

**The Montana KEYS (Keep Encouraging Young-driver Safety) Project:  
Results from the Pilot Study**

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**Abstract**

**Purpose:** This pilot study assessed family support for integrating parent-teen homework assignments into the Montana driver education curriculum.

**Program:** Five homework assignments were developed, implemented, & evaluated by group of researchers, DE administrators, & DE instructors based on the tenets of goal-oriented persuasion and parent motivation in education. Each homework assignment has (1) an Information Sheet that covers 2-3 safe driving topics and contains all info parents need to effectively participate in families activities and (2) an Assignment Sheet with 4-5 family activities, which are a mix of “vehicle-related,” “family exercise,” “family discussion,” &/or “driving” activities (see list in Table 2 or on Page 3).

**Methods:** In Summer 2009, homework assignments were tested within four driver education classes selected based on size and location across the state using 2 recruitment strategies: (a) 2 schools had required participation in classes (or families chose another class) & (b) 2 schools had voluntary participation in classes. Homework Assignments were introduced during “Parent Night” (orientation class) and participating families completed the 5 homework assignments & evaluation forms for each throughout the 5-week class.

**Results:** Of the 75 families (81%) who agreed to participate, between 57-88% of families completed all activities within each homework assignment (Table 1). 90% or more of parents reported “medium” or “high” willingness to complete activities across all homework assignments (Table 2). Open-ended responses were overwhelmingly positive and reflected the following themes: “Provides constructive activities,” “Fosters family discussions,” and “Helps judge driver readiness” (see example comments on Page 3). The minimal negative feedback related mostly to parents’ limited time. Exposure to the tenets of goal-oriented persuasion and parent motivation in education that were incorporated into homework assignments was highly predictive of parent willingness (Table 3).

**Discussion:** These findings are promising, but the next step would be to conduct an efficacy trial in a broader audience to determine whether completion of parent-teen homework assignments is related to short-term and prospective outcomes related to safe teen driving.

**Table 1. Completion Rates for all Activities within Parent-Teen Homework Assignments**

Schools	Assignment #1		Assignment #2		Assignment #3		Assignment #4		Assignment #5	
	Rate	%	Rate	%	Rate	%	Rate	%	Rate	%
School A	9/13	68	9/13	68	10/13	77	11/13	85	13/13	100
School B	18/19	95	18/19	95	19/19	100	18/19	95	0/19	0
School C	26/27	96	22/27	81	22/27	81	26/27	96	23/27	85
School D	15/16	94	11/16	69	12/16	75	8/16	50	7/16	44
Total	68/75	88	60/75	78	63/75	83	63/75	82	43/75	57

Note: Schools B and C had required participation; School B did not obtain family evaluation forms for Assignment #5

**Table 2.** Descriptive Statistics for Parent Willingness to Complete Activities within Parent-Teen Homework Assignments

Topics and Activities for the Five Parent-Teen Homework Assignments	N	Parent Willingness					
		Low		Medium		High	
		n	%	n	%	n	%
<b>1. Safety Precautions &amp; Safety Equipment</b>							
1.1 Vehicle-Related Activity: Vehicle Tasks	71	3	4.3	29	40.9	39	54.9
1.2 Vehicle-Related Activity: Vehicle Adjustments	72	2	2.8	38	45.9	37	51.4
1.3 Vehicle-Related Activity: Vehicle Controls	71	1	1.4	26	36.6	44	62.0
1.4 Family Exercise: Rapid Fire Commands	71	3	4.2	31	43.7	37	52.1
<b>2. Traffic Laws &amp; Courteous Driving</b>							
2.1 Family Exercise: Do You Know Your Signs?	68	2	2.9	22	32.4	44	64.7
2.2 Driving Activity: Signs	62	2	3.2	19	30.7	41	66.1
2.3 Family Discussion: Traffic Laws	65	1	1.5	21	32.3	43	66.2
2.4 Family Discussion: Courteous Driving	67	0	0.0	22	32.8	45	67.2
2.5 Driving Activity: Driver Communication	64	1	1.6	21	32.8	42	65.6
<b>3. Vision, Balance, &amp; Judgment</b>							
3.1 Family Discussion: Vision, Balance, & Judgment.	71	4	5.6	19	26.8	48	67.6
3.2 Family Exercise: Driving Pictures	70	5	7.1	29	41.4	36	51.4
3.3 Driving Activity: Curves, Hillcrests, & Intersections	70	2	2.9	23	32.9	45	64.3
3.4 Driving Activity: Speed Control & Lane Position	64	3	4.7	19	29.7	42	65.6
<b>4. Adverse Driving Conditions</b>							
4.1 Family Discussion: Adverse Driving Conditions	63	1	1.6	12	19.1	50	79.4
4.2 Family Exercise: Driving Pictures	63	2	3.2	19	30.2	42	66.7
4.3 Driving Activity: Driving Conditions	63	2	3.2	18	28.6	48	68.3
<b>5. Continued Safe Driving &amp; Supervised Practice</b>							
5.1 Family Discussion: Unsafe Driving	46	2	4.4	11	23.9	33	71.7
5.2 Family Exercise: Agreement for Safe Driving	47	2	4.3	18	38.3	27	57.5
5.3 Family Exercise: Keep Track of Driver Progress	44	4	9.1	14	31.8	26	59.1
5.4 Family Exercise: Schedule for Supervised Driving	43	3	7.0	17	39.5	23	53.5

