

BEST PRACTICES FOR LEADING ACTIVE SCIENCE

<p><u>1. Set-up/Preparation.</u></p> <ul style="list-style-type: none"> • Space separate from distractions • Space allows for easy movement • Enough tables and chairs • Materials: enough and well organized • Whiteboard or chart paper • Review your goals for the session • Welcome the kids. Assign Teams 	<p><u>2. Starting the Project/Session (5 min max)</u></p> <ul style="list-style-type: none"> • BREIF review on previous project/session • Introduce the new topic/challenge • Assign roles within each team <ul style="list-style-type: none"> ○ <i>Materials</i> ○ <i>Ambassador/Scout</i> ○ <i>Reporter</i> • Show materials • Restate the Challenge. Get to work
<p><u>3. Leading the Activities</u></p> <ul style="list-style-type: none"> • Visit all teams <i>briefly and often</i> • Show enthusiasm for discoveries, successes • Show interest in ideas, questions, frustrations, successes • Refer students' questions to other students • Encourage the ambassador role • Avoid "right or wrong" • Give <i>just enough</i> help • Ask the troubleshooting questions <ul style="list-style-type: none"> ○ <i>What did you notice</i> ○ <i>What did you try (and why)</i> ○ <i>What have others tried</i> ○ <i>What happened (exactly)</i> ○ <i>What works (better, best)</i> 	<p><u>4. Discussion (5 min max)</u></p> <ul style="list-style-type: none"> • Set up a <i>What Works?</i> chart • Gather kids <u>away from materials</u> • Kids call out (preferably one at a time) • Write it all on the chart (abbreviate) • Validate. Don't debate or judge. Accept contradictory ideas without comment. • Safe – no comments on other's ideas. • Don't let <i>talkers</i> take over! Give the quiet kids space to share • Focus on <i>experiences/findings</i> (not theories) • Use a <i>Parking Lot</i> for <i>science words</i> and off-topic comments/ideas • After 3 – 5 minutes, review results so far, reframe the challenge, get kids back to work
<p><u>5. Pacing the Session</u></p> <ul style="list-style-type: none"> • Each activity = <i>explore-discuss-explore-discuss</i> (~45 min total) • Break to discuss every 15 - 20 min • Keep everyone together on same activity • Have extensions ready as needed for students who "finish" ahead of others. 	<p><u>6. Closing the Session</u></p> <ul style="list-style-type: none"> • Summarize conclusions and successes. • List problems not yet solved. • State challenge for next session • Revisit <i>Parking Lot</i> • Announce the date, time, place of the next session