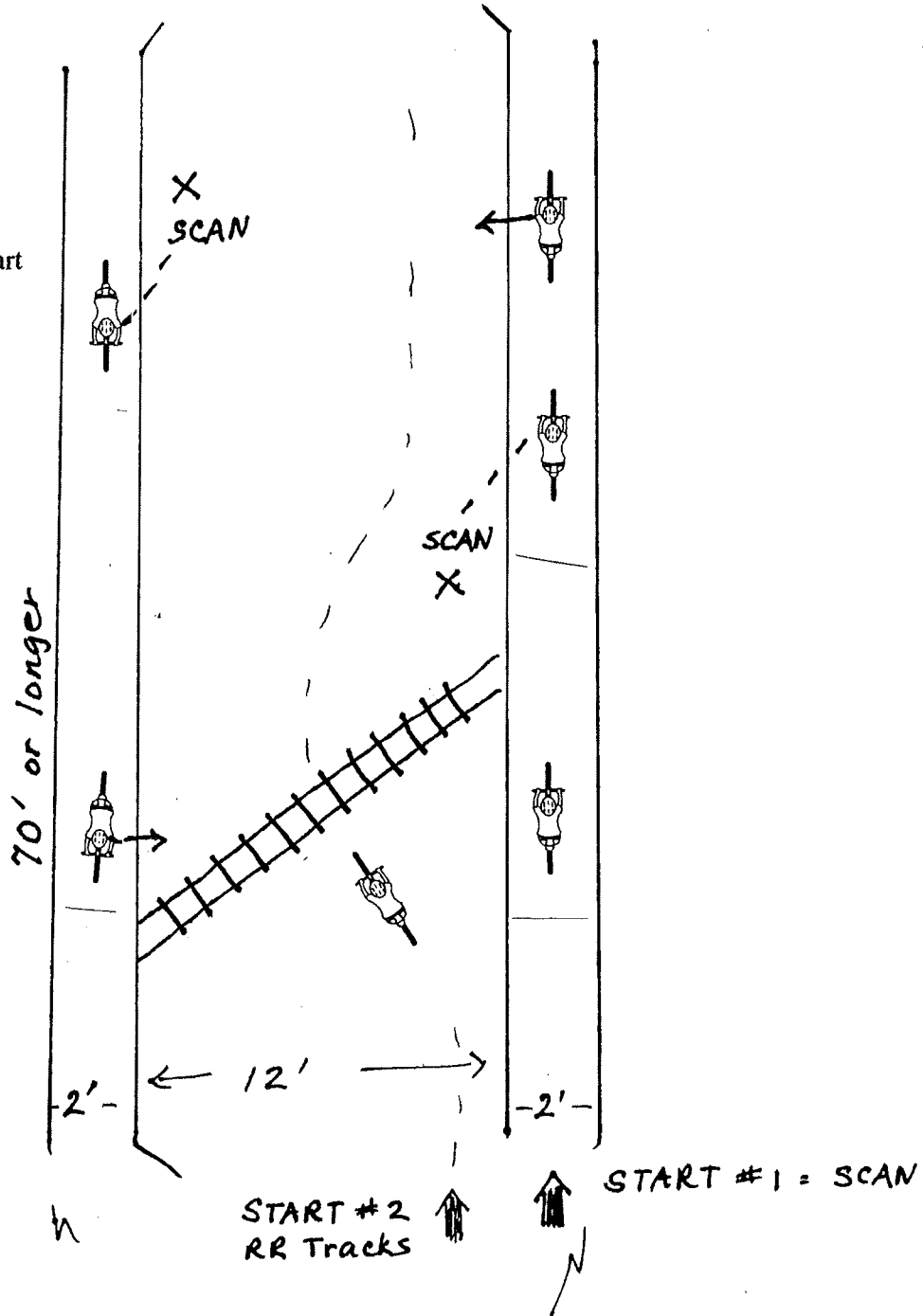
Bicycle Skills and Transportation Choices

