Engineering Teaching Portfolio Program
Session Curriculum Worksheets

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*E*ngineering *T*eaching *P*ortfolio *P*rogram

General Information (UW 2005 Fall Quarter Syllabus)

The Engineering Teaching Portfolio Program for Fall Quarter 2005 will meet Thursdays from October 6th to December 1st. There are two sections – please see below to find out the section times and locations:

Section	Time (Thurs)	Location	Facilitator
A	12:00-1:30pm	EE1 303	Jessica Yellin/Yi-Min Huang-Cottrille
B	4:00-5:30pm	EE1 303	Jessica Yellin/Yi-Min Huang-Cottrille

Contact Information for Workshop Facilitators:

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What will I get out of this program?

This program will give you the opportunity to:

1. Create a draft of a teaching portfolio (teaching philosophy statement, diversity statement, 2-3 supporting artifacts).
2. Discuss teaching issues with colleagues. Research suggests that making this a habit helps new faculty succeed (Boice, R., 1999, *Advice for New Faculty Members: Nihil Nimus.* Allyn and Bacon, Boston).
3. Develop a network of graduate students, early-career postdocs, and other people on campus that share an interest in teaching and the scholarship of teaching.
4. Develop the practice of considering your teaching decisions and their impact on students and learning. As an instructor, you will make design decisions about your teaching when planning, executing, rethinking, and revising your courses, in addition to design decisions about content and teaching methods.
5. Familiarize yourself with the varied responsibilities associated with a faculty career in engineering, which are most commonly categorized as research, teaching, and service. Most PhD students and people who hold PhDs in engineering are familiar with the responsibilities associated with research, e.g. performing and supervising research, publishing and presenting results, and proposal writing. This program will give you the opportunity to familiarize yourself with responsibilities related to teaching and service, such as discussing and explaining your teaching decisions and philosophy, and performing service obligations such as facilitating committee meetings, and discussing issues related to the recruitment and retention of engineering students at all levels.

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What do I need to do?

In order to make the program a success, you should agree to the following:

1. Persistence—by agreeing to meet for 1.5 hrs per week for 8 weeks; with the realization that other commitments may make it necessary for you to miss an occasional session,
2. Preparation—by regularly creating portfolio elements to share with your peers during the sessions,
3. Interaction—by regularly receiving feedback from and providing feedback to your peers,
4. Participation—by taking part in group work that you can later use with your own students,
5. Facilitation—by sharing the responsibility for ensuring that the sessions are focused and productive.

Facilitator/Co-Facilitator Information and Guidelines:

YiMin or Jessica will facilitate the first session. For weeks 2-8, program participants will be asked to sign up to co-facilitate at least one session. This will involve arranging a half hour planning meeting with your section facilitator (either YiMin or Jessica) sometime during the week before the session that you will co-facilitate so that you can decide how you want to cover the material for the session. The expectation is that the co-facilitator will be the primary facilitator during the session. A sign-up sheet for co-facilitators will be sent around during the first session. A copy of this sign-up sheet is included at the end of this packet to help you keep track of who is facilitating each week. The co-facilitator for each session is responsible for the following:

1. Meeting with the section facilitator (YiMin or Jessica) to plan the session, revise the curriculum worksheets, and make copies of the curriculum and any additional resources for the group.
2. Reviewing session objectives and revisiting them at the end of the session.
3. Time management -- ensuring that the group works through the session activities.
4. Meeting management -- ensuring that all group members have a voice.
5. Bringing handouts for the group.
6. Bringing additional resources for the topic. (Optional)
7. Bringing snacks. (Optional)

We have found that many graduate students and post-docs have little formal experience with running/facilitating meetings, yet these facilitation skills are extremely important to academic careers. For example, you may be expected to run committee meetings in your department or college as part of your faculty service obligations, research meetings with your students and research staff, and meetings with your collaborators for research and grant proposals. Please think of co-facilitating as a professional development opportunity to help you polish these skills.

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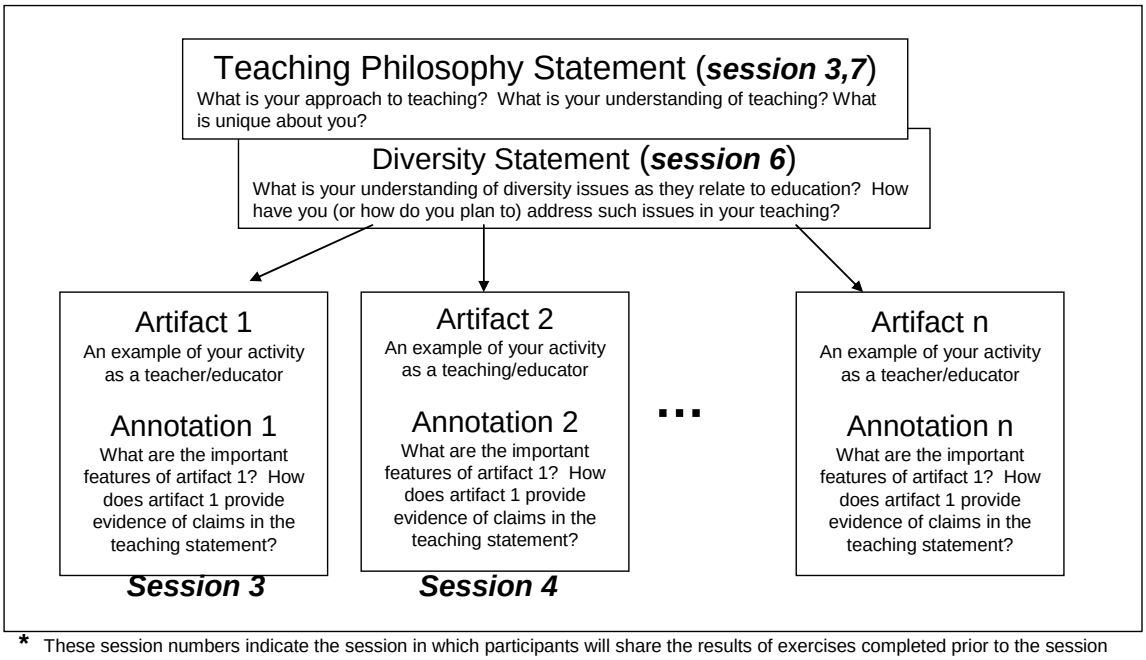
Format of the Sessions:

This program is structured around individual topics, such as the creation of a teaching statement or an explanation of artifacts to include in your portfolio. You will be introduced to a topic in one session (e.g. tips for writing a teaching philosophy statement), work on an assignment between sessions (e.g. create a draft statement), and then conclude the topic at the beginning of the subsequent session with a peer review (e.g. peer reviewing draft statements). The figure below shows a schematic diagram of the portfolio that you will construct, and which sessions will focus on the various portfolio elements.

TEACHING PORTFOLIO (*session 2, 8)**



* These session numbers indicate the session in which participants will share the results of exercises completed prior to the session (e.g., gathering information/reactions to example portfolios, creating a teaching philosophy statement, preparing an annotated artifact). In each case, the exercise will be introduced at the end of the previous session.

