1.7.1 School year 1.7.1.1 99-00 1.7.1.2 00-01

1. Administrative	2. Activity	4. Modeling Strategy
1.1 School	2.1 Plan	4.1 Planning
1.1.1 Greenhills	2.1.1 Create obj	4.1.1 Generating ideas
1.2 Teacher	2.1.2 Modify Obj	4.1.2 Stating goals
1.2.1 Ann	2.1.3 Del obj	4.1.3 Identifying fac/obj or characteristics
1.2.2 Chris	2.1.4 Create fac	4.1.4 Specifying relationships
1.2.3 Jay	2.1.5 Modify fac	4.1.5 Discussing factors/objects
1.3 Unit Exposure	2.1.6 Del fac	4.2 Searching
1.3.1 Water Q	2.2 Build	4.2.1 Seeking information
1.3.1.1 WO1	2.2.1 Create fac	4.2.2 Gathering resources
1.3.1.2 WQ2	2.2.2 Modify fac	4.3 Synthesizing
1.3.1.3 WO 3	2.2.3 Del fac	4.3.1 Discussing relationships
1.3.2 Decomposition	2.2.4 Create rel	4.3.2 Making connections
1.3.2.1 Dec 1	2.2.5 Modify rel	4.3.3 Deciding how model should work
1.3.2.2 Dec 2	2.2.6 Del rel	4.4 Analyzing
1.3.3 Weather	2.3 Test	4.4.1 Deciding about course of action
1.3.3.1 Weather 1	2.3.1 Open meter	4.4.2 Recognizing the need of test
1.3.3.2 Weather 2	2.3.2 Assign factors to graph	4.5 Explaining
1.3.4 Air O	2.3.3 Change meter value	4.5.1 Explaining why/how
1.3.5 Other	2.3.4 Del meter	4.5.2 Justifying arguments
1.4 Period	2.4 Other	4.5.3 Elaborating ideas
1.4.1 A	2.4.1 Shifting	4.6 Evaluating
1.4.2 B	2.4.2 Off task	4.6.1 Predicting what should happen
1.4.3 C		4.6.2 Identifying anomalies
1.4.4 D	- ~	4.6.2 Critiquing/interpreting the results
1.4.5 E	3. Scaffold	4.6.4 Identifying/proposing solutions
1.4.6 F	3.1 Tool	4.6.5 Carrying out solutions
1.5 Students	3.1.1 Sequencing tasks: buttons	4.7 Other
1.5.1 Allie W	3.1.2 Factoring functionality: views	4.7 Other
1.5.2 Alex C	3.1.3 Hiding Complexity	
1.5.3 Alex S	3.1.4 Facilitating Articulation: Because, description	5. Graphing
1.5.4 Alex T	3.1.5 Making context personally relevant: personalize	5.1 Use graph (Build/Test)
1.5.5 Arvind S	3.1.6 Linking Multiple Representations	5.2 Discuss graph (Build/Test)
1.5.6 Blair J	3.1.7 Manipulating Representations	5.3 Interpret graph (Build/Test)
1.5.7 Carolyn D	3.2 Teacher	5.4 Select/change degree (Build)
1.5.8 Dan Å	3.2.1 Conceptual	5.5 Connect verbal to graph (Build)
1.5.9 Emily B	3.2.2 Utility	5.6 Connect meter to graph (Test)
1.5.10 Giorgio M	3.2.3 Task	
1.5.11 Kate N	3.2.4 Content	5.7 Use text only
1.5.12 Kevin V	3.2.5 Strategy	5.8 Use graph only
1.5.13 Laurel P	3.3 Peer	
1.5.14 Lisa M	3.3.1 Conceptual	6. Content Knowledge
1.5.15 Peter A	3.3.2 Utility	6.1 Inaccurate
1.5.16 Rob F	3.3.3 Task	
1.5.17 Roshan N	3.3.4 Content	6.2 Partially accurate
1.5.18 Walker R	3.3.5 Strategy	6.3 Irrelevant
1.6 Session within		
<u>Unit Exposure</u>		7. Model-it
1.6.1 1st		7.1 Utility
1.6.2 2 nd		
$1.6.3 \ 3^{rd}$		7.2 Technical problems
$1.6.4 4^{th}$		
1.6.5 5 th		
1.7 Year/Grade		

3. Scaffold	
3.1 Tool	This is a master code for scaffolds built into the MI interface
3.1.1 Sequencing tasks: buttons	The Plan/Build/Test buttons. If the Students discuss using the buttons, or discusses not knowing what to do next and then clicks on one. This code will be used mostly with novice users. SEE 2.1 and 2.2 and 2.3
3.1.2 Factoring functionality: views	The Plan (or world) view and the Build/Test (or map) views. If students specifically discuss switching to different view mode to see object setup vs factor setup.
3.1.3 Hiding Complexity	The choice in factor/relationships setup where they can choose to use Qual or Quant or when palette bar is used to save time. Code this only if they specifically discuss, or change from default Qual setting.
3.1.4 Facilitating Articulation: Because, description	When students discuss or fill out the "because" statement in RELATIONSHIP editor. When student discuss or fill out the "description" statement in FACTOR or OBJECT creation.
3.1.5 Making context personally relevant: personalize	When students discuss or choose personalized graphic for FACTOR/OBJECT.
3.1.6 Linking Multiple Representations	In the relationship editor, when students discuss or use the text/graph to choose "more and more, or bell curve, etc", or factor arrow box.
	In test mode, when student discuss or use the link between meter & graph (color). Labels on Indep/Dep factor meters.
3.1.7 Manipulate Representations	In test mode, when student discuss dynamic feedback while running. SEE 2.3.3
3.2 Teacher	This is a master code for scaffolds provided by TEACHER behaviors/statements
3.2.1 Conceptual	Discussion/critique of model structure, problem solving on model function, helping understand factor, objects, relationships and testing.
3.2.2 Utility	Discussion of software function (how to delete factor, save to web, etc)
3.2.3 Task	Discussion of discrete/immediate actions (save now, refer to booklets for DO value, etc)
3.2.4 Content	Discussion of declarative knowledge (the optimum pH is 7, salinity is not measured in pounds, etc)
3.2.5 Strategy	Discussion involving cognitive strategies, explaining, predicting, in those cases where the strategy is what is recommended. E.g. teacher says "I think you need to gather information".
3.3 Peer	This is a master code for scaffolds provided by PEER behaviors/statements
3.3.1 Conceptual	Discussion/critique of model structure, problem solving on model function
3.3.2 Utility	Discussion of software function (how to delete factor, save to web, etc)
3.3.3 Task	Discussion of discrete/immediate actions (save now, refer to booklets for DO value, etc)