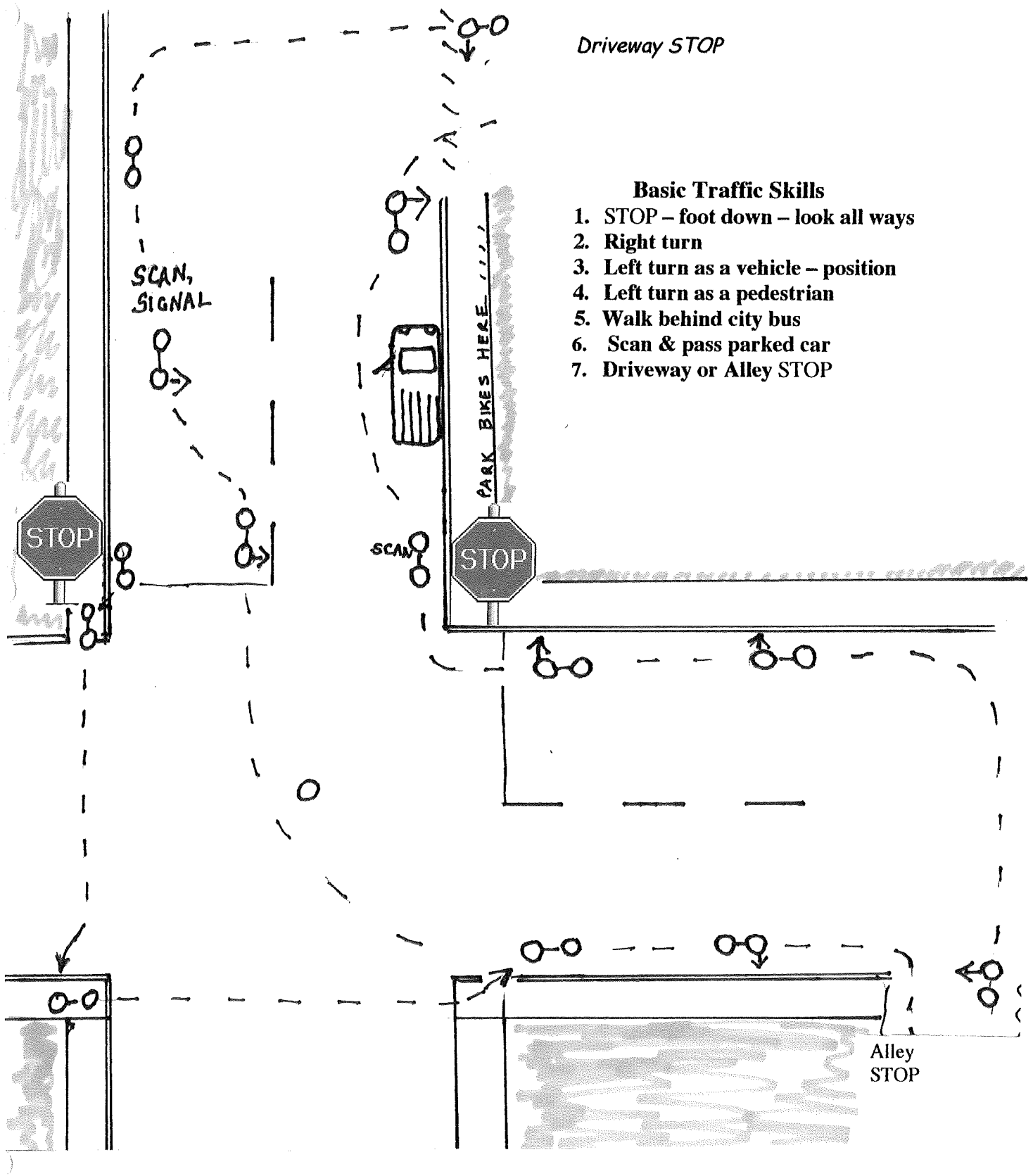
Appendix F

Bicycle Handling Skills

Paint this course on a playground or side street. Alternately, existing lines on a running track may be used.

1. Whistle Stop
Weight back
No skidding
Listen
2. Straight line riding
1-2 bike lengths apart
3. One hand riding
4. Left signal
5. Scan
6. RR X-ing @ 90°
Or speed bump





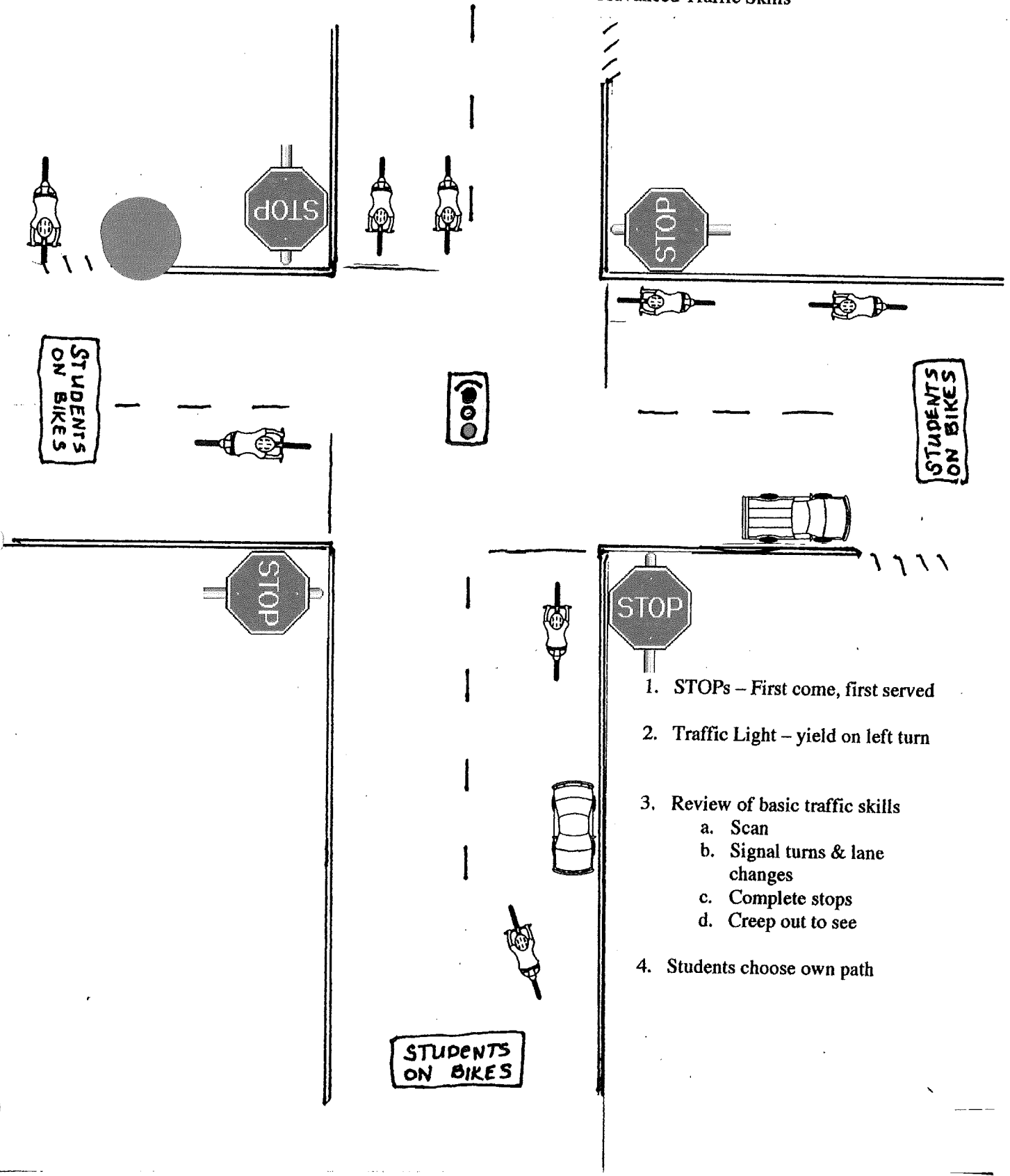
Basic Traffic Skills

1. STOP – foot down – look all ways
2. Right turn
3. Left turn as a vehicle – position
4. Left turn as a pedestrian
5. Walk behind city bus
6. Scan & pass parked car
7. Driveway or Alley STOP