General Information and Guidelines:

As a participant in this workshop, you will create a draft teaching portfolio, discuss teaching issues with colleagues, familiarize yourself with faculty roles and responsibilities, and develop a network of people on campus interested in teaching. These goals are coupled; most groups have multiple discussions about teaching issues and faculty roles and responsibilities as a direct result of peer reviewing the teaching portfolio elements. By participating fully in these sessions and sharing your ideas about teaching via your written portfolio elements, you will meet and interact with colleagues who are interested in teaching.

We have found that the quality of the discussions in this workshop depends on everybody bringing something that can be peer reviewed to the sessions. If you don't have time to do a complete draft of a portfolio element that week, at least take 10 minutes to jot down some ideas and bring a short outline or a bulleted list of talking points about what you plan to write when you have time. Even a sharing a short list of your thoughts will help you participate fully in the discussions and receive peer feedback about your ideas.

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Session Schedule

Session 1: Introduction to ETPP/Teaching Portfolio Design Specifications

The 2 tasks for Session 1 are to:

1. familiarize yourselves with the program goals
2. get to know each other
3. start discussing teaching portfolios (reserve at least 20 minutes at the end of the session)

Before you leave: Plan how you and your group will find examples of teaching portfolios in science and engineering. Decide how you will report your findings about teaching portfolios for the next meeting.

Hint: We have found that when searching for example engineering teaching portfolios on-line, that you may have more success going to a website for an institution (e.g. Texas A&M, University of Michigan, or any institution that you find interesting) and doing a keyword search for 'teaching portfolios' or 'engineering teaching portfolios' through the institution's main web page. Often more examples of science or engineering teaching portfolios are available through the website for a particular institution than what will show up in a Google search of the entire web for the same keywords.

See the following session materials at <http://www.engr.washington.edu/caee/etpp-sessions.html> for additional guidance and information:

- Session 1: Teaching Portfolio Design Specifications
- "Ice Breakers"
- "Teaching Portfolios for Engineers"

Session 2: Teaching Portfolio Design Specifications/Teaching Philosophy Statement—1st Draft

The 2 tasks for Session 2 are:

1. report findings about example science and engineering teaching portfolios to the group (approximately 1 hour)
2. based on your findings and your ideas about teaching, discuss how you might structure your teaching philosophy statement and what you might include (approximately ½ hour)

Before you leave: Decide on the format for the first draft of your teaching philosophy statement. Please bring copies of your draft for everybody (approximately 8 copies) to the next session.

Hint: We have found that the quality of the discussion and peer review of teaching philosophy statements depends on everybody sharing something that can be peer reviewed during the sessions. We understand that many of you have complicated schedules, but please bring at least a bulleted list or short outline of talking points about what you might include or how you might structure your teaching philosophy statement. Although it is best if you bring a draft statement for peer review, people can still give you useful feedback about your ideas from an outline or list of talking points.

See the following session materials at <http://www.engr.washington.edu/caee/etpp-sessions.html> for additional guidance and information:

- Session 2: Teaching Portfolios/Teaching Philosophy Statement-1st Draft
- "Strategies for Developing a Teaching Philosophy Statement"
- "Anonymous Teaching Philosophy Statement"

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Session 3: Teaching Philosophy Statements—1st Draft/Teaching Artifact Annotation I

The 2 tasks for Session 3 are:

1. peer review 1st draft of teaching philosophy statements (approximately 1 hour)
2. discuss teaching artifacts and artifact annotations (approximately ½ hour)

Before you leave: Please bring copies of your artifact and annotation for everybody (approximately 8 copies) to the next session. You might also find it helpful to bring 1 copy of the most current draft of your teaching philosophy statement.

Hint for Peer Review: Because this is the first peer review activity for the workshop, consider spending a few minutes at the beginning of the session deciding what kind of feedback would be most useful.

Hints for Artifact Annotations: Many workshop participants have found that locating, choosing and annotating artifacts can be challenging. If you are not sure about how to write the annotation, consider the following questions. What is significant about your artifact? What does it illustrate about *your* teaching skills? What key decisions did you make and what factors did you consider when you designed the artifact? Begin writing your annotation by jotting down some talking points that address these questions.

If you have significant teaching experience and are having a hard time deciding which artifact to bring, you might decide to bring 2-3 choices and write an annotation for each one, or at least jot down an outline or list of talking points about each artifact.

Alternatively, if you are early in your teaching career and don't think you have any artifacts, bring anything that might be relevant. Some examples of teaching activities that people often overlook include informal tutoring or mentoring, teaching people in your lab how to use the equipment, volunteering in youth groups (Boy's and Girl's clubs, Expanding Horizons, church groups), and leading activities or teaching in organizations that are not specifically related to your field (Mountaineers, music, dance, language lessons).

See the following session materials at <http://www.engr.washington.edu/caee/etpp-sessions.html> for additional guidance and information:

- Session 3: Teaching Philosophy Statement-1st Draft/Teaching Artifact Annotation I
- "Guidelines for Artifacts"
- "Guidelines for Reporting Student Ratings for Review"
- "Student Ratings Explanation Example"
- "Guidelines for Reading and Interpreting University of Washington Student Ratings Summary Sheets"

Session 4: Teaching Artifact Annotation I/Teaching Artifact Annotation II

The 2 tasks for Session 4 are:

1. peer review teaching artifact annotation I (approximately 1 hour)
2. discuss how to choose teaching artifacts and what information should be in artifact annotations (approximately ½ hour)

Before you leave: Please bring copies of your artifact and annotation for everybody (approximately 8 copies) to the next session. You might also find it helpful to bring copies of your first annotated artifact and the most current draft of your teaching philosophy statement.

Hint for Teaching Artifact Annotations: Writing annotations for your teaching artifacts is often difficult because you don't realize how much of your experience and expertise is embedded in your artifact. Many workshop

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participants have found that the peer reviews of their first teaching artifact annotations are especially valuable because getting feedback from an audience that is not familiar with your discipline and your work makes it very obvious what information needs to be in your annotations so they are clear, meaningful, and showcase the teaching skills that you wish to demonstrate.

During the peer review, identify reasons for including this artifact or others in your portfolio and discuss how to annotate the artifacts to best demonstrate excellence in teaching. You should also identify how the artifacts you choose support your teaching philosophy.

See the following session materials at <http://www.engr.washington.edu/caee/etpp-sessions.html> for additional guidance and information:

- Session 4: Teaching Artifact Annotation I/Teaching Artifact Annotation II
- "Guidelines for Artifacts"
- "Guidelines for Reporting Student Ratings for Review"
- "Student Ratings Explanation Example"
- "Guidelines for Reading and Interpreting University of Washington Student Ratings Summary Sheets"

Session 5: Teaching Artifact Annotation II/Diversity Statements

The 3 tasks for Session 5 are:

1. peer review teaching artifact annotation II (approximately 1 hour)
2. discussion about diversity issues in teaching and faculty careers (approximately 15 minutes)
3. discussion about what you might include in a diversity statement (approximately 15 minutes)

Before you leave: Please bring copies of your diversity statement draft for everybody (approximately 8 copies) to the next session. You might also find it helpful to bring 1 copy of the most current drafts of your teaching philosophy statement and annotated artifacts.

