STLF Report to CWSEI and Mathematics Department

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Specific activities performed by STLF

1) Professional development
   - Attended the Lunch Series in Teaching and Learning (Nov 22)
   - Discussed in math reading group on "Evaluating student response to WeBWorK" (Nov 28)

2) Math SEI general meetings/activities
   - Met with Sarah and Math-SEI group to review current projects and discuss future plans (Nov 14)
   - Attended weekly STLF meetings (Nov 17)
   - Met with Costanza to review current projects and discuss future plans (Nov 21)
   - Met with Math-SEI group to review current projects and discuss future plans (Nov 23)
   - Met with Jim Carolan to review current projects and discuss future plans (Nov 24)

3) Course-specific meetings/activities

MATH 210 – Introduction to Mathematical Computing
- Assignments and tests will be done on computers and submitted through Vista.
- A diagnostic test on series is given on Jan 6. This is part of the tracking of series skills. Results will be included in the next report.
- I am currently working on course materials on Maple. More than 3 weeks of materials has been developed at this point. Materials on MATLAB will be prepared by the instructor and the TA.
- I have been and will be attending all classes and labs. Short discussion with the instructor will be made every class.
- I will need to substitute for the instructor from Feb 1 to Feb 17.

MATH 305 – Applied Complex Analysis
- Midterm 2:
  - The test consists of 4 multiple-part questions
  - Results:

	Overall	ENPH	MATH	Other
# students	62	42	11	9
MT1 Average (/50)	33.5 ± 0.7	34.2 ± 0.9	30.3 ± 1.7	34.4 ± 2.1
MT2 Average (/50)	29.1 ± 1.2	30.0 ± 1.4	25.6 ± 2.9	29.0 ± 3.0

    - Math students did worst in the midterm. As mentioned in the previous report, these math students have lower grades on their previous courses than the rest of the class.
- A survey was given at the end of the term. I will process them soon and include the results in the next report.

MATH 110 – Differential Calculus

- December exam (E1):
  - The December Exam consists of 10 multiple-part questions and 1 bonus question.
  - Results:

	MT 1 (/40)	E1 (/70)
# students	268	247
Average	24.7 /40	31.2 /70
Average (%)	61.7%	44.6%

    - This is a difficult exam.
    - No questions were similar to workshop problems.

- Remedial assignments
  - I am responsible for the creation of the weekly remedial assignments on MathXL.
  - Remedial assignments consists of two parts:
    - Part A: algebra (for those who failed the algebra part of the diagnostic)
    - Part B: graphs and applications (for those who failed the remaining part of the diagnostic)
  - Students in general spent approximately 20 to 30 minutes on each part.
  - % of students who are assigned the remedial work actually did the work (got a non-zero mark)

	1st asmt	2nd asmt	3rd asmt	4th asmt	5th asmt	6th asmt
Part A (132 students)	91%	83%	62%	65%	57%	63%
Part B (103 students)	91%	78%	70%	67%	59%	66%

    - Participation rate dropped in the beginning, but stabilized during the last few weeks of classes.
- Workshops
  - I am responsible for the observations in the workshops. Each week I will report my feedbacks to the instructor during our regular meeting and to the TAs in weekly TA sessions.

Series Diagnostic Test

- This is part of the series skill tracking project. I am working closely with Greg Mayer who is in charge of the online Infinite Series Module.
- The test consists of 4 open questions. Two involve concepts of general series, two involve concepts of Taylor series.
- The diagnostic test was given to Math 210 during class on Jan 6. Results will be included in the next report. The test was also given to Math 257/316 as an assignment. A post-test will be given at the end of the term.
- This test will be given to Math 300 in February before the chapter on series is covered. A post-test will be given shortly after the chapter is finished.
- Other details will be included in the next report.

Current project status (material prepared by either STLF or other members of the MATH SEI)

MATH 110:
Learning Goals: 3rd draft of learning goals is complete.
Assessments: Workshop survey given at the end of Term 1
New Methods/Materials: New problem-solving based workshops, remedial work on basic skills

MATH 210:
Learning Goals: Complete
Assessments: Series diagnostic test done.
New Methods/Materials: The MATLAB module is new. Course materials on Maple are redeveloped.

MATH 305:
Learning Goals: Complete
Assessments: Final exam done.
New Methods/Materials: None at this point

Plan for immediate future work

MATH 110:
1. Process the responses from the workshop survey.
2. Continue with the creation of remedial assignments.
3. Continue with workshop observations and gather feedback from students.

MATH 210:
1. Continue with the development of course materials (Maple).
2. Prepare lectures when substitute for the instructor.

MATH 305:
1. Process the end-of-term surveys.

Series Diagnostic Test:
1. Code the tests from Math 210 and Math 257/316.
2. Develop some future plans based on the results of the test.