Bicycle Skills and Transportation Choices

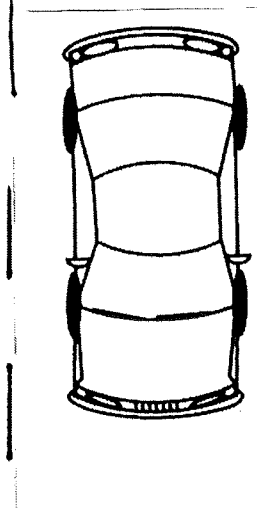
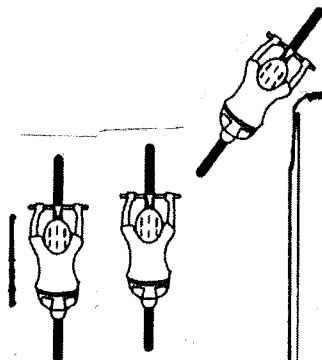
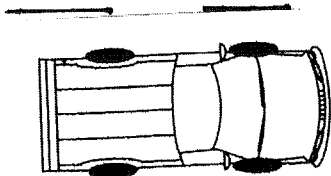
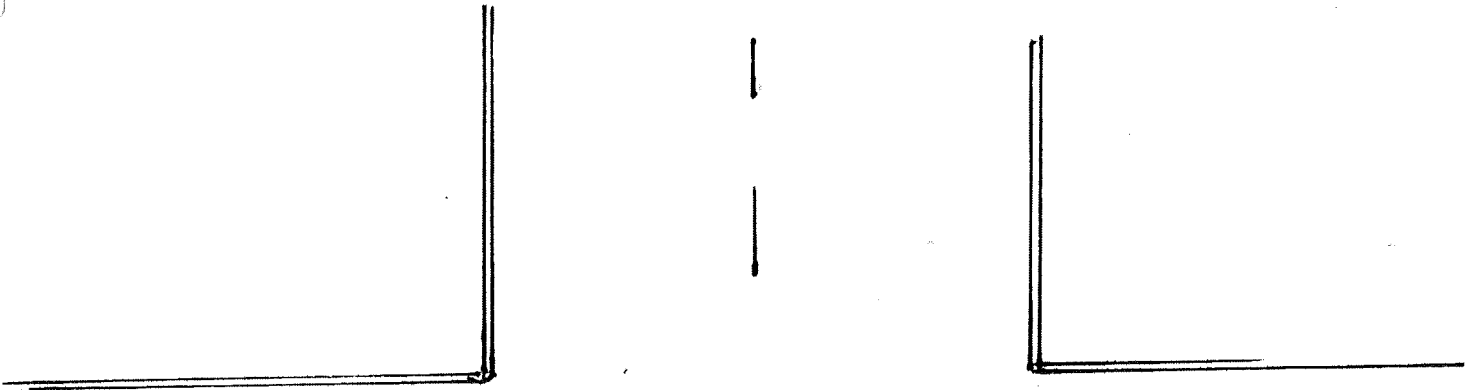
Appendix H

Lesson 5 Advanced Traffic Skills



1. STOPs – First come, first served
2. Traffic Light – yield on left turn
3. Review of basic traffic skills
 - a. Scan
 - b. Signal turns & lane changes
 - c. Complete stops
 - d. Creep out to see
4. Students choose own path

Rule of Thirds



Speed Positioning:

Bicycles travel
on the right
because they are
slower

Destination Positioning:

Near intersections,
Traffic divides
by destination

Cars have one choice
in a lane while
Bicyclists have
3 choices

⚡ **Behavior leading to the cause of the crash:**

The bicyclist is unaware of the high risk of bicycling at night and does not understand the problem of a motorist observing a bicyclist at night.

⚡ **What to teach**

- Don't ride at night
- Tape a quarter to your bicycle so you can phone home for a ride just in case you get caught after dark



5. Wear a helmet

Most serious bicycle related injuries involve head injury.

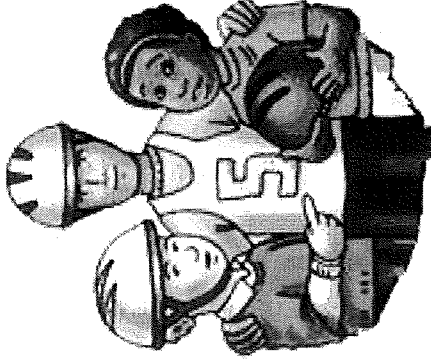
⚡ **Behavior leading to the cause of the crash:**

Not all serious bicycle crashes involve a motorist. They can happen in driveways, streets, parking lots, fields, just about anywhere. Cyclists not wearing a helmet are taking an unnecessary risk.

⚡ **What to teach**

- Wear a helmet
- How to choose a helmet
(Information Bulletin #1)

Five Bicycle Safety Concepts to Teach 9-12 Year Olds



An effective bicycle education program will include classroom instruction and a practical on-the-bike skills component for the participants. Younger children should be focusing on basic bicycle handling skills and simple traffic concepts. The older (9-12 year old) bicyclists are ready for more advanced handling skills and concepts. The concepts essential for a bicyclist to understand, the behavior leading to the cause of the accident, and what to teach are summarized.



Funded by a grant from the NYS Governor's Traffic Safety Committee.

For more information about bicycle safety education materials, contact your local Cornell Cooperative Extension office or the 4-H Program, Biological and Environmental Engineering Department, 326 Riley Robb Hall, Cornell University, Ithaca NY 14853-5701. Web: www.bike.cornell.edu.

1. Stop and look before entering a road or a street



Bicyclists too often ride into a street from a driveway without looking first. They weave in and out of sidewalks, parking lots and streets. These behaviors result in 15% of all victims involved in bicycle/motor vehicle crashes. Seventy-five percent of the victims are 8-14 years old.

Bicyclists too often ride through stop signs. Riding through a stop sign leads to 10% of all bicycle/motor vehicle collisions. Seventy-five percent of the victims are 14 years old and older.

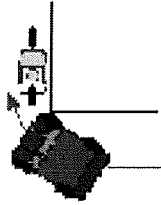
57
✚ **Behavior leading to the cause of the crash:**

The bicyclist is accustomed to very little traffic on low volume streets and has not developed the "automatic look before entering" behavior. The bicyclist often misjudges the speed and stopping distance of automobiles and often believes all motorists will avoid a collision with a bicyclist. Bicyclists know the traffic laws but they choose to ignore them.

✚ **What to teach**

- Stop, look and listen before entering a roadway
- Ride in a straight line on the right side of the roadway
- Don't weave in and out of traffic
- Be predictable. Don't do unexpected things
- Obey the traffic laws

2. Ride with traffic on the right side of the street.



The motorist, while looking to the left to make a right hand turn, collides with the cyclist approaching from the motorist's right on the wrong side of the street.

✚ **Behavior leading to the cause of the crash:**

The fear of being hit by autos approaching from the rear causes bicyclists to wrongly ride facing traffic.

✚ **What to teach**

- Ride on the right side of the roadway

3. Ride in a straight line and look before turning or changing direction

The bicyclist all too often makes a sudden left turn into the path of an oncoming automobile. This represents 8% of all bicyclist/motor vehicle accidents. Most victims are 8-14 years old.