Hints for Teaching Artifacts: By this time, most workshop participants have a draft teaching portfolio that contains a teaching philosophy statement and 1-2 peer reviewed annotated artifacts. When it is finished, your teaching portfolio should be a persuasive and cohesive document in which the statements demonstrate your excellence in teaching and describe how you personally go about teaching, and the annotated artifacts provide evidence for the claims you make in your statements. Do your annotated artifacts connect with your teaching philosophy statement? Do they provide evidence for the claims you make about teaching? If they are disconnected, how might you revise your statement and annotations to make your draft portfolio more consistent?

Hints for Diversity Statements: Many workshop participants find writing diversity statements challenging for a variety of reasons. Some people are not sure why this exercise is necessary; others are unsure of how a diversity statement might be received by audiences such as faculty search committees in traditional departments; people who have done significant diversity outreach may be unsure about how much of their work to present; people who have not done much with diversity may be unsure of what to say about it – and almost everybody perceives diversity issues as a political minefield.

Many institutions such as community colleges and universities that traditionally serve diverse groups require applicants to provide diversity statements. More traditional institutions are increasingly concerned with recruitment and retention of students from underrepresented groups in science, technology, engineering, and mathematics (STEM) disciplines, and you may be asked about your thoughts on diversity during an interview. Additionally, national funding agencies such as the National Science Foundation (NSF) now require all grant proposals to satisfy the NSF "Broader Impacts" criteria, and may not accept proposals that do not address diversity in some way. Even if you choose not to include your diversity statement in your teaching portfolio, having an opportunity to

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practice talking and writing about diversity within the safe environment of this workshop with prepare you for addressing diversity issues later in more public, higher-stakes situations.

See the following session materials at <http://www.engr.washington.edu/caee/etpp-sessions.html> for additional guidance and information:

- Session 5: Teaching Artifact Annotation II/Diversity Statements
- "It's All in What You Ask: Questions for Search Committees"
- "Factors contributing to undergraduate decisions to switch from science, mathematics, and engineering (SME) majors, by sex: 1994"
- "NSF Merit Review Broader Impacts Criterion"

Session 6: Diversity Statements/Teaching Philosophy Statement—2nd Draft

The 2 tasks for Session 6 are:

1. peer review diversity statements (approximately 1 hour)
2. discussion about 2nd draft of teaching philosophy statement (approximately ½ hour)

Before you leave: Please bring copies of your revised teaching philosophy statement draft for everybody (approximately 8 copies) to the next session. You might also find it helpful to bring 1 copy of your draft portfolio (the most current drafts of your teaching philosophy statement, diversity statement, and annotated artifacts).

Hint for Teaching Philosophy Statement—2nd Draft: Your teaching philosophy statement should be able to stand alone when it has to, but must also be cohesive, consistent, and powerful as the cornerstone of your teaching portfolio. We have found that in this type of teaching portfolio, the teaching philosophy statement is the backbone of the portfolio, the diversity statement and artifacts provide evidence to support claims in the teaching philosophy statement, and the annotations are the glue that holds the portfolio together.

By this time, most participants will have a draft of a complete portfolio consisting of a teaching philosophy statement, a diversity statement, and 1-3 annotated artifacts. When you revise your teaching philosophy statement, think about how this statement maps with your other portfolio elements. For some people, writing a strong teaching philosophy statement may be the product they want most for a faculty job search. If this is the case, you may want to consider incorporating ideas from your diversity statement and annotated artifacts into your teaching philosophy statement to strengthen it.

See the following session materials at <http://www.engr.washington.edu/caee/etpp-sessions.html> for additional guidance and information:

- Session 6: Diversity Statements/Teaching Philosophy Statement—2nd Draft

Session 7: Teaching Philosophy Statement—2nd Draft/Portfolio Completion

The 2 tasks for Session 7 are:

1. peer review teaching philosophy statements (approximately 1 hour)
2. discussion about putting teaching portfolio together and polishing it (approximately ½ hour)

Before you leave: Please bring copies of your teaching portfolio for everybody (approximately 8 copies) to the next session.

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Hint for Peer Review: Your teaching philosophy statement should be able to stand alone when it has to, but should also be cohesive, consistent, and powerful as the cornerstone of your teaching portfolio. Please consider including feedback about these design issues in your peer review.

Hint for Portfolio Completion: Many workshop participants have decided to complete and present their portfolios in a variety of ways. Some examples of what participants have done in the past include adding a table of contents, writing short annotations introducing each portfolio element, creating additional teaching portfolio elements such as lists of classes that they have taught or would like to teach, and creating teaching portfolio websites. You also may want to consider having a friend, colleague, or mentor look at your teaching portfolio and give you feedback on its readability, cohesiveness, consistency, and completeness.

If you wish to put your teaching portfolio on-line and are a member of the University of Washington community, you might consider publishing an e-portfolio through the University of Washington Catalyst e-portfolio web interface. This interface is very simple to use and will provide you with a relatively easy way to post your teaching portfolio on the web. For more information, check out this link to "Catalyst Teaching – use online portfolios" at <http://catalyst.washington.edu/method/portfolio.html>.

See the following session materials at <http://www.engr.washington.edu/caee/etpp-sessions.html> for additional guidance and information:

- Session 7: Teaching Philosophy Statement—2nd Draft/Portfolio Completion

Session 8: Portfolio Completion/Professional Development Plan

The 2 tasks for Session 7 are:

1. peer review teaching portfolios (approximately 1 hour)
2. discussion about next steps (approximately ½ hour)

Hint for Peer Review: Your teaching portfolio should be readable, cohesive, consistent, and complete. Please consider including feedback about these design issues in your peer review.

Hint for Next Steps: We hope that this workshop has helped you create a teaching portfolio and that the discussions have helped you learn more about your career options, how to document your teaching in the future, and how to become competitive candidates in your chosen careers. We also hope that you have had the opportunity to create and maintain a network of people on your campus who are interested in teaching science and engineering, and that you are more aware of teaching as a scholarly activity. Best of luck in your future work!

See the following session materials at <http://www.engr.washington.edu/caee/etpp-sessions.html> for additional guidance and information:

- Session 8: Portfolio Completion/Professional Development Plan
- "Skills Acquired During A Graduate Education"
- "References for Future Faculty"
- "Grad-Initiated Professional Development Activities"

Useful Links

- Tomorrow's Professor Listserv http://sll.stanford.edu/projects/tomprof/
- PhDs.org Science, Math, Engineering Career Resources http://www.phds.org/
- Science's Next Wave (career development resources) http://nextwave.sciencemag.org/

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Co-facilitator Sign-up Sheet

Please sign up to be the co-facilitator for one of the group's weekly meetings.