**Table 3.** Regression Results for Predicting Parent Willingness to Complete Homework Assignments from Goal-Oriented Persuasion (GOP) and Parent Motivation in Education (PME)

Parent-Teen Homework Assignments	Models <sup>1</sup>							
	GOP		PME		Combined		Added Value	
	N	R-square	N	R-square	N	R-square	Over GOP	Over PME
1. Safety Precautions & Safety Equipment	63	.45***	58	.43***	55	.55***	.10	.12
2. Traffic Laws & Courteous Driving	59	.47***	58	.48***	57	.60***	.13	.12
3. Vision, Balance, & Judgment	62	.54***	59	.63***	62	.69***	.15	.06
4. Adverse Driving Conditions	61	.37**	59	.46***	58	.55***	.08	.09
5. Continued Safe Driving & Supervised Practice	41	.58***	41	.41**	41	.65**	.07	.24

\*p<.05; \*\*p<.01; \*\*\*p<.001; <sup>1</sup> all models control for school

**If you are interested in learning more about the Montana KEYS Project or in obtaining copies of the parent-teen homework assignments, please contact:**

**Fran Penner-Ray at [fpenner-ray@mt.gov](mailto:fpenner-ray@mt.gov) or (406) 444-4432**



# Parent-Teen Homework Assignments to Increase Driver Safety

## List of Homework Assignments & Comments About Them

Homework Assignments	Montana parents said...	Driver Ed instructors said...
<p><b>#1 SAFETY PRECAUTIONS &amp; SAFETY EQUIPMENT</b></p> <p>1.1 Vehicle-Related Activity: Vehicle Tasks.            1.2 Vehicle-Related Activity: Vehicle Adjustments.            1.3 Vehicle-Related Activity: Vehicle Controls.            1.4 Family Exercise: Rapid Fire Commands.</p>	<ul style="list-style-type: none"> <li>♦ "I got into the emergency planning part. Good to have before it's needed."</li> <li>♦ "Good, helpful, simple."</li> <li>♦ "I forgot how automatically I do things. Explaining is more difficult than doing"</li> <li>♦ "All of these things are important for teaching her to be a safe and competent driver."</li> <li>♦ "Fun + interesting."</li> <li>♦ "After the exercise my son realized how important it was to know where everything was."</li> </ul>	<ul style="list-style-type: none"> <li>♦ "It creates good habits."</li> <li>♦ "Student/parent collaboration is evident by the comments provided from parents."</li> <li>♦ "[Parent] comments indicated it was a good opportunity to see what their student knew."</li> <li>♦ "All students/parents in my 2009 summer class completed [it]."</li> <li>♦ "Parents liked this activity."</li> <li>♦ "Fun learning, positive interactions."</li> </ul>
<p><b>#2 TRAFFIC LAWS &amp; COURTEOUS DRIVING</b></p> <p>2.1 Family Exercise: Do You Know Your Signs?            2.2 Driving Activity: Signs.            2.3 Family Discussion: Traffic Laws.            2.4 Family Discussion: Courteous Driving.            2.5 Driving Activity: Driver Communication.</p>	<ul style="list-style-type: none"> <li>♦ "Good activities that brought out good questions."</li> <li>♦ "This was a good activity for new and old drivers alike."</li> <li>♦ "Both parents participated &amp; had fun."</li> <li>♦ "[This] was easy to do on [the] way to school."</li> <li>♦ "Good opportunity to discuss safe driving."</li> <li>♦ "Family bonding w/ teenager [is] always a plus."</li> <li>♦ "Brought a greater knowledge of courteous driving."</li> </ul>	<ul style="list-style-type: none"> <li>♦ "Parents/teens enjoyed this."</li> <li>♦ "Good discussion leads."</li> <li>♦ "It should help new drivers a lot."</li> <li>♦ "Great activity for kids &amp; parents."</li> <li>♦ "Parents were able to easily follow the lesson."</li> <li>♦ "Some students knew their signs better than their parents!"</li> </ul>