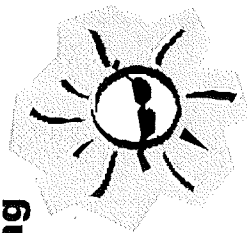
✚ **Behavior leading to the cause of the crash:**

The bicyclist is distracted or doesn't think to scan for traffic before changing direction. This situation may occur as a bicyclist avoids a hazard in the roadway.

✚ **What to teach**

- Ride in a straight line
- Search for hazards
- Scan before changing lanes

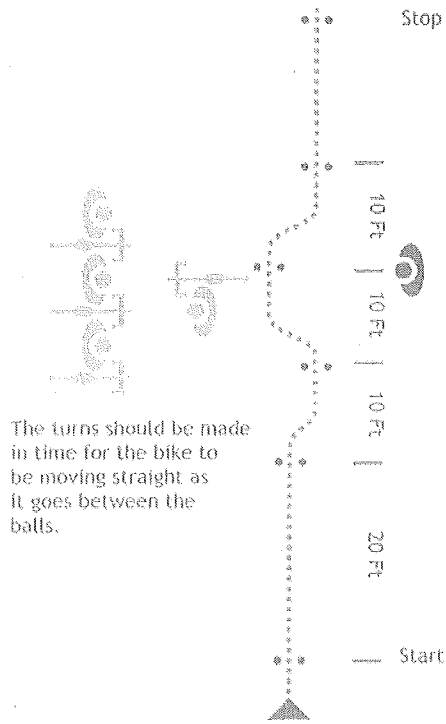
4. Ride only during daylight hours



The bicyclist riding on a rural roadway during dusk or nighttime is hit by an automobile approaching from the rear. This accounts for only 7% of all bicycle/motor vehicle accidents, but accounts for 30% of all fatalities.

Avoidance Maneuvers

CONTROL

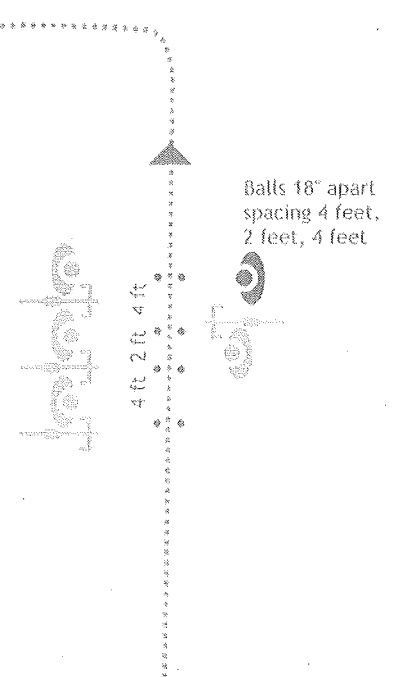


QUICK STOP

At least three passes, one with back brake, one with both brakes and one with both brakes and move weight back.

Instruct riders to begin braking at first pair of balls the first two times through. Then have them stop when you whistle.

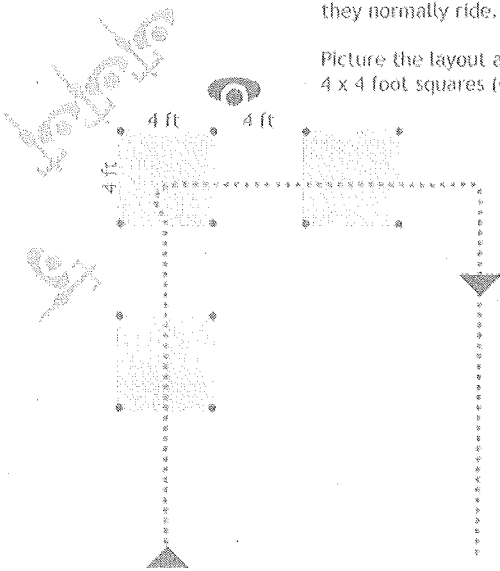
Have riders come to a complete stop with one foot on the ground



Once the right side instant turn has been practiced, the left side can be practiced by entering from the other end.

This drill should be done without braking. Have the riders put their hands on the handlebars where they normally ride.

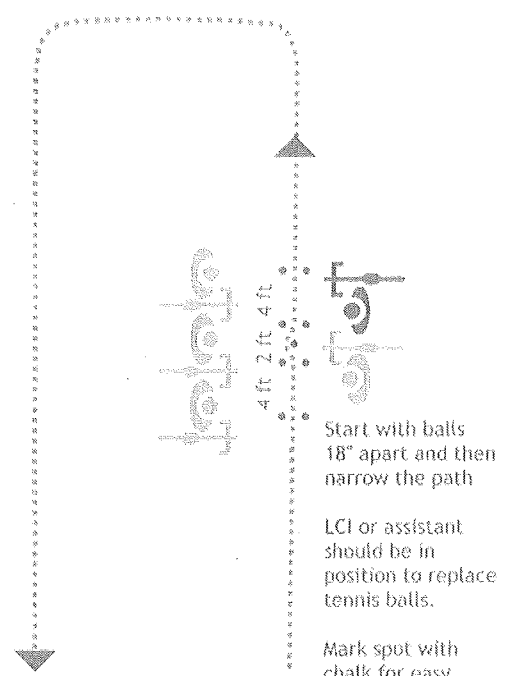
Picture the layout as three 4 x 4 foot squares (grey shapes)



Insure the riders have the inside pedal up in the turn. If the riders are having trouble, have them practice "swooping" turns in the parking lot.

INSTANT TURN

Try to maneuver so a cyclist riding along side would not be bumped.



ROCK DODGE

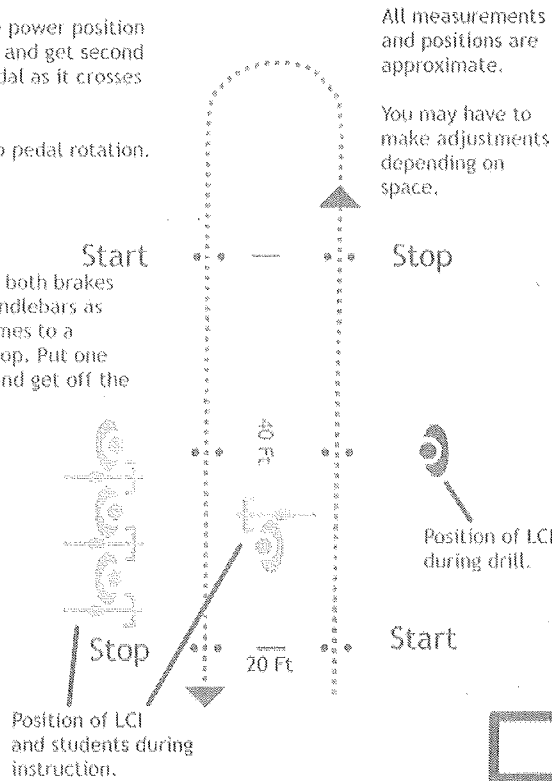
Handling Skills

STARTING/STOPPING

Foot in the power position push down and get second foot on pedal as it crosses the top.