Week	Topic/Date	Co-facilitator Name
1	Introduction to ETPP & Teaching Portfolios Intro: Teaching Portfolio Design Specs ***(Thursday October 6, 2005)***	N/A – Jessica and YiMin
2	Follow-up: Teaching Portfolio Design Specs Intro: Teaching Philosophy Statements–1st Draft ***(Thursday October 13, 2005)***	
3	Follow-up: Teaching Philosophy–1st Draft Intro: Teaching Artifact Annotation I ***(Thursday October 20, 2005)***	
4	Follow-up: Teaching Artifact Annotation I Intro: Teaching Artifact Annotation II ***(Thursday October 27, 2005)***	
5	Follow-up: Teaching Artifact Annotation II Intro: Diversity Statements ***(Thursday November 3, 2005)***	
6	Follow-up: Diversity Statements Intro: Teaching Philosophy–2nd Draft ***(Thursday November 10, 2005)***	
7	Follow-up: Teaching Philosophy–2nd Draft Intro: Portfolio Completion ***(Thursday November 17, 2005)***	
8	Follow-up: Portfolio Completion Intro: Professional Development Plan ***(Thursday December 1, 2005)***	

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Center for the Advancement of Engineering Education
University of Washington, Box 352183, Seattle, WA 98195-2183

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Program Introduction: Stand-alone Version

Handouts

Program Introduction (this document)
Group Facilitator Sign-up Sheet

Introduction

The Engineering Teaching Portfolio Program (ETPP) is an 8 session, stand-alone curriculum developed at the University of Washington. This program provides a framework for small groups of engineering graduate students, post-docs, and others interested in teaching engineering to develop teaching portfolios. Each program session was designed to fit within a 1½ hour timeframe, with approximately 1½ -3 hours/week of preparation on your part for each meeting. The program activities were designed for a group of 5-12 people.

What will I get out of this program?

This program will give you the opportunity to:

6. Create a draft of a teaching portfolio (teaching philosophy statement, diversity statement, 2-3 supporting artifacts).
7. Discuss teaching issues with colleagues. Research suggests that making this a habit helps new faculty succeed (Boice, R., 1999, *Advice for New Faculty Members: Nihil Nimus.* Allyn and Bacon, Boston).
8. Develop a network of fellow graduate students, early-career postdocs, and other people on campus that share an interest in teaching and the scholarship of teaching.
9. Develop the practice of considering your teaching decisions and their impact on students and learning. As an instructor, you will make design decisions about your teaching when planning, executing, rethinking, and revising your courses, in addition to design decisions about content and teaching methods.
10. Familiarize yourself with the varied responsibilities associated with a faculty career in engineering, which are most commonly categorized as research, teaching, and service. Most PhD students and people who hold PhDs in engineering are familiar with the responsibilities associated with research, e.g. performing and supervising research, publishing and presenting results, and proposal writing. This program will give you the opportunity to familiarize yourself with responsibilities related to teaching and service, such as discussing and explaining your teaching decisions and philosophy, and performing service obligations such as facilitating committee meetings, and discussing issues related to the recruitment and retention of engineering students at all levels.

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What do I need to do?

In order to make the program a success, you should agree to the following:

6. Persistence—by agreeing to meet for 1.5 hrs per week for 8 weeks; with the realization that other commitments may make it necessary for you to miss an occasional session,
7. Interaction—by regularly receiving feedback from and providing feedback to your peers,
8. Participation—by taking part in group work that you can later use with your own students,
9. Facilitation—by sharing the responsibility for ensuring that the sessions are focused and productive.

Guidelines for Facilitators

Session facilitation will rotate among group members (See Facilitator sign-up sheet). The facilitator for each session is responsible for the following:

8. Reviewing session objectives and revisiting them at the end of the session.
9. Time management -- ensuring that the group works through the session activities.
10. Meeting management -- ensuring that all group members have a voice.
11. Bringing additional resources for the topic. (Optional)
12. Bringing handouts for the group. (Optional)
13. Bringing snacks. (Optional)

Program Format & Structure

This program is structured around individual topics, such as the creation of a teaching statement or an explanation of artifacts to include in your portfolio. You will be introduced to a topic in one session (e.g. tips for writing a teaching statement), work on an assignment between sessions (e.g. create a draft statement), and then conclude the topic at the beginning of the subsequent session (See Figure 1).

This program has been designed with engineering graduate students in mind. It has a number of unique characteristics that set it apart from other portfolio programs.

1. This program is engineering-focused, i.e. the resources created for the project will be tailored to the needs and challenges of you, future engineering faculty.
2. The program is peer-focused and designed to stand-alone and be self-motivated rather than be 'taught' by a staff or faculty member. In other words, you will be leading the sessions.
3. The program includes a diversity component because you, as the next generation of engineering educators, face the challenge of attracting and retaining a much more diverse student population to engineering than preceding generations of faculty. To help you to articulate what impacts you can have on this issue, you will be asked to create a diversity statement describing your perspective and actions.

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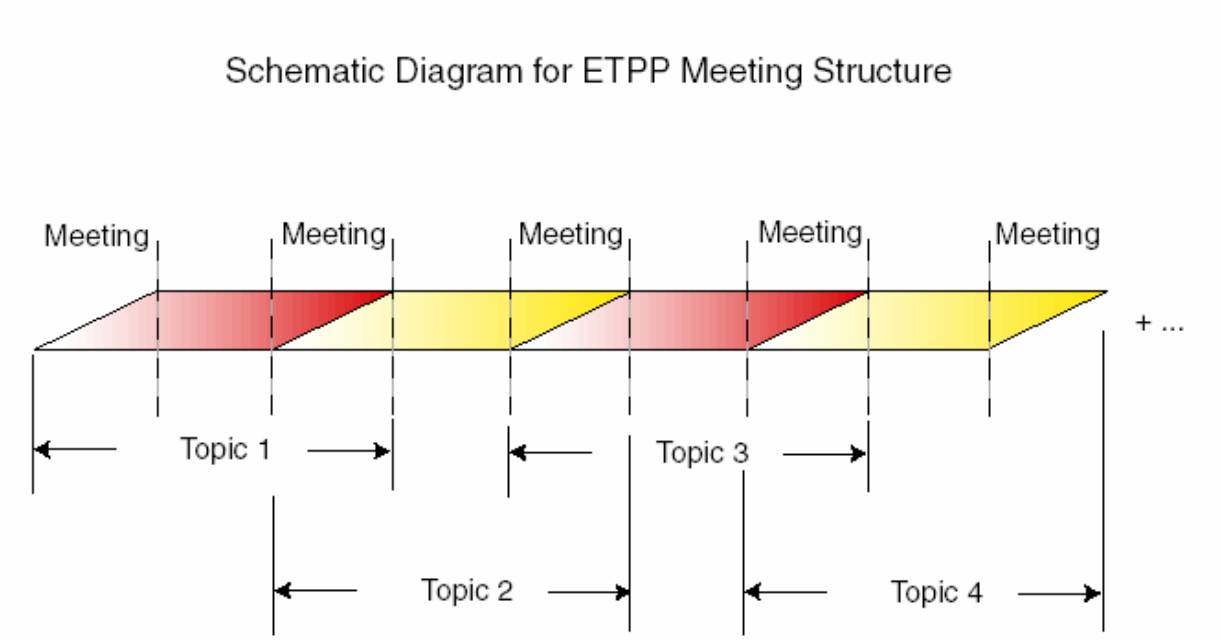

Figure 1: Graphical representation of portfolio program structure. Note that each topic is discussed in two separate meetings. Each topic begins near the end of one meeting and concludes at the beginning of the subsequent meeting.