<p><b>#3 VISION, BALANCE, &amp; JUDGMENT</b></p> <p>3.1 Family Discussion: Vision, Balance, &amp; Judgment.            3.2 Family Exercise: Driving Pictures.            3.3 Driving Activity: Curves, Hillcrests, &amp; Intersections.            3.4 Driving Activity: Speed Control &amp; Lane Position.</p>	<ul style="list-style-type: none"> <li>♦ "Great learning tool!"</li> <li>♦ "Good things to check for and be aware of not only for kids but parents as well."</li> <li>♦ "These were a bit more difficult, but very helpful!"</li> <li>♦ "Good skill building."</li> <li>♦ "Helped show the importance of always watching around you for hazards."</li> <li>♦ "Great way for me to measure his readiness to drive."</li> <li>♦ "We continue to do these exercises each time we drive."</li> </ul>	<ul style="list-style-type: none"> <li>♦ "Great info."</li> <li>♦ "Nice reminders for parents."</li> <li>♦ "Good examples."</li> <li>♦ "Easily understood by parents/teens."</li> <li>♦ "Easily performed by student/parent."</li> <li>♦ "Great activity, very helpful."</li> </ul>
<p><b>#4 ADVERSE DRIVING CONDITIONS</b></p> <p>4.1 Family Discussion: Adverse Driving Conditions.            4.2 Family Exercise: Driving Pictures.            4.3 Family Exercise: Vehicle Safety Kits.            4.4 Driving Activity: Driving Conditions.</p>	<ul style="list-style-type: none"> <li>♦ "Important to safe driving."</li> <li>♦ "Provides a good focus."</li> <li>♦ "I think all these activities are great. We've really enjoyed the conversations."</li> <li>♦ "Good practical learning."</li> <li>♦ "Made my son more aware of his town and way around."</li> <li>♦ "I would have felt more prepared as a teenage driver if this had been available to me."</li> </ul>	<ul style="list-style-type: none"> <li>♦ "This should make parents aware of teen experience and lack of it."</li> <li>♦ "Easily understood."</li> <li>♦ "Positive feedback [from families]."</li> <li>♦ "Fun, clear."</li> <li>♦ "Good activity."</li> <li>♦ "Specific responsibilities clear."</li> </ul>
<p><b>#5 CONTINUED SAFE DRIVING &amp; SUPERVISED PRACTICE</b></p> <p>5.1 Family Discussion: Unsafe Driving.            5.2 Family Exercise: Parent-Teen Agreement for Safe Driving Expectations.            5.3 Family Exercise: Keep Track of Driver Progress: First Assessment.            5.4 Family Exercise: Schedule for Supervised Driving.</p>	<ul style="list-style-type: none"> <li>♦ "All this helps kids + parents stay on track."</li> <li>♦ "Makes driving together not rushed &amp; less stressful."</li> <li>♦ "Good way to track his improvement."</li> <li>♦ "Makes my expectations clear."</li> <li>♦ "Takes time but worth it."</li> <li>♦ "Nice way to set-up rules for driving - instead of just letting them drive w/ no rules or consequences."</li> <li>♦ "Good to see progress &amp; to see where they need to go."</li> </ul>	<ul style="list-style-type: none"> <li>♦ "Good review."</li> <li>♦ "Those parents that actually worked through this felt it was very relevant."</li> <li>♦ "Good discussion points listed."</li> <li>♦ "General [family] comments indicated that parents were discussing this information and how it tied back to the previous four lessons."</li> <li>♦ "Good parent information."</li> <li>♦ "The tie-in to GDL and how to make this step work appeared to be appreciated by parents."</li> </ul>