Do not stop pedal rotation.

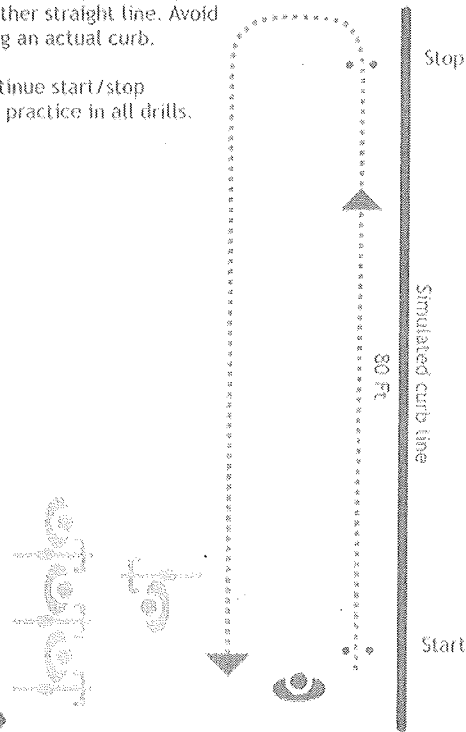
On stop use both brakes and turn handlebars as the bike comes to a complete stop. Put one foot down and get off the saddle.



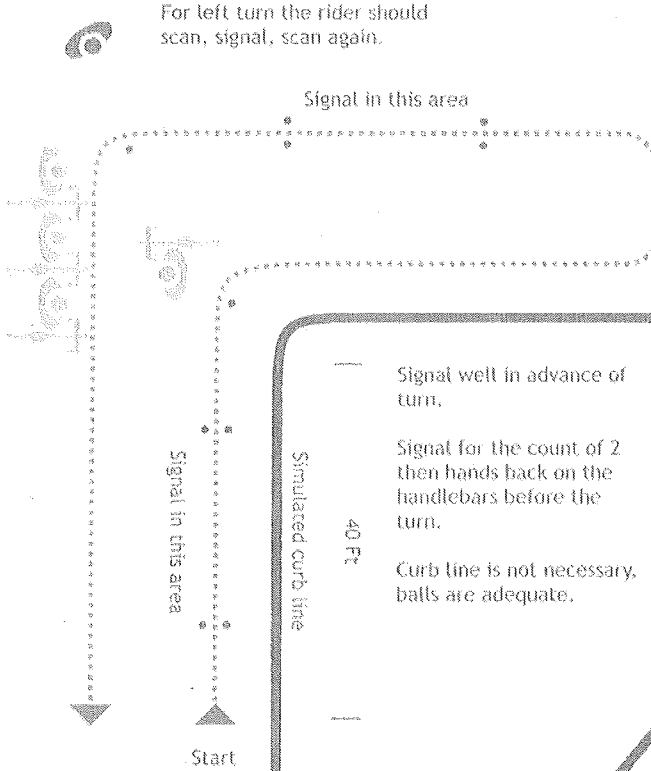
STRAIGHT LINE

Curb line may be a stripe or other straight line. Avoid using an actual curb.

Continue start/stop skill practice in all drills.



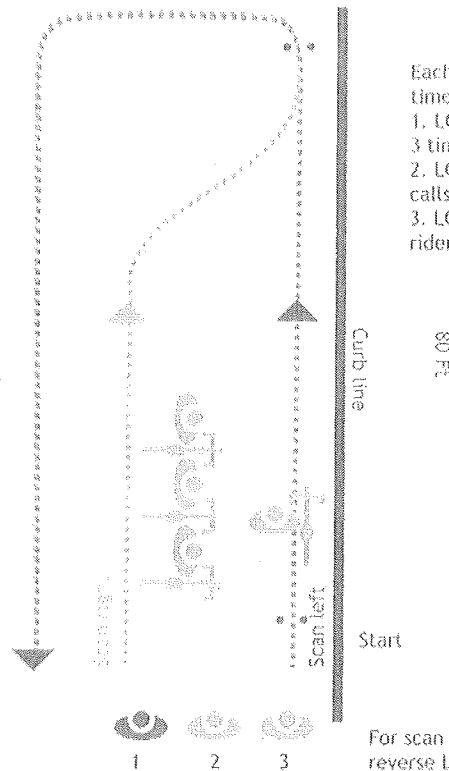
For left turn the rider should scan, signal, scan again.