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Group Facilitator Sign-up Sheet

Group Facilitators

Please sign up to be the lead for one of the group's weekly meetings.

	Topic	**Facilitator Name**
1	Introduction to ETPP & Teaching Portfolios Intro: Teaching Portfolio Design Specs	
2	Follow-up: Teaching Portfolio Design Specs Intro: Teaching Philosophy Statements–1st Draft	
3	Follow-up: Teaching Philosophy–1st Draft Intro: Teaching Artifact Annotation I	
4	Follow-up: Teaching Artifact Annotation I Intro: Teaching Artifact Annotation II	
5	Follow-up: Teaching Artifact Annotation II Intro: Diversity Statements	
6	Follow-up: Diversity Statements Intro: Teaching Philosophy–2nd Draft	
7	Follow-up: Teaching Philosophy–2nd Draft Intro: Portfolio Completion	
8	Follow-up: Portfolio Completion Intro: Professional Development Plan	

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Session 1: Teaching Portfolio Design Specifications

Session Objectives

By the end of this session, participants will have:

- developed group rapport and used the meeting as a forum for discussing teaching
- identified participants' prior knowledge about teaching portfolios
- discussed participants' reasons for participating in the program
- become more familiar with teaching portfolios and their key components

Handouts

Session 1: Teaching Portfolio Design Specifications (this document)
"Ice Breakers"
"Teaching Portfolios for Engineers"

Group Introductions

Since this is a peer-driven program, and receiving and providing feedback will be an ever-present theme, you will want to get to know your partners as individuals. Select some or all of the following options in order to start generating information for cross-talk about portfolios with members of your group.

Option 1: Introductions

Please take a couple of minutes at the beginning of the session to introduce yourself to other group members, e.g. consider telling each other your department, where you are in your program, why you are participating in the group, and/or why you are interested in teaching.

Option 2: Interview your neighbor--- teaching interest statement

Many faculty positions require applicants to provide a statement of teaching interests. In groups of 2, interview the person sitting next to you about their teaching interests. This might include a list of courses they have taught, and/or courses that they would be interested in teaching. Record the list as a rough draft of this portfolio element. Take turns introducing the person that you interviewed and reporting their teaching interests to the whole group.

Option 3: Developing goals for this workshop

In groups of 3-4, list what you hope to get out of this workshop. As a whole group, compile a list of goals for what participants hope to get out of this workshop and prioritize them. Have one person record the list and email it to the entire group, or post on a group website. Refer back to this list as the workshop progresses.

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Option 4: Icebreakers

Read the “Ice Breakers” handout. Select one icebreaker from the list, or an alternative technique that you have used or experienced as a student. As a group, conduct the icebreaker activity.

Introduction: Teaching Portfolios

The following two exercises are designed to help you begin thinking about creating your own teaching portfolio.

Option 5: Discussing teaching portfolios

1. Select one or all of the following items as a trigger for group discussion:
   - Take a minute to jot down a definition or some descriptor words that come to mind when you think of a teaching portfolio.
   - What have you read or heard about portfolios (or "dossiers" as in Canada and the UK)?
   - Describe or list item(s) that you want to be sure to include in your own teaching portfolio.
2. Take a minute or two to write something down in response. Then, turn to a neighbor and compare your notes. What is similar/different? Your group may choose to skip directly to a whole-group discussion.

Option 6: Resources about engineering teaching portfolios

Take 5-10 minutes to read the 3-page handout "Teaching Portfolios for Engineers." As you read, make notes of the parts that surprised you or were different than you expected. Discuss this in your group.

Before You Leave this Meeting

As a group, please decide the format of your portfolio analyses, e.g. written notes, printouts of the portfolio pages with your written comments, ideas (in your head) about your analysis.

Between Sessions

Assignment: Reverse engineering of teaching portfolios

The purpose of this assignment is to introduce you to the consistencies and variability of the material included in teaching portfolios. Find one or two portfolios online and analyze them. There are links to some portfolios on the ETPP website at <http://www.engr.washington.edu/caee/ETPP_site/examples.htm> However, because such sites are extremely personal, some links may have been changed or deactivated. Try using your favorite search engine to do a search for ‘teaching portfolios’ or ‘engineering teaching portfolios’.

Analyze each portfolio using the following questions as a guide:

- What are the design specifications (i.e. major parts or subdivisions)?
- Who is the audience?
- At what kind of institution is the author employed or seeking employment?
  The Carnegie Foundation for the Advancement of Teaching provides the most commonly cited classification of higher education institutions
  http://www.carnegiefoundation.org/Classification/index.htm
- Key Characteristics: What characteristics stand out for you? What will you remember about it? What resonated with you? What was a "red flag" for you?

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Session 2: Teaching Portfolio Design Specs/Teaching Philosophy Statement-1st Draft

Session Objectives

By the end of this session, participants will have:

- analyzed teaching portfolios and identified key components
- thought about audiences for engineering teaching portfolios
- thought about how to write a draft of a teaching philosophy statement
- used the session as a forum to discuss teaching

Handouts

Session 2: Teaching Portfolios/Teaching Philosophy Statement-1st Draft (this document)
"Strategies for Developing a Teaching Philosophy Statement"
"Anonymous Teaching Philosophy Statement"

Follow-up: Teaching Portfolios

Report results of your analysis to the group.

1. Compile a list of typical items included in engineering teaching portfolios.
2. Discuss the audiences for whom the portfolios were written. Group members should think about the potential audience(s) for their own portfolios.
3. What characteristics of the portfolios were most memorable? What did they tell you about the authors?

Introduction: Teaching Philosophy Statements

The teaching philosophy statement is the focal point of your teaching portfolio, so it makes sense to begin by writing about your perspectives on learning and teaching. In some ways, your philosophy statement is analogous to a theoretical statement in a research proposal because it documents the theories that guide your actions and provides a framework within which everything else fits.

While the word 'philosophy' might bring to mind visions of abstract theoretical perspectives, or you might think you do not have a philosophy, you do, even if you have never had reason to articulate it. Your philosophy statement demonstrates that you have given serious thought to your teaching and describes the rationale behind your actions in instructional settings.

Your philosophy statement provides a context for selecting data and evidence of your teaching. Your statement should delineate the following:

- what you expect your students to accomplish intellectually (learning objectives)

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- your program for helping students to achieve
- a few examples citing student-learning activities.

