Teacher Name: _____

WEBTECH

EVALUATION PLAN and FORMS

Developed for the WebTech Project
By Michal Lomask, Director
ETGaR Company for Evaluation Studies

Teacher Name: _____

To the field test teacher:

The WebTech is an experimental program designed to develop on-line materials for high school technology learning. The program is funded by the National Science Foundation (NSF) and it includes development, application and evaluation components.

The evaluation component of the WebTech program is based on three main guiding questions:

1. What do students learn through their experiences with the WebTech units?
2. What do teachers learn through their experiences with the WebTech units?
3. How do teachers' pedagogy and students' learning in the WebTech units reflect national math, science and technology education standards?

To answer these questions you will be asked to do the following:

1. Participate in training workshop activities
2. Complete questionnaire forms after the workshop (forms T1, T2 and T3)
3. Provide all students with a parent/guardian consent form to be signed
4. Administer pre-tests to student in the WebTech class (forms S1 and S2) and mail them to project evaluator
5. Complete daily "check-up" (form T4)
6. Teach the assigned module and collect sample work produced by students (form T5)
7. Provide a sample of pictures of students' models/final products
8. Administer the post-test and evaluation form to student in the WebTech class (forms S3, S4,S5)
9. Complete the unit evaluation (form T6)
10. Send all materials to project evaluator

Data collected by you and by the project leaders will be analyzed to answer the above evaluation questions. The final report will be sent to you as soon as it will be available.

Thank you very much for your participation and contribution to the success of this project.

Teacher Name: _____

Form T1: General Information

1) How many years have you been teaching, what and where? (Please start with your most recent position)

2) What is your major teaching discipline/s?

3) In what class/grade level do you plan to teach the WebTech unit?

4) How many computers do you have in your classroom and/or lab room?

5) Do students in your class have easy access to computers during the school day? At home?

6) What are the topics students in your class will learn before and after this unit?
   Before:

   After:

7) Describe the general academic level of students in your class

Teacher Name: _____

Form T2: Familiarity with Educational Standards:

Use the this scale to answer each one of the following questions:　　**4 = Very**
3 = Fairly
2 = Somewhat
1 = Not at all

	4	3	2	1
Educational Standards				
How familiar are you with the National Standards for Technological Literacy (SfTL)?				
How familiar are you with the National Science Education Standards (NSES)?				
How familiar are you with the NYS Learning Standards for mathematics, science and technology?				
How familiar are you with the National Council of Teachers of Mathematics (NCTM) Standards?				
Instructional practices				
How familiar are you with the use of science laboratory activities with students?				
How familiar are you with the use of projects or extended investigations?				
How familiar are you with the use of the technology design cycle?				
How familiar are you with the use of student journals/portfolios?				
How familiar are you with strategies to develop students' ability to communicate ideas?				
How familiar are you with the use of on-line resources for instruction?				
How familiar are you with traditional teaching methods?				
Preparation				
How well prepared do you feel you are to teach standard-based technology?				
How well prepared do you feel you are to teach standard-based science?				
How well prepared do you feel you are to teach standard-based mathematics?				
How well prepared do you feel you are to teach the WebTech module?				

Teacher Name: _____

T3: Post-workshop Feedback

8) What are the main insights you gained about the use of the engineering design cycle in WebTech module?

9) What are the main insights that you gained about the role of science in the WebTech module?

10) What are the main insights that you gained about the role of mathematics in the WebTech units?

11) What are the main insights that you gained about the use of the Internet in the WebTech units?

12) How can the workshop be improved for future training?

Teacher Name: _____

T5: Examples of Student Work

At the end of the unit please collect the <u>design folios or project notebook</u> completed by three students who represent different levels of achievement (i.e., low, medium and high level). If students want to keep their work, please make copies of their folios. Also collect sample work to illustrate student performances during the unit. The samples can be collected from different students and it may include any of the following:

- Lab reports
- Homework
- Drawings
- Pictures of models
- PowerPoint presentations
- and others

Teacher Name: _____

T6: Tell us what you think

Please reflect about your experience with the WebTech unit and briefly answer the following questions:

1. What was your most difficult task during this experience?

_____

_____

_____

_____

2. What support did you receive from Project leaders during the implementation of the unit?

_____

_____

_____

_____

3. What support did you receive from your school/district?

_____

_____

_____

_____

4. What were, if any, the barriers to successful implementation of the unit?

_____

_____

_____

_____

5. How can the module be improved?

_____

_____

_____

_____

6. Will you be interested in teaching other WebTech units? If so, what type of support would you need?

_____

_____

_____

Teacher Name: _____

Parent/Guardian Consent Form

Dear Parent or Guardian:

     The WebTech Project was developed at the State Universities of New York at Buffalo and Stony Brook and funded by the National Science Foundation. The Project is presently conducting a field-test of new curriculum modules to improve their value to students and teachers. These modules were designed to enhance students' technology, math and science knowledge and skills through hands-on and web-based learning activities. The new curriculum was tested by expert teachers and their classes in a pilot study, and the results were used to revise the project materials and ready them for field testing. This field-test is designed to further evaluate the quality of the curriculum materials and their impact on student learning.

     We are writing you this letter to notify you that your child will participate in the study of this new curriculum. He or she will complete all class assignments and be tested for mastery of the curriculum content, as is normally done with all regular coursework.

     Your child will be also asked to complete a questionnaire about his/her reaction to the new materials. Work done by your child during the unit might be selected to be evaluated by project staff. Materials gathered during the field study are used for the evaluation of the project and not for grading students. Therefore, all information provided by your child will be confidential.

     Should you have any questions regarding this study, you may contact Dr David Shaw dshaw @buffalo.edu or at 716-645-3112 Ext. 1218

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I, (print name) _____, the parent or legal guardian of the

student (print name) _____ give my consent to the WebTech Project

to gather materials and work produced by my child in the project unit. I understand that these

materials will be used for evaluation research only.

Parent signature: _____   Date: _____

   ☞ Please sign this form and send it back to school with the student

Teacher Name: _____

Scoring Rubric for Student Learning Outcomes

Score Point	Criteria for Scoring
Exemplary (4)	Student work shows: • Comprehensive knowledge of the topic • In-depth understanding of topic-related concepts and ideas • Use of data and examples to illustrate main arguments or point of view • Logical and coherent flow of ideas and arguments **Overall, the work is exemplary, detailed and clear.**
Proficient (3)	Student work shows: • Knowledge of the topic • Good understanding of topic-related concepts and ideas • Some use of data and examples to illustrate main arguments or point of view • Good development of ideas and arguments **Overall, the work is good, has some detail, and is clear.**
Developing competency (2)	Student work shows: • Some knowledge of the topic, but may include content inaccuracies • Some understanding of topic-related concepts, but there are apparent gaps in understanding the relations among main ideas • Some use of supporting facts and examples • An apparent effort, although not completely successful, to put together ideas and arguments **Overall, the work is satisfactory, but the answer may be vague or not well developed and may include content inaccuracies.**
Novice (1)	Student work shows: • Little knowledge of the topic. • Limited understanding of main ideas • Unsupported arguments. • Misconceptions, inaccurate or irrelevant information. **Overall, the work is poor and lacks clarity.**
Unscorable (0)	**The student either:** • left the answer blank • wrote about a different topic