SIGNALING

Each rider goes 3 times

1. LCI calls "scan" 3 times.
2. LCI steps to "2" calls "scan" 3 times
3. LCI steps to "3" rider scans at will



SCAN DRILL

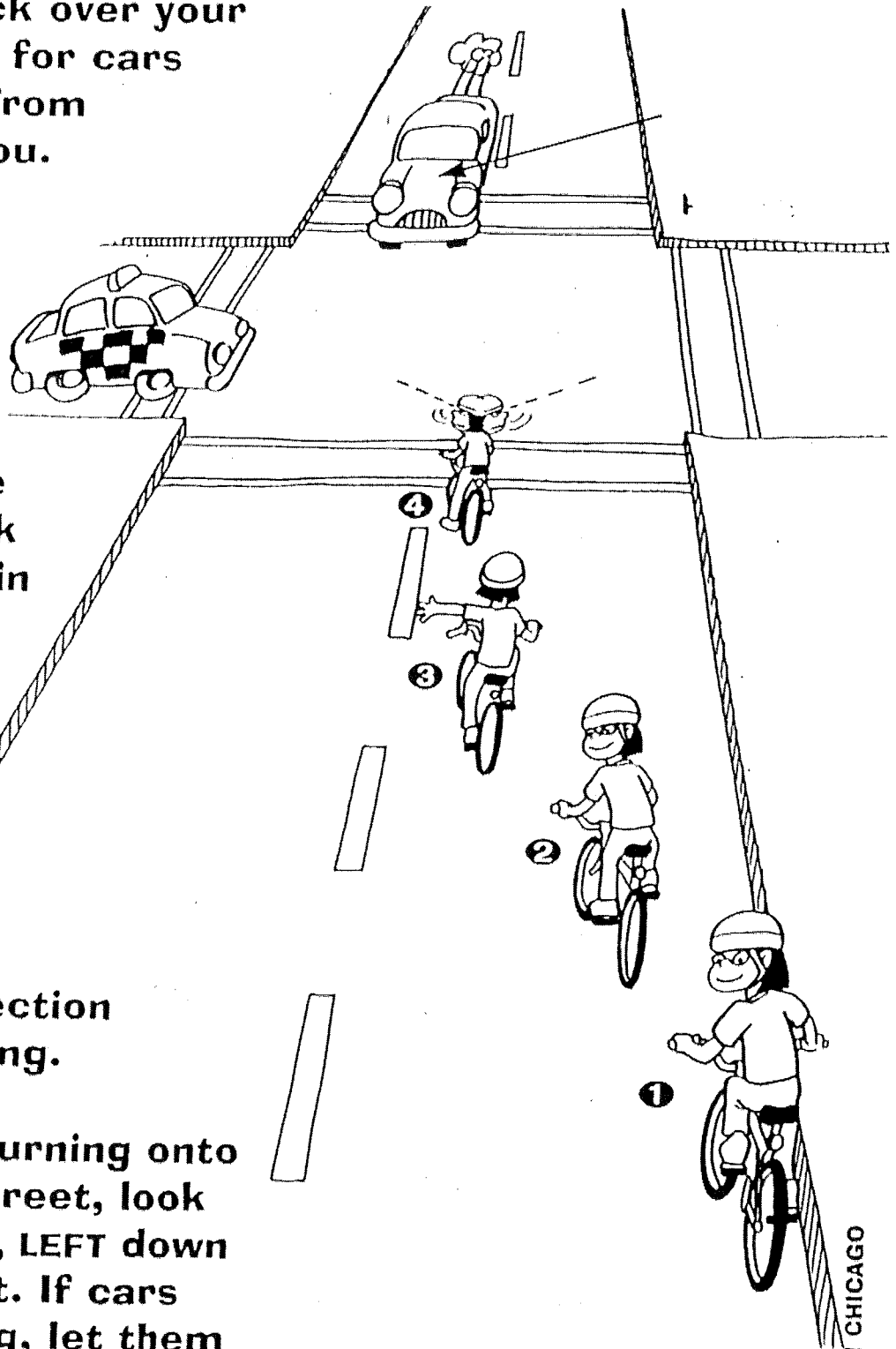
MOVING OR TURNING LEFT LIKE A CAR

① Look back over your shoulder for cars coming from behind you.

② When no cars are coming, move to the middle of the lane. Look back again for cars.

③ If you're turning, point your arm in the direction you're going.

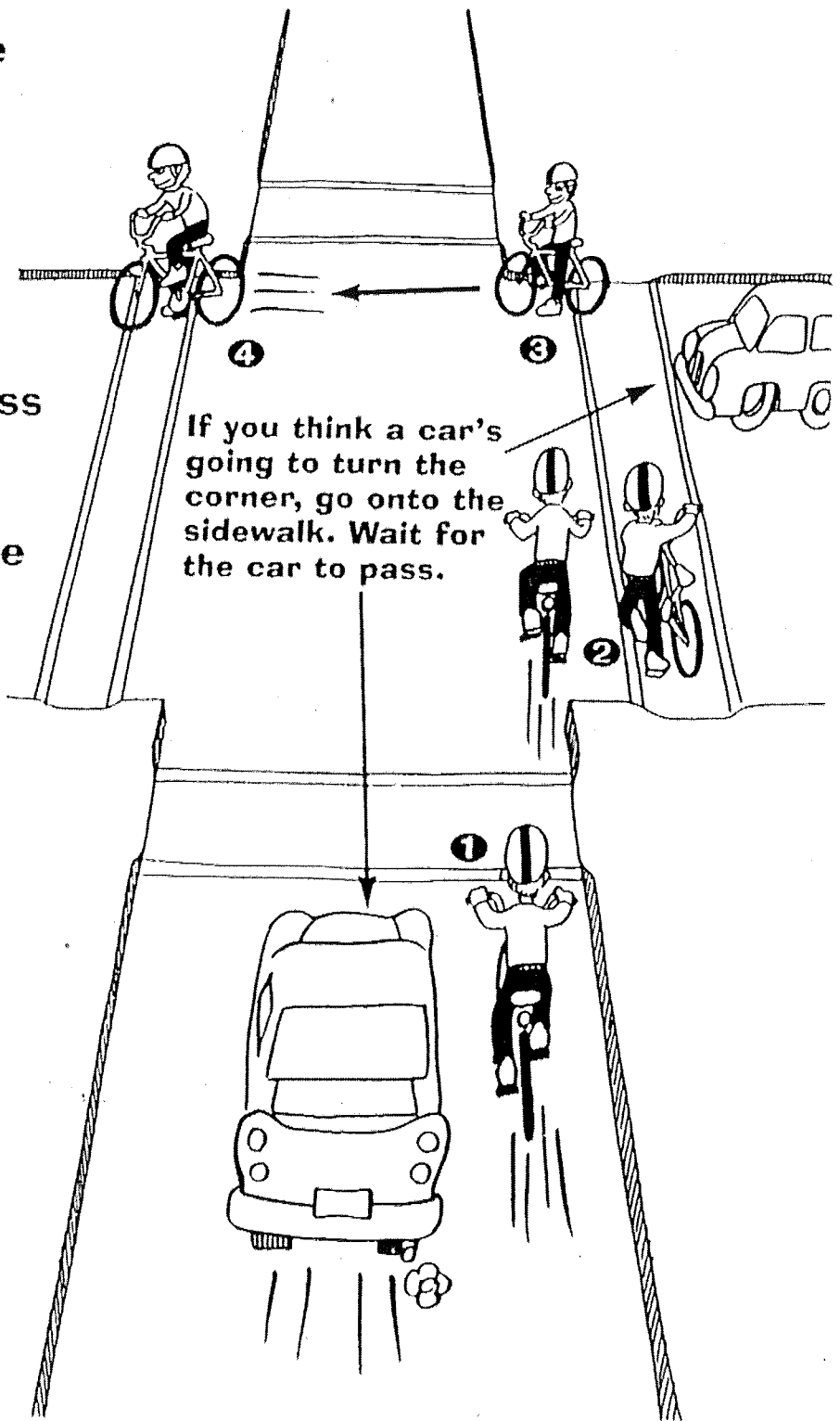
④ If you're turning onto another street, look LEFT, RIGHT, LEFT down that street. If cars are coming, let them pass. Then turn.