Select some or all of the following options to do as a group. We listed these options in the order we thought would be most useful. If your time is limited, do the first one as a group, and try the second one individually.

Option 1: Focus on teaching philosophy statement

As a group, discuss the following questions:

1. Of the teaching portfolios you analyzed, how many had teaching philosophy statements?
2. What do you remember most about the teaching philosophy statements?
3. Is there anything that you would want people to remember about you after reading your teaching philosophy statement?

Option 2: Getting started

Read the "Strategies for Developing a Teaching Philosophy Statement" handout. Individually, choose a strategy and follow the prompts. As a group, discuss what was difficult and what new ideas this activity brought up. These notes can serve as a first step for the weekly assignment.

Before You Leave this Meeting:

Decide on the layout and typographical details of your first draft that will make it easiest to give and receive feedback in the next session, e.g. font size, spacing.

What You Should Bring to the Next Session:

Enough copies of the first draft of your teaching philosophy statement for everyone (approximately 8 copies).

Between Sessions:

Assignment: First draft – teaching philosophy statement

The purpose of this assignment is to help you take the first step in creating your teaching portfolio–by writing a first draft of your teaching philosophy statement. Many people find that writing this philosophy statement is also one of the most difficult steps to take.

You may find the “Strategies” handout a useful tool for getting started. You can use your notes from the one you tried in the meeting, try another, or develop your own strategy. If you already have a first draft, reread it, and if you find your views have changed, refine it.

Two things typically left out of early versions of philosophy statements are (1) References to students, and (2) examples of how your philosophy manifests itself in concrete terms in the classroom or in interactions with students.

This draft philosophy statement should be about 500 words in length. Choose any format or organization that is comfortable for you, e.g. a narrative format or one that uses headings/subheadings.

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Engineering Teaching Portfolio Program
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Session 3: Teaching Philosophy Statement-1st Draft/Teaching Artifact Annotation I

Session Objectives

By the end of this session, participants will have:

- written a first draft of their teaching philosophy statement
- agreed on the kinds of feedback that would be most useful
- discussed the process and challenges of creating a teaching philosophy statement
- read and reviewed the teaching philosophy statement first drafts of other group members
- received feedback on their teaching philosophy statement first draft
- thought about audiences for teaching philosophy statements and teaching portfolios
- used the session as a forum to discuss teaching
- identified activities that count as teaching
- identified types of evidence associated with these activities
- created individual lists of specific teaching artifacts

Handouts

Session 3: Teaching Philosophy Statements-1st Draft/Teaching Artifact Annotation I
(this document)
"Guidelines for Reporting Student Ratings for Review"
"Student Ratings Explanation Example"
"Guidelines for Reading and Interpreting University of Washington Student Ratings Summary Sheets"

Required Materials

Enough copies of the first draft of your teaching philosophy statement for everyone (approximately 8 copies).

Follow-up: Teaching Philosophy Statement—Draft 1

1. What process(es) did you go through in writing your teaching philosophy statement?
2. What was the most challenging aspect of this assignment?
3. As a group create a list of the kinds of feedback that would be most useful for improving your teaching philosophy statement. Think about how to structure the peer review so that everyone gets the most constructive feedback. You might want to consider underlining memorable or key words and phrases. Another strategy is to indicate what parts should be left unchanged or 'as-is'.
4. Peer review. The goal of the peer review is to receive feedback from people with potentially different perspectives. Thus, each person should review at least two other teaching philosophy statements.

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Introduction: Teaching Artifacts

Group members are likely to be at different points in their teaching development. If you are at the beginning of your teaching career, you may not think you have a lot of artifacts from which to choose. The activities below will help you identify potential teaching artifacts.

At the other end of the spectrum, if you have a lot of teaching experience, your challenge is to be selective in your choices. You may need to create composite artifacts that represent multiple iterations of a single activity.

Remember, portfolios intended for public view are not supposed to be 'representative' of your teaching career, but a demonstration of your excellence in teaching. You want to include materials that make you proud. The process that you use to build your curriculum vitae provides a good analogy—in your vita, you include publications, not rejected paper submissions; and grants awarded, not unsuccessful proposals.

Option 1: What counts as teaching?

Before reading the quote below, discuss what "counts" as teaching. Create a list of different kinds of teaching. After reading the definition below, brainstorm other activities that you could use to support your teaching philosophy statement.

The University of Washington's Graduate School defines teaching duties as:

> "…interactions with students over instructional issues. Examples of teaching duties include holding office hours, reviewing tests or paper scores/evaluations with students, answering questions in special centers such as those focused on assistance with writing, math, chemistry, etc., tutoring, conducting labs, leading discussions, assisting students to solve problem sets, commenting on studio work, or lecturing."
> http://www.grad.washington.edu/acad/gsmemos/gsmemo14.htm#Teaching

Option 2: Create a list of artifacts with your group

As a group, create a list of artifacts that might be associated with the different kinds of teaching and other activities identified in Option 1. Choose someone to write up and distribute the lists generated by the group.

Option 3: Create a list of artifacts on your own

Individually, take some time to write a list of specific artifacts from your own experience. Identify which ones you currently have in your possession and others that will take some effort to obtain.

Before You Leave this Meeting:

Decide on the maximum number of artifacts group members should bring to the next meeting.

What You Should Bring to the Next Session:

Please bring copies of your artifact and annotation for everybody (approximately 8 copies) to the next session. You might also find it helpful to bring 1 copy of the most current draft of your teaching philosophy statement.

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Between Sessions:

Assignment: Teaching artifact annotation I

1. Revise the first draft of your teaching philosophy statement, taking into account your colleagues' comments. Do you have artifacts that support your teaching philosophy statement?
2. Choose a teaching artifact and annotate it. Please bring enough copies of the draft of your first annotated teaching artifact for everyone to the next session.

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Session 4: Teaching Artifact Annotation I/Teaching Artifact Annotation II

Session Objectives

By the end of this session, participants will have:

- located at least two artifacts and identified reasons for inclusion in the portfolio
- identified how the artifacts demonstrate excellence in teaching
- identified how the artifacts support their teaching philosophy
- used the session as a forum to discuss teaching

Handouts

Session 4: Teaching Artifact Annotation I/Teaching Artifact Annotation II (this document)
"Guidelines for Reporting Student Ratings for Review"
"Student Ratings Explanation Example"
"Guidelines for Reading and Interpreting University of Washington Student Ratings Summary Sheets"

Required Materials

Enough copies of your annotated teaching artifact for everyone (approximately 8 copies).
A copy of your most current teaching philosophy statement.

Follow-up: Teaching Artifact Annotation I

1. 'Show and Tell': take turns quickly showing the group the artifacts you brought with you, and telling the group which artifact you feel provides the best support for your teaching philosophy statement. Try not to spend more than 1-2 minutes per person.
2. Group discussion: Would these artifacts also serve to provide "documentation of excellence in teaching" (a phrase common to academic job postings)? Why or why not? Can you think of artifacts that you did not bring which would be better?

Recall the peer feedback criteria that the group devised last session.

1. What was helpful about the group's feedback process?
2. Do you have any changes or additions to the criteria?
3. What parts of the process could be changed in this and future feedback sessions?
4. Discuss group formation (do you want to use the same groups or a different configuration?)
5. Peer review teaching artifact annotations.

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Introduction: Teaching Artifact Annotation II

The purpose of a written annotation is to provide readers with information about the context and significance of your artifact, and to explain its connection to your teaching philosophy. It is analogous to an interpretation of data in a research paper. As a researcher, you would never include data in a paper without an accompanying interpretation of the findings.

Option 1: Brainstorming about context for artifacts

As a whole group, take turns choosing one of your artifacts and brainstorming about what background information a reader would need to understand your artifact and its significance. Consider that your audience might include people outside of your discipline or at a different kind of institution. In addition, remember that readers are unlikely to be familiar with the curriculum or course from which your artifacts are drawn. After everyone in the group has gotten feedback about one of their artifacts, decide as a group to repeat this option for another round of artifacts or try a different option.

Option 2: Reality check—how detailed should your annotations be?

In this activity, you will work with someone from another discipline or specialty. Take turns exchanging one artifact with your partner and letting him or her read it. Explain how you plan to annotate this artifact to your partner. As an outsider reading the artifact and listening to the explanation, give feedback about how much context you need in order to understand what the artifact is, why it is significant, and what aspect of your partner's teaching is showcased. Is it clear what role your partner had in the creation and/or use of the artifact? Take notes.

Option 3: Feedback about artifacts

Divide into small groups of 2-4 and discuss the artifacts you brought and your reasons for wanting to include them in your portfolio. Be sure to take notes about your justification/rationale.

Before You Leave this Meeting:

Decide how many annotated artifacts you should bring to the next session.

What You Should Bring to the Next Session:

Bring enough copies of your artifact(s) and draft explanations for everyone in the group.
Bring a copy of your most recent teaching philosophy statement.

Between Sessions:

Assignment: Write your artifact annotations

For each artifact, write an explanation of the context, rationale, and connection to your teaching philosophy statement. Ideally, the artifacts will demonstrate both excellence in teaching and support your philosophy. Each explanation should be less than 1 page.

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Session 5: Teaching Artifact Annotation II/Diversity Statement

Session Objectives

By the end of this session, participants will have:

- identified their most exemplary teaching artifacts
- written an explanation for 1-2 artifacts that includes context and rationale for inclusion
- received peer feedback about the clarity of the artifact explanation and its connection to the teaching philosophy statement
- had the opportunity to think about issues of diversity in engineering
- discussed diversity issues with peers
- used the session as a forum to discuss teaching

Handouts

Session 5: Teaching Artifacts II—Artifact Annotation/Diversity Statements (this document)
"It's All in What You Ask: Questions for Search Committees"
"Factors contributing to undergraduate decisions to switch from science, mathematics, and engineering (SME) majors, by sex: 1994"
"NSF Merit Review Broader Impacts Criterion"

Required Materials

Enough copies of your annotated teaching artifact for everyone in the group (approximately 8 copies).
A copy of your most current teaching philosophy statement.

Follow-up: Teaching Artifact Annotation II

1. Discuss what type of feedback you want from your colleagues.
2. Peer review teaching artifact annotations.

Introduction: Engineering and Diversity

The lack of diversity among students and faculty in engineering is a well-documented, persistent challenge for engineering educators, and the business, government, and industry groups that hire engineering graduates. Many variables impact the population of engineering degree recipients, but three in particular are of particular importance in engineering: demographic patterns and trends, student recruitment and retention, and economic/market influences.

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Many people feel uncomfortable addressing diversity issues for a variety of reasons, including concerns about being accused of racism or, at the other end of the spectrum, being expected to represent the views of a particular underrepresented group. Few engineers can afford to avoid the subject these days because, while there has been progress, it has been small and slow. Faculty job postings increasingly mention diverse student populations. Funding agencies are providing the lever to encourage researchers to specify what roles they play in addressing this challenge. Well-conceived discussions of the broader impacts of engineering research have served to differentiate which highly ranked research proposals receive funding. There is no better way to meet this challenge than to discuss it among your peers before it comes up in more formal settings, such as a campus interview, committee meeting, or proposal review.

What is a Diversity Statement?

Your diversity statement might discuss the importance of a diverse scholarly community or its significance in your field. You might use your statement to describe how you interact with students and colleagues with different backgrounds and experiences. You want your statement to demonstrate that you have given serious thought to the issue, explain why you take the actions that you do, as well as provide some examples.

These activities are intended to provide you with an opportunity to think about diversity and articulate your thoughts before you are required to do so in a faculty interview or a grant proposal. You may or may not opt to include this statement in the 'public' version of your portfolio.

Option 1: Brainstorming—what do you put in a diversity statement?

As a group, brainstorm ideas about what people might choose to include in a diversity statement. Select one person to record and distribute the group's suggestions.

Option 2: Discussing diversity—identifying key issues

Many people are unclear about why diversity issues are being highlighted so much in engineering education. Please re-read the introductory paragraphs about diversity in engineering.

a) The emphasis on diversity issues in education is sometimes interpreted as a push to teach students from some groups differently than students from other groups.
   - Discuss why the 'different methods for different groups' approach is problematic.
   - Discuss other approaches to teaching that you might take.

b) Identify the reasons for increasing diversity in engineering that you find most compelling.

Option 3: Search Committee Questions

Choose 3 questions from the "It's All in What You Ask: Questions for Search Committees" handout (listed above). Individually, take 5-10 minutes to read and make notes about how you might answer these questions. If you do not feel you have answers at this time, what kinds of actions could you take to put yourself in a position to answer them? Either as a large group or smaller groups, process your responses to the questions.

Before You Leave this Meeting:

Decide on the layout and typographical details that will make it easiest to give and receive feedback in the next session.

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What You Should Bring to the Next Session:

Enough copies of the draft of your diversity statement for everyone in the group (approximately 8 copies).

Between Sessions:

Assignment: First draft – diversity statement

The purpose of this assignment is to help you take the first step in thinking about your perspective on the diversity challenges in your field. This draft statement should be about 500 words in length. Choose any format or organization that is comfortable for you, e.g. a narrative format or one that uses headings/subheadings.

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Session 6: Diversity Statement/Teaching Philosophy Statement-2nd Draft

Session Objectives

By the end of this Session, participants will have:

- articulated their thoughts about diversity
- received peer feedback about their diversity statement
- created a plan for revising their teaching philosophy statement
- used the session as a forum to discuss teaching

Handouts

Session 6: Diversity Statements/Teaching Philosophy 2nd Draft (this document)

Required Materials

Enough copies of the draft of your diversity statement for everyone in the group (approximately 8 copies).

Follow-up: Diversity Statements

1. As a group, create a list of the kinds of feedback that would be most useful for improving your diversity statement.
2. Peer review. Each person should review at least two other diversity statements.