IN CHICAGO

AN EASY WAY TO TURN LEFT

- 1 Look LEFT, RIGHT, LEFT for cars. Stop if any are coming.
- 2 Walk in the crosswalk, or ride your bike next to the crosswalk. Cross the street.
- 3 Stop just before you reach the curb. Stand in front of the crosswalk, facing the way you want to go. (If you got off your bike, get back on.)
- 4 When there are no cars coming, ride on. (If there's a traffic light, wait until it's turned green.)



Elementary Pre-Test

Name _____

Student Survey

WHAT DO YOU KNOW ABOUT BICYCLING?

1. I should ride my bike facing traffic so I can see what's coming.
2. All bicycle riders must stop at all stop signs and red lights just like car drivers do.
3. I have to stop my bike when I hear a siren coming from an ambulance, police car, or fire truck.
4. I don't need lights on my bike to ride at night because I already have reflectors.
5. Bicycle riders can safely carry packages in one hand because they can steer with the other.
6. Bicycle riders must give hand signals before making turns.
7. On my bike I only have to look for cars straight ahead when crossing a road or riding out of a driveway.
8. It's ok for two people to ride on a bike if one sits on the seat and the other sits on the handlebars.
9. I don't need to wear a bike helmet because I never ride my bike around cars.
10. It's okay to ride a bike that's a little too big for me now so that I can grow into it next year.

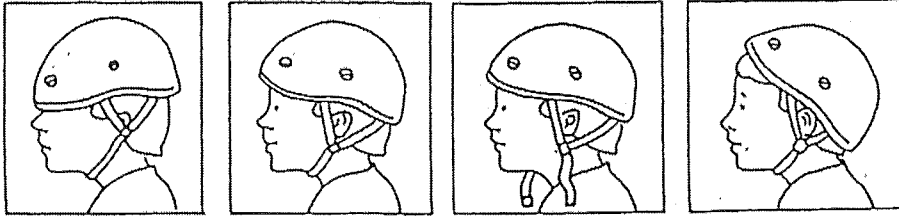
<i>True</i>	<i>False</i>

Name _____

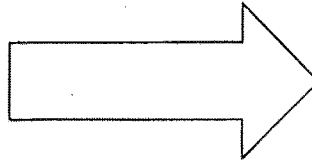
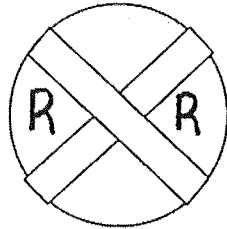
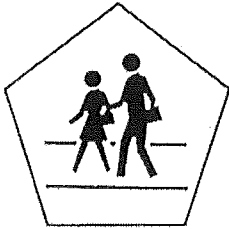
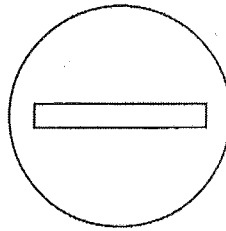
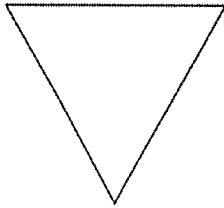
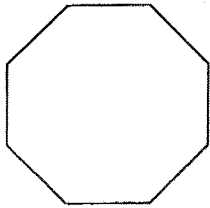
Bicycle Safety Quiz (10 points)

Room # _____

Circle the helmet that fits correctly.



Write the correct name on the signs below.



RAILROAD CROSSING

YIELD

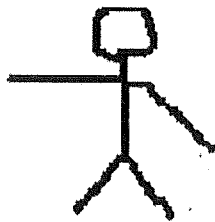
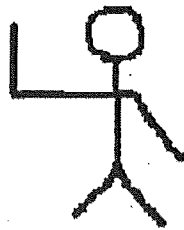
ONE WAY

STOP

DO NOT ENTER

SCHOOL CROSSING

Label the following hand signals:



Name _____

Bicycle Safety Final Test (15 points)

RM# _____

A good way to remember what to inspect on your bike is to do the ABCD bike check. What does each letter stand for?

A means _____ C means _____

B means _____ D means _____

Why is it important to have good air pressure in your tires? Give 2 reasons.

1. _____

2. _____

True/False

_____ A helmet must be worn on the head with a space of no more than two fingers between the eyebrow and helmet.

_____ When fitting a helmet, the keepers (side buckles) should be under the earlobes to fit properly.

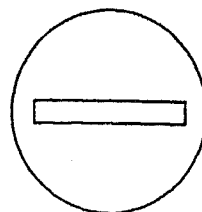
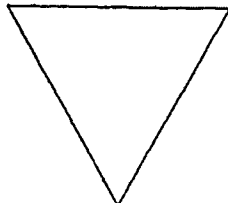
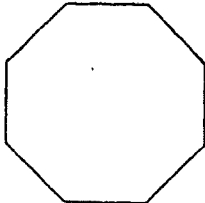
_____ When you come to a stop sign and you don't see any cars, it is OK to keep going without stopping.

_____ You should ride on the right side of the road near the curb. (With traffic)

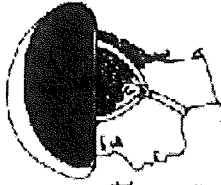
_____ You can ride safely in the middle of the street as long as you pay attention to your surroundings.

_____ It is OK to give another person a ride on your bike as long as they are standing on the foot pegs or sharing your seat.

Write the correct name on the signs below



killed in crashes die of head injuries, and thousands suffer permanent brain damage. Most of these deaths and serious injuries could be prevented by helmet use. Helmets are stylish and come in all sizes. Most bike shops can fit your child (and you, to set a good example) with a comfortable helmet.



Younger children should ride under direct adult supervision, even when on sidewalks. There is no magic age at which a child can safely ride a bike. It can be said that before the age of ten, few children can really understand traffic. They can be taught certain specific skills, but they will have trouble judging vehicle speeds and understanding concepts like "right-of-way."

Help them to understand that a bicycle is a vehicle and not a toy. Teach them how to start and stop a bicycle, and what to look for like loose chains and nuts, broken spokes, etc.

Show them that you care about their bicycling habits. Spend time with your children. Take them out for training rides.

Here are some additional suggestions on what you can do:

1 ♦ Sidewalks, Driveways, Parking Lots, etc

Stop before entering a street from a sidewalk, driveway, parking lot, alley, curb, or anyplace. About half of the children eight and under who get killed on bikes get hit when they ride out of a driveway without stopping or looking when they enter a road.