Introduction: Audience Analysis

If the peer review of the drafts of your diversity statements does not take up the entire meeting time, then use the following activities to explore the issue of audience more thoroughly. If you do not get to this as a group, please do these activities on your own between sessions.

A Focus on Audience

Common questions about teaching philosophy statements and teaching portfolios include: “Who will be reading this?” “What will they do with it?” “What are they expecting to see?” One way to think about this is within the context of a search for a new faculty member. Search committees can be composed of a variety of different kinds of faculty, depending on the kind of institution and its organizational structure. Other people may also be involved in a faculty search, such as deans, department chairs, program directors, and other academic staff. The audience for your philosophy statement might vary along the following dimensions:

- Interest in Teaching (e.g. positive / neutral / negative)
- Experience (e.g. veteran faculty / early career faculty)
- Field (e.g. from inside the department / outside the department)
- Discipline (e.g. specialist / non-specialist)

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Option 1: Thinking about audience

Imagine a person with some of the above characteristics and think about how they might react to the wording, examples, and teaching methods mentioned in your philosophy statements. What kinds of supporting evidence might these different kinds of people expect to see in your portfolio? Will you be able to create artifacts that meet these expectations?

Option 2: Additional research about audience

What are some actions that the group could take to find out how philosophy statements or portfolios are used in the academy (e.g. talking to faculty at an institution that includes philosophy statements or portfolios in job postings)? Decide whether you want to look for additional information. If so, divide up the tasks among willing group members.

Before You Leave This Meeting:

Review the layout and typographical decisions you made in the previous weeks and decide on any revisions that will make the review process easier or more efficient.

What You Should Bring to the Next Session:

Enough copies of your teaching philosophy statement 2nd draft for everyone in the group (approximately 8 copies). You might also find it helpful to bring a copy of the most current draft of all of your other teaching portfolio elements.

Between Sessions:

Assignment: Second draft – teaching philosophy statement

Rewrite your teaching philosophy statement taking into account your colleagues' comments and possible audience characteristics. As you rewrite, you might want to consider the following questions:

1. What teaching artifacts provide the best evidence that your teaching philosophy guides how you teach and interact with students?
2. Is your teaching philosophy statement consistent with the rest of your portfolio, e.g. your diversity statement and your annotated teaching artifacts?

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Session 7: Teaching Philosophy Statement-2nd Draft/Portfolio Completion

Session Objectives

By the end of this session, participants will have:

- written a second draft of their teaching philosophy statement
- revisited the group's feedback criteria
- read and reviewed the teaching philosophy second drafts of other group members
- received feedback on their teaching philosophy statement second draft
- used the session as a forum to discuss teaching
- created a plan for expanding and revising their teaching portfolios

Handouts

Session 7: Teaching Philosophy Statements-2nd Draft/Portfolio Completion (this document)

Required Materials

Enough copies of your teaching philosophy statement 2nd draft for everyone in the group (approximately 8 copies).

Follow-up: Teaching Philosophy Statement-2nd Draft

1. Discuss what type of feedback you want from your colleagues.
2. Peer review.

Introduction: Portfolio Completion

The purpose of these activities is to help you identify items that would make your portfolio a complete document. Your group may opt to do each individually, and then discuss it as a group.

Option 1: Optimizing and polishing

Determine the existing components of your portfolio that need to be expanded or revised.

Option 2: Ideas for assembling your teaching portfolio

Identify parts of a 'typical' portfolio that will help it stand alone as a cohesive document for an outside reader (e.g. table of contents, abstract, executive summary).

Option 3: What is missing?

Create a list of items that you would like to include in future versions of your portfolio (i.e. additional artifacts, list of teaching interests). In other words, what is missing from your current portfolio?

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Before You Leave this Meeting:

Discuss the structure of next session's peer feedback. For example, you might want to split into pairs so that each person can review a complete portfolio. Alternatively, you might want to receive feedback from more than one person on a particular component or aspect of your portfolio.

What You Should Bring to the Next Session:

Enough copies of your teaching portfolio for everyone in the group (approximately 8 copies).

Between Sessions

Assignment: Putting Together Your Portfolio

1. Create the items identified in Option 1.
2. If your schedule permits, make some or all of the revisions to your philosophy statement and artifacts suggested by your peers.
3. Put together all of your existing portfolio components. You might decide to focus on one aspect of your portfolio for this last opportunity to receive peer feedback.
4. If you do not have time to make the changes suggested by your peers, you might want to create a list of the suggested changes for future. This will ensure that you do not 'lose' these suggestions.

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*E*ngineering *T*eaching *P*ortfolio *P*rogram

Session 8: Portfolio Completion/Professional Development Plan

Session Objectives

By the end of this session, participants will have created plans for:

- completing their teaching portfolio
- documenting their teaching in the future
- learning about career options
- becoming competitive candidates for their chosen careers
- creating and maintaining a network of people interested in teaching engineering
- continuing to discuss teaching and the Scholarship of Teaching with others

Handouts

Session 8: Portfolio Completion/Professional Development Plan (this document)
"Skills Acquired During A Graduate Education"
"References for Future Faculty"
"Grad-Initiated Professional Development Activities"

Useful Links

Tomorrow's Professor Listserv http://sll.stanford.edu/projects/tomprof/
PhDs.org Science, Math, Engineering Career Resources http://www.phds.org/
Science's Next Wave (career development resources) http://nextwave.sciencemag.org/

Required Materials

Enough copies of your teaching portfolio for everyone in the group (approximately 8 copies).

Follow-up: Portfolio Completion

Please leave sufficient time to move on to the final topic of the portfolio program!!!

1. Decide what kind of feedback each person wants for their draft portfolio.
2. Break into groups according to the type of feedback desired.
3. Peer review.

Introduction: Professional Development Plan

The purpose of the following activities is to start the process of learning about your career options and developing a plan for becoming a competitive candidate in whichever career you choose. If teaching is part of your career plan, try to choose activities that will help you to develop strategies for documenting your

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teaching in the future, to create a network of colleagues interested in teaching engineering, to discuss teaching with others, and/or to learn more about teaching as a scholarly activity, i.e. the Scholarship of Teaching.

Option 1: Developing plans for acquiring teaching experience

1. Brainstorm ways to gain teaching experience before you graduate. Be sure to include options that would be possible in departments with limited opportunities for graduate students to serve as sole instructor.
2. Discuss how each of these teaching experiences might be documented for future inclusion in a teaching portfolio.
3. Discuss strategies for maintaining and updating your portfolio.

Option 2: Developing plans for researching faculty careers

As a group, discuss what questions remain unanswered about faculty careers and how you might go about finding answers. Pool your knowledge about campus, electronic, and print resources.

Option 3: Developing plans for completing your teaching portfolio

Determine which of the existing components of your portfolio need to be expanded or revised.

Before You Leave This Meeting:

Thank your peers for their help.
Discuss ways that you might continue to support each other as you proceed through graduate school and future job searches.

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