What you can do:

Explain the reason for stopping before entering a street. Take your child to the driveway and practice stopping, moving out to see around objects, scanning left-right-left, and if there's no traffic, proceeding into the road.

2 ♦ No playing in the Road

What you can do:

Help your child identify other places such as parks or playgrounds where he or she can ride figure eights, and otherwise zoom around without having to worry about cars. Explain that the street is for safe riding practices only.

3 ♦ Drive with Traffic

Driving against traffic puts bicyclists where motorists least expect them and directly causes one out of five bike/car crashes. Motorists turning right look for traffic coming from the left, not from the right. People driving cars drive by habit.

What you can do:

Stand on the sidewalk with your child at a busy intersection and watch which way drivers turn their heads.

4 ♦ Obey Traffic Signs

Stop at all stop signs and red lights. Bicyclists breaking this basic rule cause about 30% of serious bike/car crashes for this age group.

What you can do:

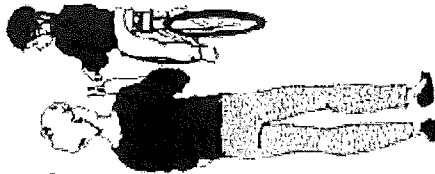
Explain the reasons for traffic signs and signals, and that traffic works as well as it does because most people know and follow the rules. Practice identifying different traffic signs. Close your eyes and listen for approaching "quiet" cars. Practice stopping and looking before entering an intersection and waiting for others who may not have yielded the right-of-way.

5 ♦ Be Predictable in Traffic

Cyclists who make unexpected left turns without scanning behind for traffic and signaling their turns account for 30% of serious car/bike mishaps for young children. The key here is to look to the rear to see cars coming from behind. Children often forget about cars they can't see, think cars can stop faster than they really can, or assume adults will "look out for them." Bicyclists traveling around parked cars should also scan behind and yield to overtaking traffic.

What you can do:

Teach your child to walk across busy streets until he or she has more experience and understands traffic. In the meantime, for residential street riding, your child can learn to always scan and signal before left turns. To teach scanning behind without swerving, take your child to a playground to practice riding a straight painted line while quickly looking behind. Stand alongside and hold up two or three fingers after your child rides by. Without swerving, have him or her practice telling you how many fingers you are holding up.



6 ♦ Decide for Yourself

Make your own decisions. Many crashes happen when youngsters follow each other. The first may run a stop sign and get through, but others may not be as lucky.

What you can do:

Impress upon your child the importance of checking traffic for him or herself. Each cyclist in a group should stop for stop signs, and scan behind (and yield to overtaking and oncoming traffic) before making left turns.

7 ♦ Stay off Busy Streets

Children haven't built up their traffic cycling skills to handle heavy traffic situations.

What you can do:

Let your child know that certain streets are "off-limits" and that riding on them is a privilege that will come when it is earned.

8 ♦ No-Night Riding

Older cyclists, with the proper equipment and cycling skills, can do it in reasonable safety, but it's 20 times as risky as day riding, and it's not for kids.

What you can do:

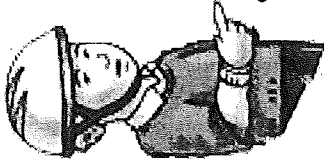
Rule out night riding entirely. If your child is stuck somewhere after dark be sure he or she knows to call you, collect from a pay phone if necessary, for a ride home.



Funded by a grant from the NYS Governor's Traffic Safety Committee.

For more information about bicycle safety education materials, contact your local Cornell Cooperative Extension office or Lois Chaplin, Biological and Environmental Engineering Department, 326 Riley Robb Hall, Cornell University, Ithaca, NY 14853. Email: lec4@cornell.edu. Web: www.bike.cornell.edu.

What Every Parent Should Know



Bicycling is fun for kids, and a big step in growing up. Having their own transportation gives them mobility and a taste of independence. But without proper training, kids can get into serious trouble on a bicycle. This bulletin will help you teach your child the attitudes and skills that will help make him or her a safer rider now and for years to come.

Be sure your child rides a bike that fits, one which he or she can straddle with both feet flat on the ground. A larger bike to "grow into" is hard for them to control. Stick with a bike having a coaster brake (the kind that brakes when you pedal backwards), unless your child's hands are large and strong enough to operate handbrake levers.

Your child should wear a helmet. Bicyclists under age 14 are required by law in New York State to wear a helmet. Bicycle crashes are a major cause of head injuries in children. Three out of four bicyclists



Bicycling program begins in Moses Lake schools

*By Chrystal Doucette
Herald staff writer*

MOSES LAKE — Garden Heights Elementary School students were dressed in pajamas Wednesday, but alert for class, as they prepared to ride bicycles.

Moses Lake School District debuted a bicycling unit for elementary school students, funded through a Washington State Legislature Road Safety Education pilot grant.

A set of 30 bicycles are being cycled between the schools, said Michelle Price, assistant superintendent of curriculum and instruction.

Students at Garden Heights were first in the district to use the new bikes.



Chrystal Doucette/Columbia Basin Herald
Garden Heights Elementary School fourth-grade students learn how to ride bikes skillfully Wednesday.

Wednesday was special because the students were also dressed in pajamas for Spirit Week.

Nolan Sloan, 10, and David Moreno, 9, both rode on their own for the first time on the fourth day of the program.

"It felt great," said Sloan.

"My mom and dad are going to be happy that I can," said Moreno.

Moreno said he doesn't own a bike, but he thinks his siblings will let him borrow theirs.

Sloan said student teacher Matt Ahmann gave him the confidence to continue trying until he could ride on his own.

"I thought Mr. Ahmann was still hanging onto me, but then I started noticing that there wasn't anything on my back," Sloan said.

Ahmann, who finishes student teaching for his Bachelor of Science degree in May, said the bicycling program helps students learn bicycle safety.

The students also build communication skills and self confidence through the program, while becoming more balanced bicyclists, he said.

Students learn how to signal turns and change lanes with other traffic.

"They've never tried to ride with one hand and it's really important to ride with one hand, because they've got to signal," said Ahmann. "Now they can feel confident to get out in traffic or ... across the street."

Ahmann said students are improving since the program's first day.

The students learn about traffic laws, causes of bicycle accidents, and transportation options available to students, she said.

The curriculum was developed by the League of American Bicyclists and modified to include curriculum developed by the Federal Highway Administration, Price said.

Helmets were donated by Safe Kids Grant County.

Price called the district's selection to participate in the program a "unique honor."

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